European Commission

Monthly Highlights

No. 5 / 2019

EUMOFA

European Market Observatory for Fisheries and Aquaculture Products

In this issue

In March 2019, first-sales value and volume grew in Estonia, Latvia, Poland, and Portugal over March 2018. In the same period, they experienced downward trends in Belgium, Denmark, France, Lithuania, the Netherlands, Norway, and Sweden.

In the period from April 2016 to March 2019, the highest average price of Atlantic salmon was recorded in Poland (7,04 EUR/kg), 4% higher than in Denmark, and 34% more than the price in Sweden. The highest sea trout average price was observed in France (16,87 EUR/kg), which is 192% more than in Denmark and 59% more than in Poland.

The price of prepared or preserved eels imported in the EU from China was 20,09 EUR/kg in the end of April and beginning of May, up by 18% over the price of 17,70 EUR/kg registered a year earlier.

In 2018, the average price of fresh octopus for household consumption in Italy was 12,18 EUR/kg, 30% higher than in Portugal (9,33 EUR/kg).

The first EUMOFA review of fisheries and aquaculture trade trends in 2018 revealed that EU imports from third countries grew by 4% in volume and 2% in value over 2017, reaching 6 million tonnes, valued at EUR 25,9 billion. Salmonids were the most imported species for a value of EUR 5,8 billion and volume of 876.000 tonnes.

In 2017, EU landings of rapa whelk reached almost 13.000 tonnes. The main fishing countries in the EU were Romania (72%) and Bulgaria (28%).

In May, the EU and Cape Verde signed a new protocol to implement the Sustainable Fishing Partnership Agreement (SFPA), covering a period of five years and providing fishing opportunities for 69 Union vessels to fish in Cabo Verde waters.

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1 First sales in Europe

In **January–March 2019**, 12 EU Member States (MSs) and Norway reported first-sales data for 10 commodity groups[1]. First-sales data are based on first-sales notes and data collected from auction markets.

1.1 Compared to the same period last year

Increases in value and volume: First sales grew in Estonia, Italy, Portugal, and the UK. The increases were particularly high in Portugal due to higher harvests of anchovy and octopus.

Decreases in value and volume: First sales dropped in Belgium, Lithuania, the Netherlands, Norway, Poland, and Sweden. The decrease was particularly sharp in Lithuania due to lower first sales of cod, and in the Netherlands as blue whiting, Atlantic horse mackerel and herring supplies sharply decreased.

Table 1. **JANUARY–MARCH FIRST–SALES OVERVIEW OF THE REPORTING COUNTRIES (volume in tonnes and value in million EUR) ***

	January–March 2017		January–March 2018		January–March 2019		Change from January–March 2018	
Country	**Volume**	**Value**	**Volume**	**Value**	**Volume**	**Value**	**Volume**	**Value**
BE	4.652	16,43	4.265	17,35	3.541	14,44	-17%	-17%
DK	54.429	76,55	54.943	74,23	58.638	70,41	7%	-5%
EE	17.570	3,65	16.145	3,16	18.204	3,37	13%	7%
FR	49.165	166,28	45.882	161,75	46.193	154,17	1%	-5%
IT	18.967	69,55	15.684	63,87	16.002	68,83	2%	8%
LV	20.891	4,30	14.919	2,73	16.052	2,73	8%	0%
LT	546	0,62	652	0,59	341	0,35	-48%	-41%
NL	22.468	65,02	84.395	121,63	50.504	85,35	-40%	-30%
NO	1.009.211	827,44	1.098.040	809,43	886.094	770,37	-19%	-5%
PL	38.412	12,10	42.464	12,18	39.108	9,80	-8%	-20%
PT	15.227	44,04	13.914	37,85	19.069	47,91	37%	27%
SE	22.420	14,06	49.030	21,98	37.935	17,47	-23%	-21%
UK	107.899	178,00	69.590	104,91	72.926	148,66	5%	42%

Source: EUMOFA (updated 13.05.2019).
** Volume data is reported in net weight for the EU MSs and in live weight equivalent (lwe) for Norway. Prices are reported in EUR/kg (without VAT). For Norway, they are reported in EUR/kg of live weight.*
***Partial data. First-sales data for Italy covers 229 ports (approximately 50% of the total landings).*

[1] Bivalves and other molluscs and aquatic invertebrates, cephalopods, crustaceans, flatfish, freshwater fish, groundfish, other marine fish, salmonids, small pelagics, tuna and tuna-like species.

1.2 In March 2019

Increases in value and volume: First sales grew in Estonia, Latvia, Poland, and Portugal. The increase was particularly sharp in Portugal due to small pelagics (anchovy).

Decreases in value and volume: First sales dropped in Belgium, Denmark, France, Lithuania, the Netherlands, Norway, and Sweden. The decreases were particularly high in Lithuania and Sweden due to small pelagics, whereas groundfish species were the main factor behind the decreases in the Netherlands.

Table 2. **MARCH FIRST–SALES OVERVIEW OF THE REPORTING COUNTRIES (volume in tonnes and value in million EUR)**

	March 2017		March 2018		March 2019		Change from March 2018	
Country	**Volume**	**Value**	**Volume**	**Value**	**Volume**	**Value**	**Volume**	**Value**
BE	1.272	5,56	1.498	7,14	952	4,85	-36%	-32%
DK	11.578	22,10	11.296	20,18	9.561	16,98	-15%	-16%
EE	6.330	1,33	5.469	1,12	7.101	1,38	30%	23%
FR	17.188	56,94	16.369	57,48	13.899	48,02	-15%	-16%
IT	7.781	28,75	5.468	23,73	5.463	24,15	0%	2%
LV	8.005	1,67	4.443	0,81	6.123	1,02	38%	26%
LT	224	0,20	224	0,15	108	0,08	-52%	-46%
NL	7.680	23,72	42.038	55,34	19.484	31,47	-54%	-43%
NO	467.030	323,03	501.252	338,94	366.713	308,40	-27%	-9%
PL	18.201	5,50	12.452	3,76	17.246	4,19	39%	11%
PT	6.540	15,15	3.310	11,26	5.711	15,61	73%	39%
SE	8.814	4,94	17.264	6,89	6.566	4,16	-62%	-40%
UK	23.946	44,39	15.083	19,80	11.859	28,51	-21%	44%

Source: EUMOFA (updated 13.05.2019); volume data is reported in net weight.
**Volume data is reported in net weight for the EU MSs and in live weight equivalent (lwe) for Norway. Prices are reported in EUR/kg (without VAT). For Norway, they are reported in EUR/kg of live weight.*
***Partial data. First-sales data for Italy covers 229 ports (approximately 50% of the total landings).*

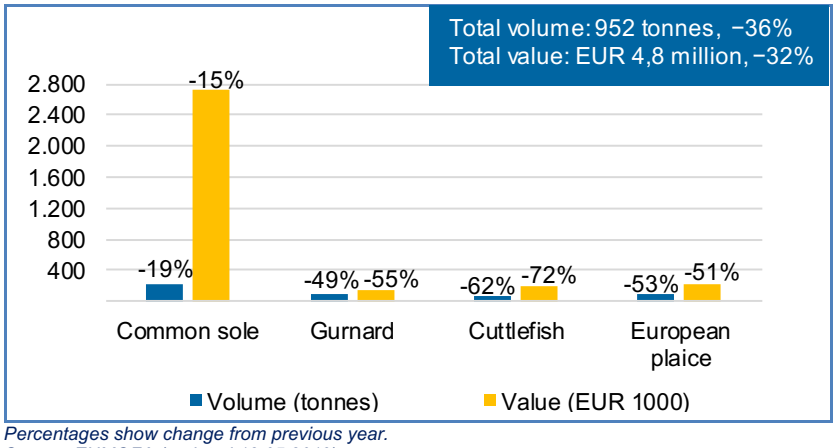
The most recent weekly first-sales data **(up to week 25-2019)** available in EUMOFA can be accessed **here.**

The most recent monthly first-sales data for **April 2019** available in EUMOFA can be accessed **here.**

1.3 First sales in selected countries

In **Belgium** in **January–March 2019,** the main species that contributed to the overall decreases in first-sales value and volume (both down by 17%) from the same period in 2018 included cuttlefish, gurnard, and scallop. In **March 2019,** both value and volume were lower compared with March 2018. Cuttlefish, common sole, monk, European plaice, and gurnard were among the key species responsible. Among the top valued species, the average price of cuttlefish fell by 27% to 3,37 EUR/kg whereas the price of scallop fell by 57% to 1,18 EUR/kg.

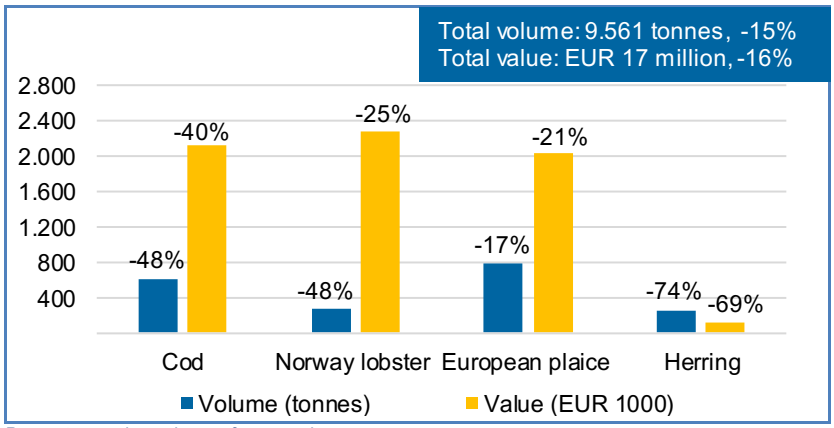
Figure 1. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN BELGIUM, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In **Denmark** in **January–March 2019,** first-sales value fell by 5% (due to cod, coldwater shrimp), while volume grew by 7% (due to clam) in comparison to the same period in 2018. In **March 2019**, first sales decreased in value and volume compared to March 2018. The decline was mostly due to cod, herring, Norway lobster, European plaice, and blue mussel. The average price increased for Norway lobster (+43% at 8,07 EUR/kg), which is linked to its decreased supply.

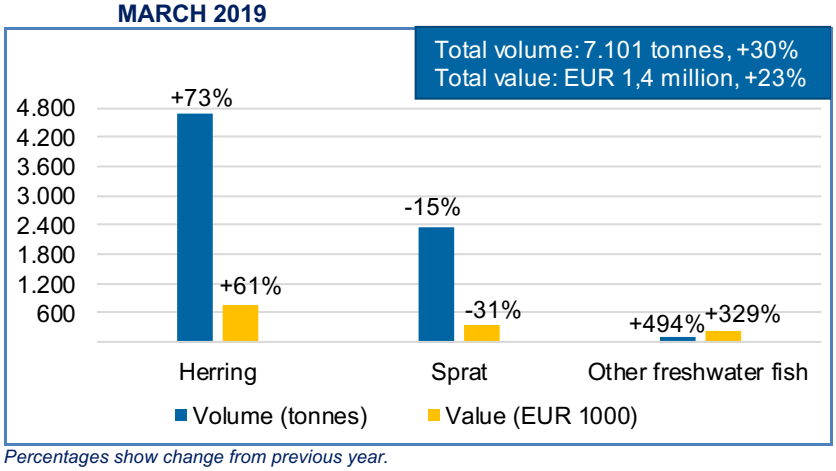
Figure 2. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN DENMARK, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.06.2019).

In **Estonia** in **January–March 2019,** herring was the main species behind increases in overall first–sales value (+7%) and volume (+13%) compared to the same period in 2018. The same species, together with European perch were responsible for more intense growth in overall first sales in **March 2019** compared to March 2018. The average price of herring at 0,16 EUR/kg was 7% lower due to higher supply.

Figure 3. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN ESTONIA, MARCH 2019**



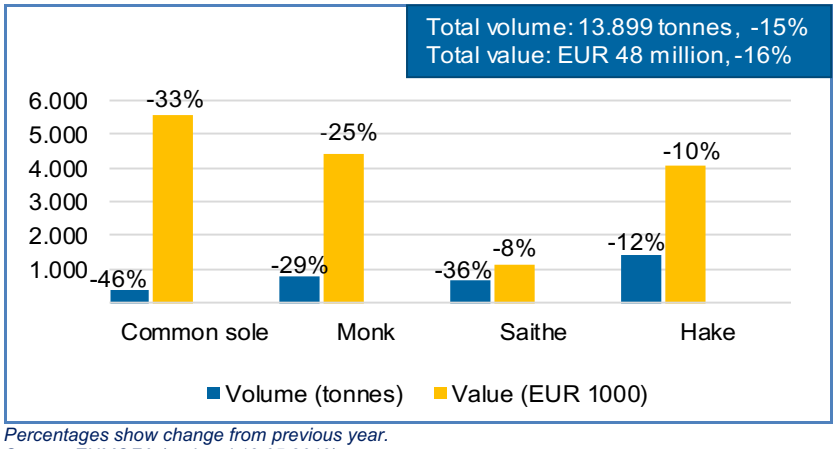
Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In **France** in **January–March 2019**, first sales decreased by 5% in value (main contributors were monk, cuttlefish, hake) and increased by 1% in volume (due to scallop, herring, sardine) from January–March 2018. In **March 2019**, saithe, common sole, scallop, monk, hake, and squid were the main species behind the overall decreases in first sales from March 2018. Among the top valued species, prices rose for common sole (+24%, to 14,25 EUR/kg) and fell for scallop (−18%, to 2,13 EUR/kg).

In **Italy** in **January–March 2019** compared to the same period in 2018, first-sales value and volume grew by 8% and 2%, respectively, mainly due to anchovy, cuttlefish, hake, octopus, and sardine. In **March 2019**, first sales slightly increased, while volume remained stable compared to March 2018. Anchovy, octopus, squillid, and hake were the main species contributing to these trends. Among the top species, average prices sharply increased for anchovy (+33% to 2,35 EUR/kg) due to decrease in supply.

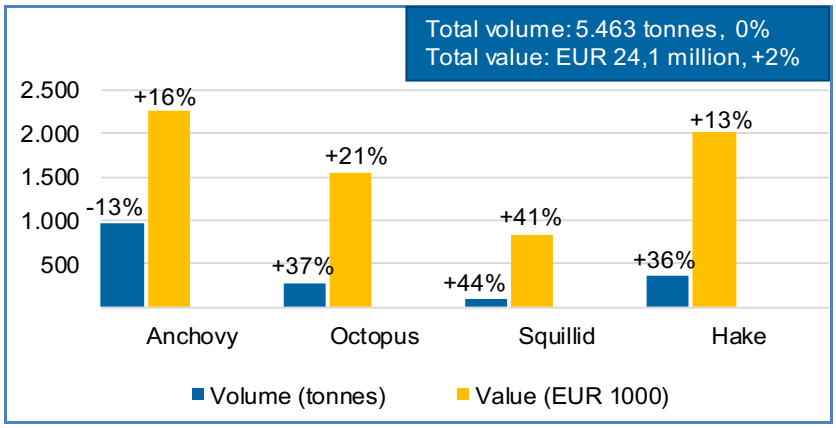
In **Latvia** in **January–March 2019**, first-sales value was stable, while volume increased by 8% compared to the same period in 2018. In **March 2019**, first sales increased compared to March 2018 in both value and volume. The main factors responsible for this increase were higher supplies of small pelagics including herring, sprat, and smelt. The average price decreased by 11% for herring, 1% for sprat, and 49% for smelt.

Figure 4. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN FRANCE, MARCH 2019**



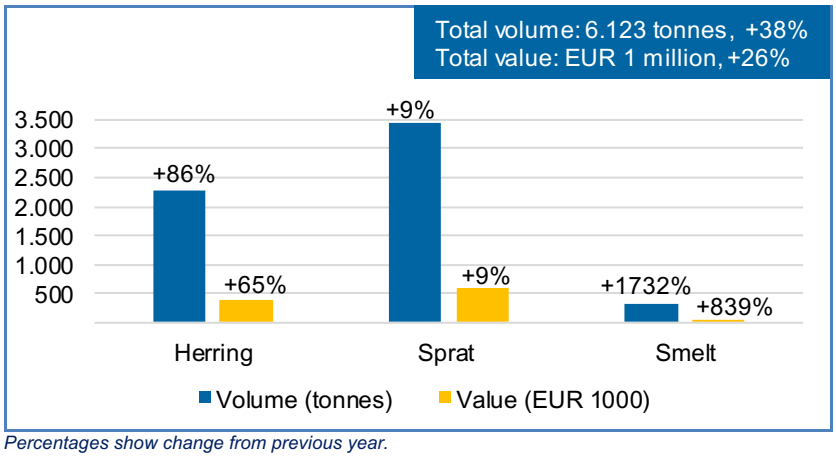
Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

Figure 5. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN ITALY, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

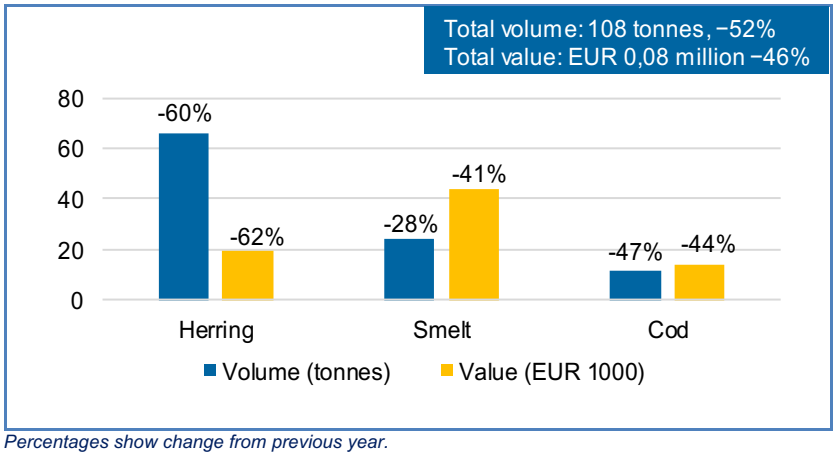
Figure 6. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN LATVIA, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In **Lithuania** in **January–March 2019**, first sales fell in value and volume by 41% and 48%, respectively, from January–March 2018. This was mainly driven by cod and herring. In **March 2019**, first sales continued the similar trend dropping from March 2018 due to cod, herring, and smelt. The average price of cod increased by 5% to 1,20 EUR/kg, while that of herring fell by 4% to 0,30 EUR/kg.

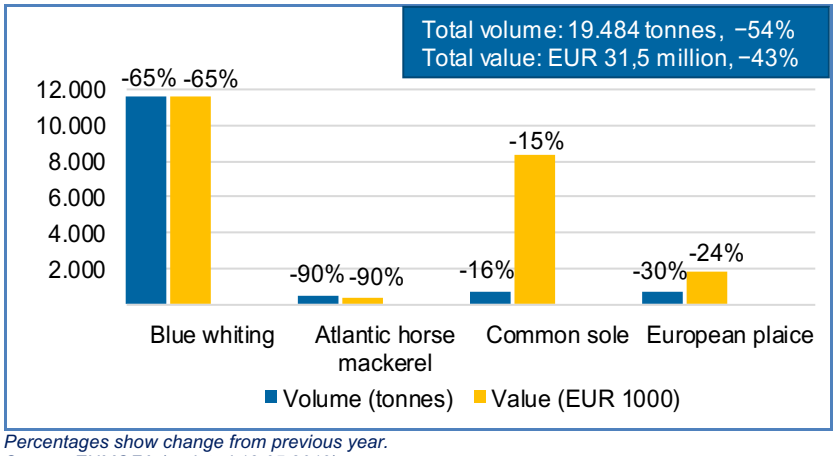
Figure 7. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN LITHUANIA, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In the **Netherlands** in **January–March 2019,** first-sales fell by 30% in value and 40% in volume compared to January–March 2018. Blue whiting was the species most responsible for the decreases. In **March 2019,** similar downward trends continued compared with March 2018 due to the same species. Among the top valued species, the average price of shrimp *Crangon* spp. decreased by 72% to 2,59 EUR/kg, while those of European plaice rose by 7% to 2,64 EUR/kg.

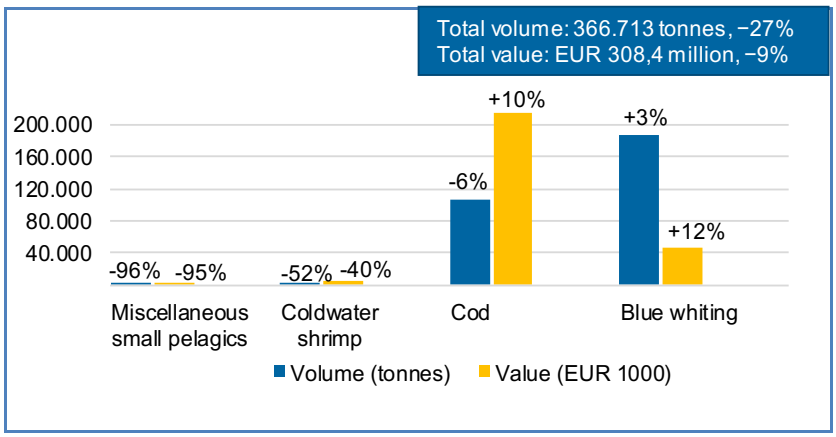
Figure 8. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN THE NETHERLANDS, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In **Norway** in **January–March 2019**, first sales decreased by 5% in value and 19% in volume from January–March 2018. The main contributors to these decreases were miscellaneous small pelagic species, saithe, haddock, and coldwater shrimp. In **March 2019** compared to March 2018, first-sales value and volume decreased mainly due to miscellaneous small pelagics and coldwater shrimp. The average price of coldwater shrimp increased by 24% to 4,79 EUR/kg, and that of cod grew by 17% to 2,00 EUR/kg.

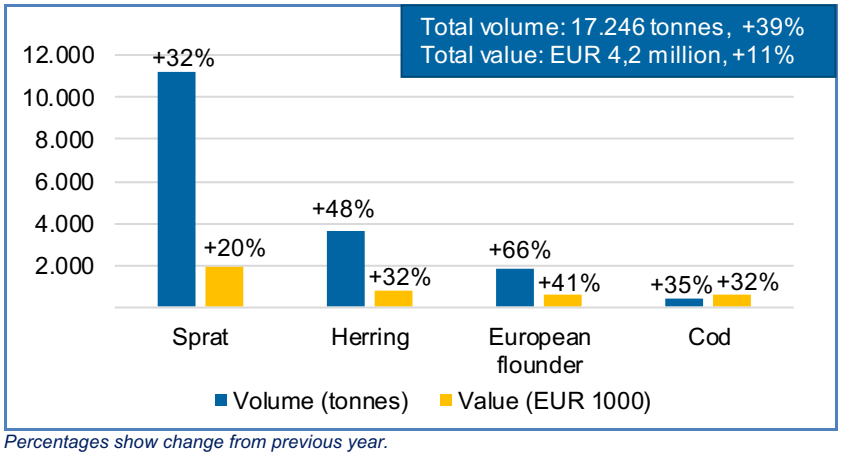
Figure 9. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN NORWAY, MARCH 2019**



Percentages show change from previous year.
Volume data is reported in live weight equivalent (lwe). Prices are reported in EUR/kg of live weight.
Source: EUMOFA (updated 13.05.2019).

In **Poland** in **January–March 2019**, first–sales decreased by 20% in value, and 8% in volume compared to the same period in 2018. The decline was mostly due to sprat, herring, and trout. In **March 2019**, first-sales value and volume increased compared to March 2018, mainly because of sprat, herring, European flounder, and cod. Most of the key species recorded decreases of their average price, with herring (−11% to 0,23 EUR/kg) and European flounder (−15% to 0,31 EUR/kg) falling the most.

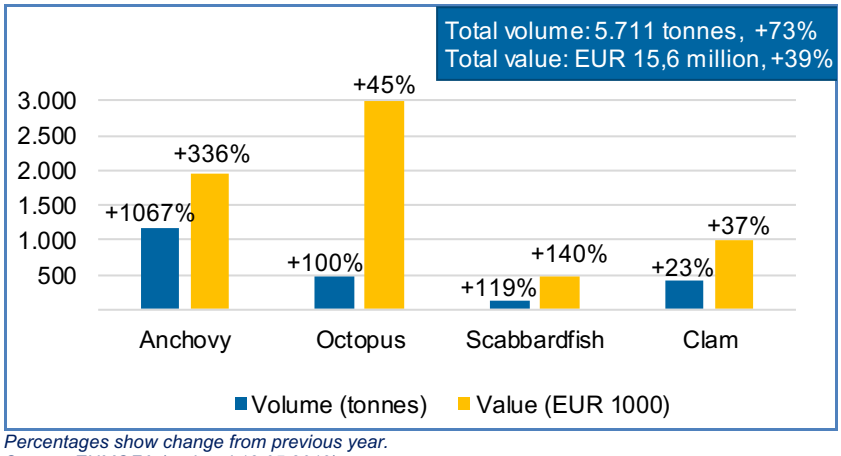
Figure 10. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN POLAND, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In **Portugal** in **January–March 2019**, first–sales value increased by 27%, while volume increased by 37% compared to the same period in 2018. The growth was mostly because of sales of high-valued octopus, anchovy, clam, and Atlantic horse mackerel. In **March 2019**, first-sales value and volume rose over March 2018, mainly because of anchovy and octopus. These two species recorded decreases of their average prices of 63% and 28%, respectively, linked with higher supplies.

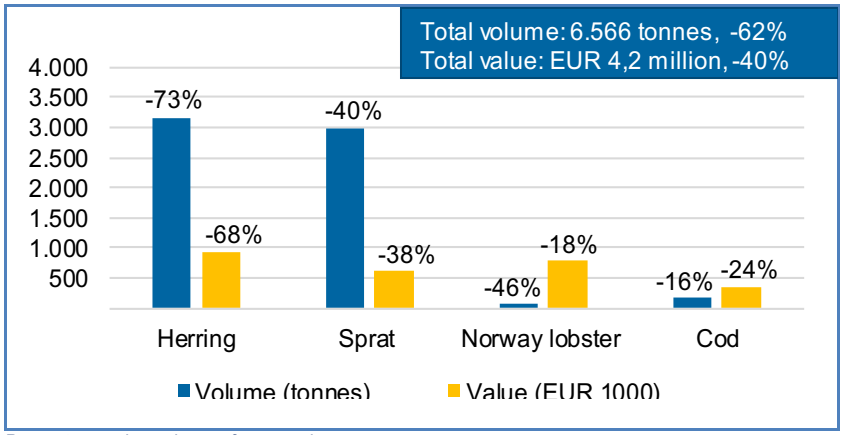
Figure 11. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN PORTUGAL, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In **Sweden,** lower first–sales value (−21%) and volume (−23%) in **January–March 2019** compared to the same period in 2018 were caused mainly by a lower supply of herring, cod, and Norway lobster. In **March 2019**, both value and volume dropped significantly from March 2018. This was caused by small pelagic species, mainly herring and sprat. The average price of herring grew by 17% to 0,29 EUR/kg, and that of saithe increased by 60% to 2,31 EUR/kg.

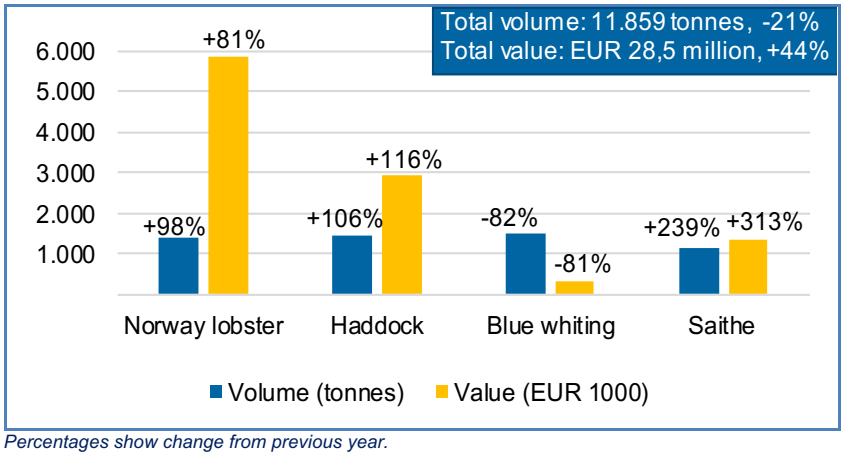
Figure 12. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN SWEDEN, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

In the **UK** in **January–March 2019**, first-sales value and volume increased by 42% and 5%, respectively, compared to the same period in 2018. This trend was mainly caused by Norway lobster. In **March 2019**, higher first sales of Norway lobster and haddock caused an overall first-sales value increase, whereas lower supply of blue whiting contributed to the volume decrease from March 2018. The average price increased for cod (+30% to 3,22 EUR/kg) and saithe (+22% to 1,18 EUR/kg), while that of scallop fell by 13% to 2,55 EUR/kg.

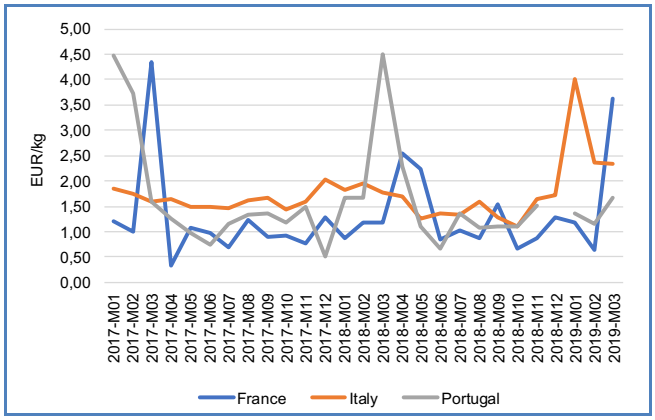
Figure 13. **FIRST SALES OF MAIN COMMERCIAL SPECIES IN THE UK, MARCH 2019**



Percentages show change from previous year.
Source: EUMOFA (updated 13.05.2019).

1.4 Comparison of first-sales prices of selected species in selected countries

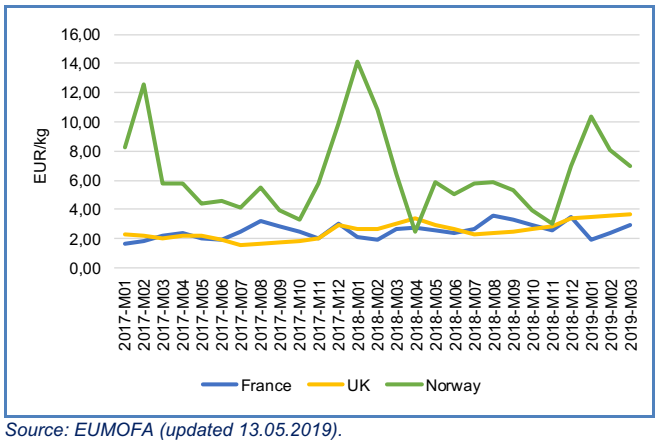
Figure 14. **FIRST-SALES PRICES OF ANCHOVY IN FRANCE, ITALY, AND PORTUGAL**



Source: EUMOFA (updated 13.05.2019).

Of the EU Member States monitored by EUMOFA, first sales of **anchovy** take place almost entirely (99%) in **France**, **Italy**, and **Portugal**. In these countries the average first-sales prices in March 2019 were: 3,63 EUR/kg in France (up by 458% from February 2019 and by 210% from March 2018); 2,35 EUR/kg in Italy (down by 0,3% from the previous month but up by 33% from a year earlier), and 1,68 EUR/kg in Portugal (up by 45% from February 2019 and by 63% from March 2018). Italy tends to have the most stable price trend, while prices in France and Portugal are loosely correlated with volume. The large price jump in France was correlated with seasonally low supplies; similar if not as large increases have been observed during the early months in previous years.

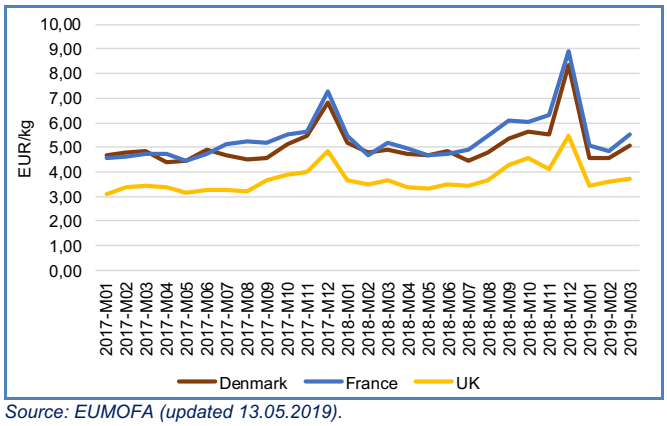
Figure 15. **FIRST-SALES PRICES OF CRAB IN FRANCE, THE UK, AND NORWAY**



Source: EUMOFA (updated 13.05.2019).

First sales of **crab** among reporting European countries occurs mainly in **France**, the **UK**, and **Norway**, which held a combined 94% of sales volume in 2018. In March 2019, the average first-sales prices of crab were: 2,90 EUR/kg in France (up by 23% from February 2019 and by 10% over March 2018), 3,63 EUR/kg in the UK (up by 3% from the previous month and by 22% from a year earlier), and 6,97 EUR/kg in Norway (a decline of 14% from February 2019 and incline by 8% over the price in March 2018). Prices in France and the UK tend to track each other closely, while the price in Norway appears completely unrelated and is highly seasonal (as is first-sales volume).

Figure 16. **FIRST-SALES PRICES OF MONK IN DENMARK, FRANCE, AND THE UK**



Source: EUMOFA (updated 13.05.2019).

First sales of **monk** take place mainly in **Denmark**, **France**, and the **UK**, together accounted for 84% of total first-sales volume in 2018 reported by countries monitored by EUMOFA. In March 2019, the average first-sales prices of monk were: 5,09 EUR/kg in Denmark (up by 11% from February 2019 and by 4% over March 2018), 5,52 EUR/kg in France (up by 14% over the previous month and by 6% over a year earlier), and 3,69 EUR/kg in the UK (an increase of 3% over February 2019 and 0,2% below the price in March 2018). Prices in all three markets follow the same trend even though monthly volume trends in these markets bear no resemblance to one another. The price peaks in December each year are not correlated with any exceptional change in supplies: they are probably due to strong seasonal demand during that festive month.

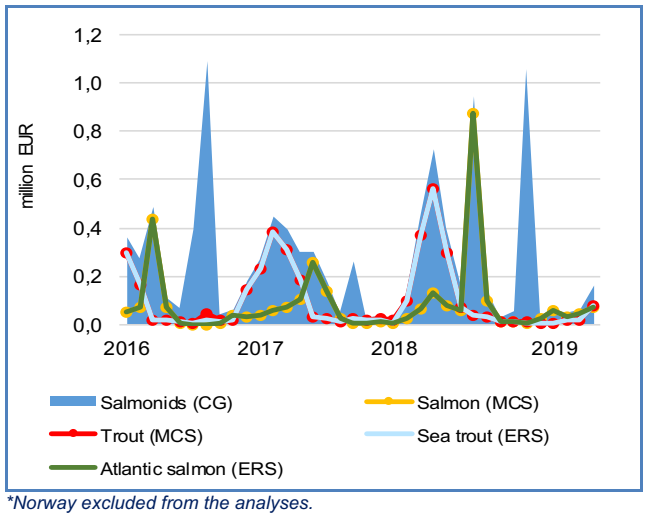
1.5. Commodity group of the month: salmonids

First sales of salmonids concern only wild catches. Of the EU MSs monitored by EUMOFA, the **salmonids** commodity group (CG) ranked 10th in value and volume among the 10 CGs sold at the first-sale stage in March 2019[2]. First sales reached EUR 0,16 million and 21 tonnes, decreasing by 77% in value and 79% in volume from March 2018. In the past 36 months, the highest value of salmonids was registered in October 2016, at about EUR 1 million.

Salmonids include three main commercial species (MCS): salmon, trout, and other salmonids.

At the species (ERS) level, Atlantic salmon and sea trout represented 93% of total first-sales value (48% and 45%, respectively) of salmonid species in March 2019[3].

Figure 17. **FIRST-SALES VALUE COMPARISON AT CG, MCS, AND ERS LEVEL FOR REPORTING COUNTRIES**



**Norway excluded from the analyses.*
Source: EUMOFA (updated 13.05.2019).

1.6. Focus on Atlantic salmon

Atlantic salmon (*Salmo salar)* is a carnivore species of ray-finned fish in the family Salmonidae. It is found in the North Atlantic on both European (Portugal to Russia) and North American sides and in rivers that flow into the Atlantic and, due to human introduction, in the north Pacific Ocean[4]. Atlantic salmon follow an anadromous fish migration pattern, as their greatest feeding and growth occur in saltwater, whereupon adults return to spawn in native freshwater streams. Spawning occurs from October to January and it can live for 4 to 6 years[5].

Today, all fishing of wild Atlantic salmon in rivers and sea is highly regulated. The North Atlantic Salmon Conservation Organization (NASCO) has the responsibility for its conservation, restoration, and rational management. In Europe, Atlantic salmon is mainly targeted by the fleets of Norway, Iceland, the UK, and Ireland. Most catches occur in rivers, whereas the use of nets and traps in Europe's marine fisheries has declined significantly over time. This reduction reflects increasingly restrictive management measures, including closure of fisheries, to reduce levels of exploitation in many countries[6]. Most of today's catches of wild Atlantic salmon are done in recreational fisheries in rivers, where catch and release are common.

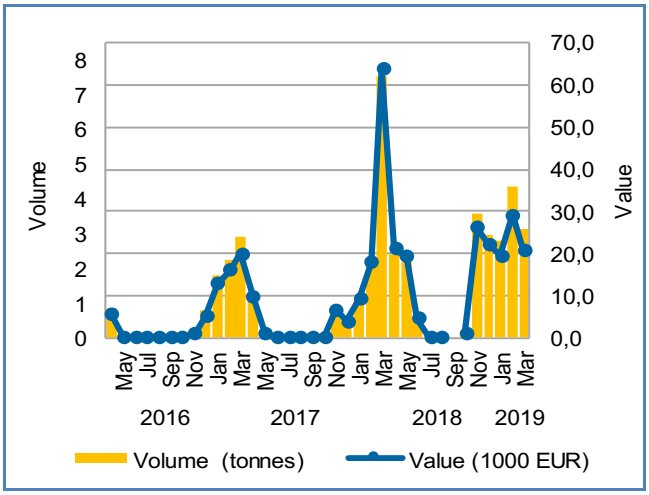
Selected countries

[2] More data on commodity groups can be found in table 1.2 in the Annex
[3] Ranking of the main commercial species in the salmonid species commodity group can be found in table 1.3 in the Annex
[4] http://www.fao.org/fishery/culturedspecies/Salmo_salar/en
[5] https://ec.europa.eu/fisheries/marine_species/farmed_fish_and_shellfish/salmon_en
[6] ICES, (2017). "Report of the Working Group on North Atlantic Salmon (WGNAS)." 29 March–7 April 2017, Copenhagen, Denmark. ICES CM 2017/ACOM: 20. 296 pp.

In **Denmark** in January–March 2019, first sales of Atlantic salmon decreased by 24% in value and 5% in volume compared to the same period in 2018. Compared to 2017, value increased by 41% and volume by nearly a half. Except in the Baltic Sea, no commercial marine fishery targets salmon in Denmark. Most of the catch is reported by the offshore longline fishery from September to May[7]. This period is when the mature salmon start their spawning migration towards their home rivers[8]. Of salmonid species, Atlantic salmon constitued 64% of overall value and 60% of volume in March 2019.

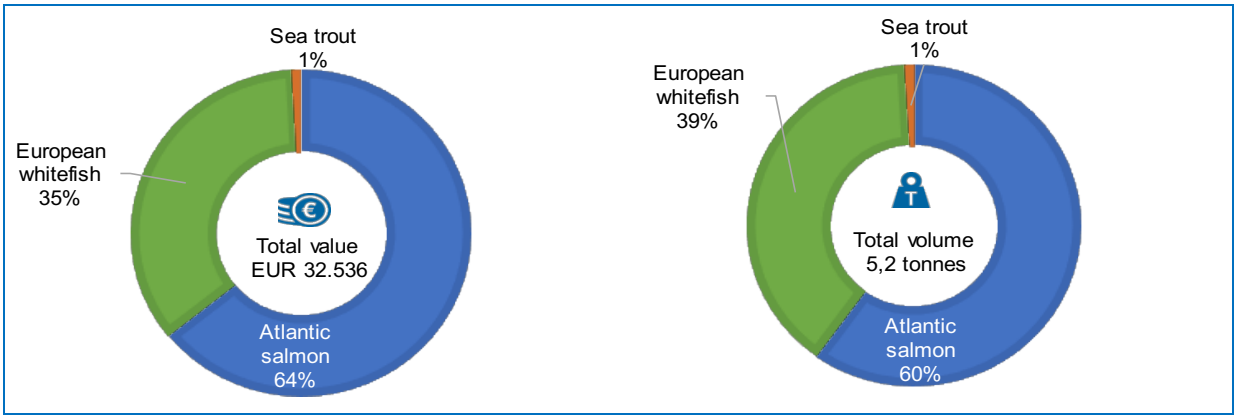
Main fishing areas for the Danish fleet are waters around Bornholm where Nexø is located, the most important port in terms of first-sales value.

Figure 18. **ATLANTIC SALMON: FIRST SALES IN DENMARK**



Source: EUMOFA (updated 13.05.2019).

Figure 19. **FIRST–SALES COMPARISON OF SALMONID SPECIES (ERS) IN DENMARK, VALUE AND VOLUME, MARCH 2019**



Source: EUMOFA (updated 13.05.2019).

In **Poland** in January–March 2019, first sales of Atlantic salmon decreased by 61% in value and 60% in volume compared to January–March 2018.

Figure 20. **ATLANTIC SALMON: FIRST SALES IN POLAND**

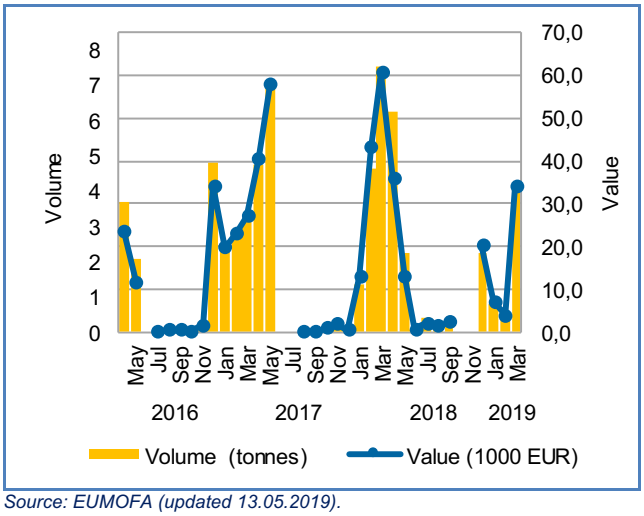
[7] http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2018/2018/sal.oth.nasco.pdf
[8] http://www.nasco.int/pdf/2013%20papers/CNL(13)41%20FINAL.pdf

Compared with January–March 2017, first-sales value was down by 35%, while volume fell by 36%.

Polish vessels operate both with longlines and floating anchored gillnets, depending on the weather conditions. The salmon longline fishery is seasonal, and mainly takes place from late autumn (October/November) to spring (April/May)[9].

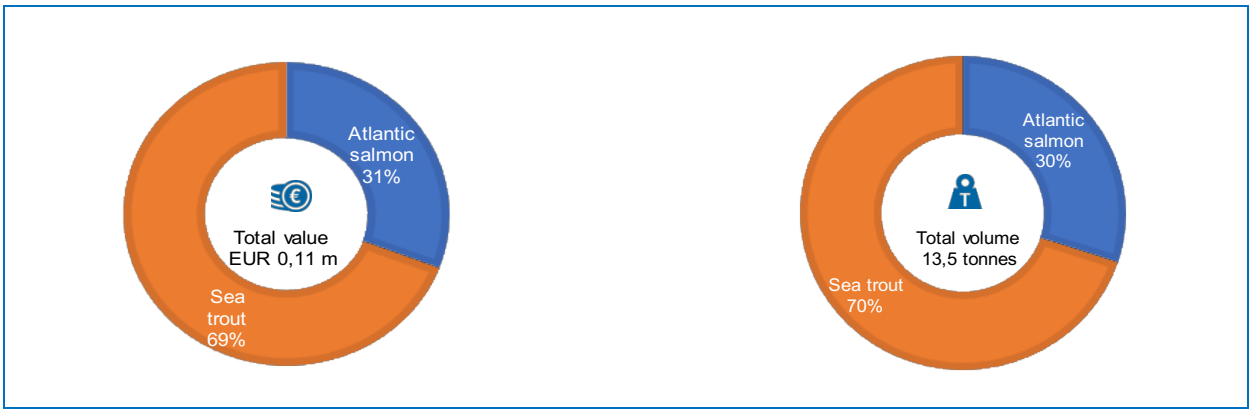
Atlantic salmon represents 31% of overall first-sales value and 30% of volume of salmonid species reported in March 2019.

Ustka, Jastarnia, and Hel are the Polish ports where most first sales of Atlantic salmon occur on the Baltic Sea.



Source: EUMOFA (updated 13.05.2019).

Figure 21. **FIRST–SALES COMPARISON OF SALMONID SPECIES (ERS) IN POLAND, VALUE AND VOLUME, MARCH 2019**



Source: EUMOFA (updated 13.05.2019).

In **Sweden**, first sales of Atlantic salmon were registered only from April to August, whereas the rest of the year there are very minor or no catches

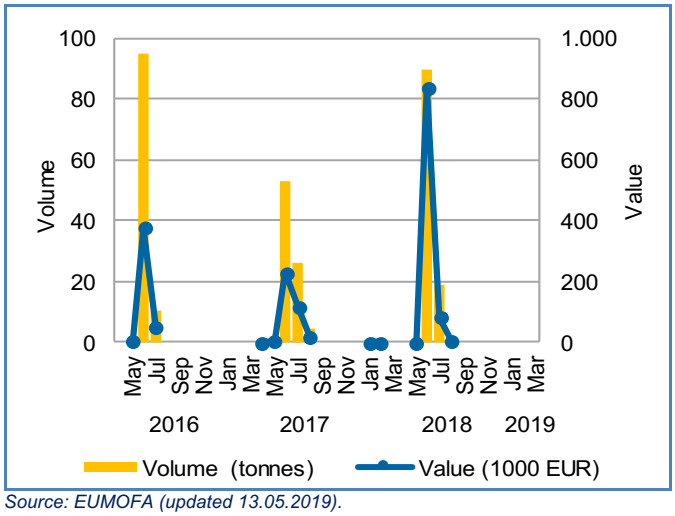
Figure 22. **ATLANTIC SALMON: FIRST SALES IN SWEDEN**

[9] https://www.ices.dk/community/advisory-process/pages/latest-advice.aspx

due to the closed season which starts as soon as the quota is exhausted. In 2018, first-sales value increased by 149% and volume by 30% compared to 2017. This was due to an increase in first-sales average price.
In Sweden, most of the commercial catch of salmon was from coastal fishing with trap-nets and fykenets, located mainly in the Gulf of Bothnia.

The fishing coincides with the salmon migration in the rivers and outside the rivers when the fish reach the area in May–June. Sweden has a small quota; therefore, the fishing is closed at some point in July and August[10]. In March 2019, there were no reported Atlantic salmon first sales due to fishing closures.

The main port for first sales of Atlantic salmon is Smögen on the North Sea coast.

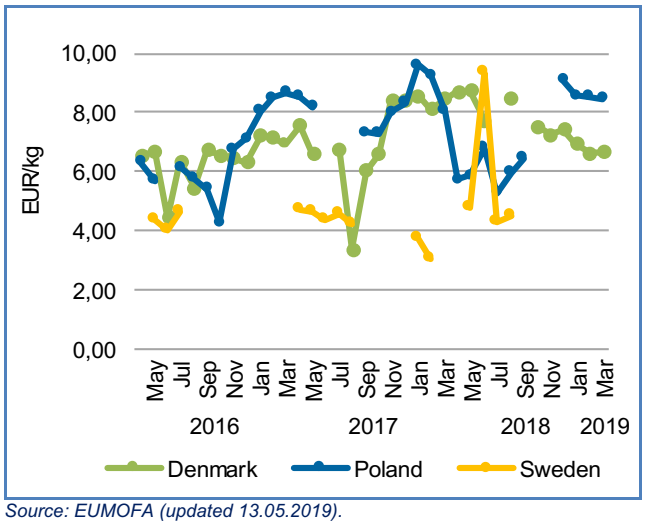


Source: EUMOFA (updated 13.05.2019).

Price trends

[10] http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2018/WGBAST/01%20WGBAST%20_%20Report%20of%20the%20Baltic%20Salmon%20and%20Trout%20Assessment%20Working%20Group.pdf

Figure 23. **ATLANTIC SALMON: FIRST-SALES PRICE IN SELECTED COUNTRIES**



Source: EUMOFA (updated 13.05.2019).

In the observed 36-month period (April 2016–March 2019), the highest average price of Atlantic salmon was recorded in Poland (7,04 EUR/kg), 4% higher than in Denmark (6,83 EUR/kg), and 34% more than the price in Sweden (4,65 EUR/kg).

In **Denmark** in January−March 2019, the average first-sales price of Atlantic salmon (6,73 EUR/kg) decreased by 20% from the same period in 2018. Compared to 2017 it decreased by 5%. In the past 36 months (March 2019−April 2016), the average price peaked in May 2018 at 8,72 EUR/kg for 2,2 tonnes sold. On the other hand, the price was the lowest (fluctuating around 6,50 EUR/kg) when supply was low.

In **Poland** in January−March 2019, the average price of 8,48 EUR/kg was 2% lower than in the same period in 2018, and slightly higher compared to 2017. The highest average price was recorded in January 2018 when 1,3 tonnes were sold at 9,62 EUR/kg, while the lowest price occurred in July 2018 at 5,29 EUR/kg for 0,4 tonnes.

In **Sweden** in January−March 2019 there were no registered first sales due to fishing closure restrictions. In the observed past 36 months, the highest price (9,36 EUR/kg) was registered in June 2018, when 90 tonnes of Atlantic salmon were sold. The lowest price, namely 3,98 EUR/kg occurred in June 2016, when 95 tonnes were sold.

1.7. Focus on sea trout

Sea trout is the common name usually applied to anadromous forms of brown trout (*Salmo trutta*) and is often referred to as *Salmo trutta* morpha *trutta*. It is a migratory fish that closely resembles the Atlantic salmon in its form and behaviour.

Sea trout is widely distributed in Europe along the Atlantic and Baltic coasts, the UK, and Iceland. They are found in the Black and Caspian Seas and as far north as the Barents and Kara Seas in the Arctic Ocean. Sea trout live in cold rivers and lakes, and spawns in rivers and streams with clean gravel beds. It usually spawns in late autumn (November−December) when it reaches 1−2 years of age[11].

Today, nearly all sea trout on the EU market comes from aquaculture, whereas wild trout stocks in the EU are mainly targeted by recreational fishermen, and to a lesser extent by commercial fisheries. The main fishing nation is Denmark, followed by Poland, and France. Sea trout fisheries are regulated in several main areas of management: fishing season restrictions (closing periods), gear limitations, legal size (40 cm for sea trout), bag-limits and protected areas[12].

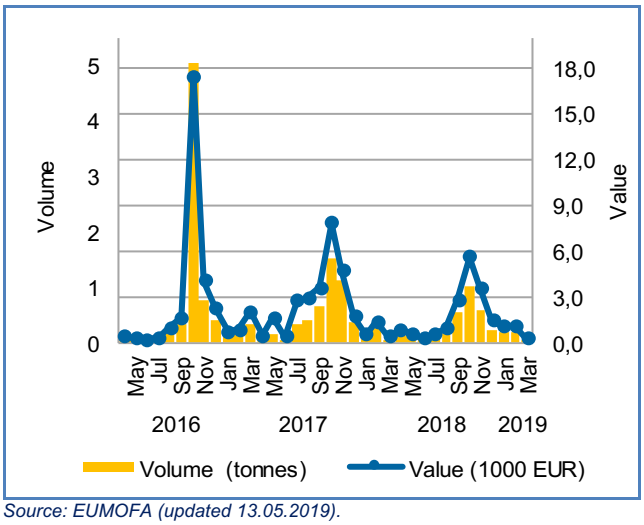
Selected countries

In **Denmark** in January–March 2019, sea trout first sales increased by 7% in value and 5% in volume over the same period in 2018. Compared to the observed period in 2017, first sales were lower, down by 34% in value and 37% in volume.

Sea trout made up only 1% of total first-sales value and volume of salmonids in March 2019.

Among the main ports for first sales of sea trout were Hodbaek, Køge, and Kalvø on the Baltic Sea.

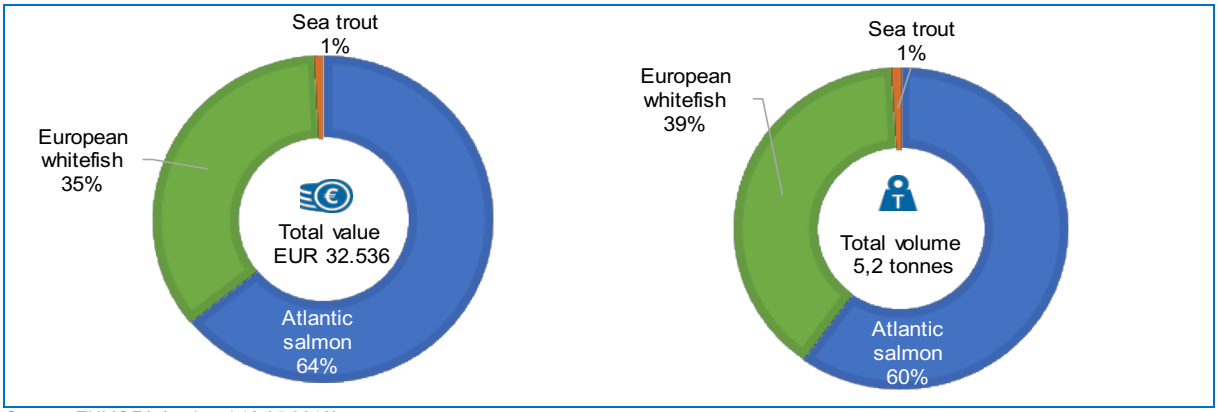
Figure 24. **SEA TROUT: FIRST SALES IN DENMARK**



Source: EUMOFA (updated 13.05.2019).

[11] https://ec.europa.eu/fisheries/marine_species/farmed_fish_and_shellfish/trout
[12] https://www.fiskepleje.dk/service/english_version_fiskepleje/seatrout_stocks_denmark

Figure 25. **FIRST–SALES COMPARISON OF SALMONID SPECIES (ERS) IN DENMARK, VALUE AND VOLUME, MARCH 2019**



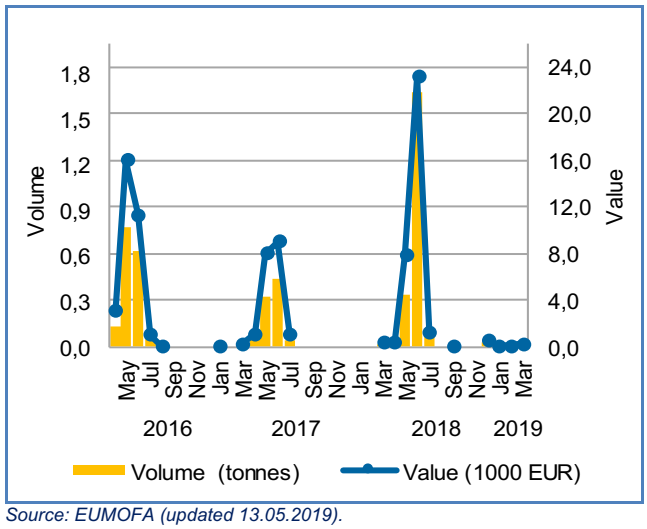
Source: EUMOFA (updated 13.05.2019).

In **France,** first sales of sea trout are rather small in value and volume, starting in early spring and lasting until July. In 2018, compared to 2017, first-sales increased by 71% in value (from EUR 19.000 to EUR 33.000) and by 134% in volume (from 0,9 tonnes to 2,1 tonnes).

In March 2019, the share of sea trout among salmonid species was 2% of total value and 8% of total volume.

Saint-Jean-de-Luz is the main port for first sales of sea trout in France.

Figure 26. **SEA TROUT: FIRST SALES IN FRANCE**



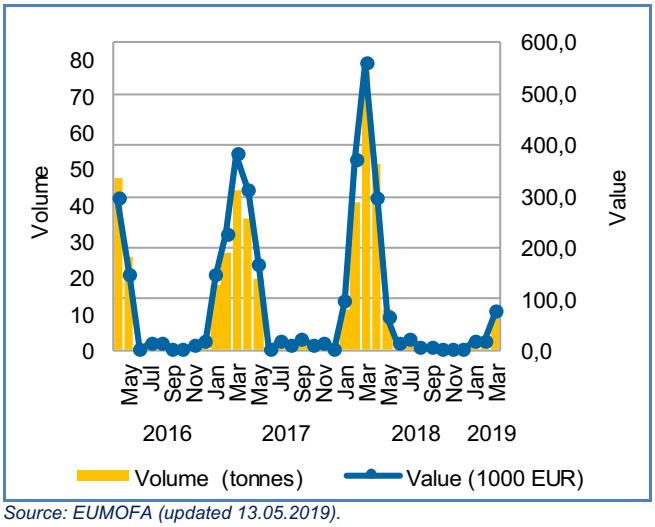
Source: EUMOFA (updated 13.05.2019).

Poland has the highest catches of sea trout among surveyed countries. In January–March 2019, first sales of sea trout increased in both value and volume by 89% from January–March 2018. Compared to 2017, first-sales value and volume decreased by 85%.
Sea trout catches are closely linked with Atlantic salmon catches, as these species are targeted by the same fishing fleet. Namely, in September 2018, due to overfishing of salmon, Poland introduced the restrictive measure by banning salmon fishery, what indirectly affected sea trout fishery. This was the reason behind a sharp decrease in first sales of sea trout in March 2019[13].

Sea trout is targeted either in coastal or offshore fishery. The fishery is seasonal, and the highest first sales occur in spring. Of salmonid species, sea trout constituted 69% of total value and 70% of total volume in March 2019.

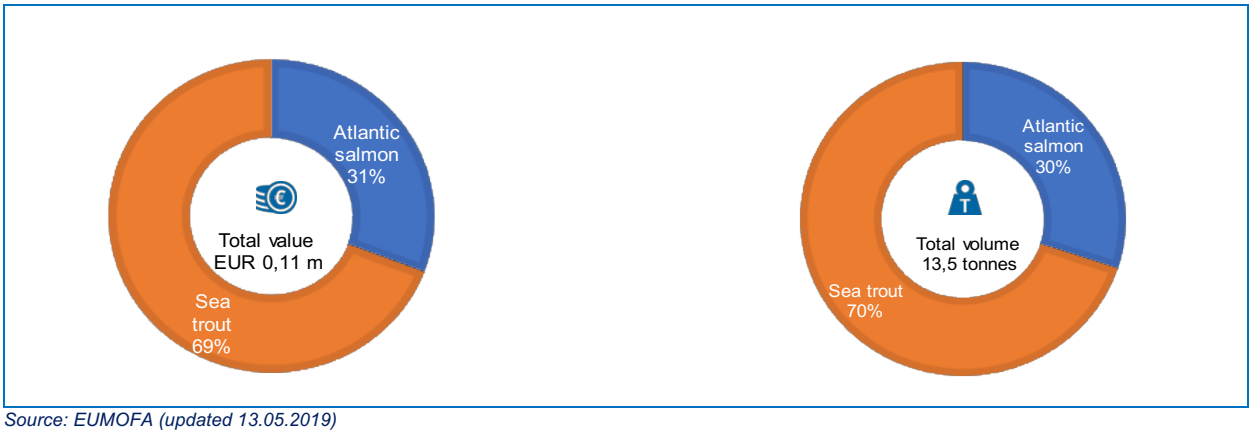
Ustka and Hel on the coast of the Baltic Sea were the busiest ports for first sales of sea trout in Poland.

Figure 27. **SEA TROUT: FIRST SALES IN POLAND**



Source: EUMOFA (updated 13.05.2019).

Figure 28. **FIRST–SALES COMPARISON OF SALMONID SPECIES (ERS) IN POLAND, VALUE AND VOLUME, MARCH 2019**



Source: EUMOFA (updated 13.05.2019)

[13] Ministry of Marine Economy and Inland Navigation of Poland http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WMP20180000878

Price trends

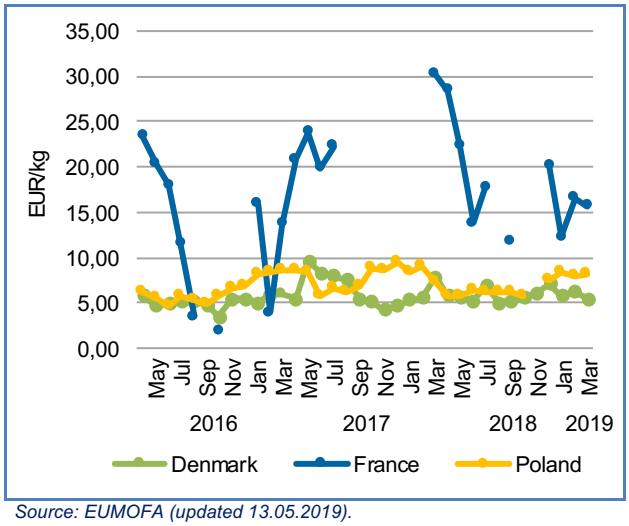
For the past 36 months (April 2016–March 2019), the highest average price of sea trout was observed in France (16,87 EUR/kg), 192% more than in Denmark (5,78 EUR/kg) and 59% over the price in Poland (6,98 EUR/kg). A reason for the significantly higher price in France is a lower volume which pushed price up.

In **Denmark** in January−March 2019, the first-sales average price (5,92 EUR/kg) slightly increased (+2%) over the same period in 2018, while it was up by 5% compared to 2017. The highest price was recorded in May 2017, at 9,58 EUR/kg for 170 kg, and the lowest price was registered in October 2016 when 5 tonnes were sold at 3,46 EUR/kg.

In **France**, the average price of sea trout during January−March 2019 was 14,98 EUR/kg. The price fell by a half from January−March 2018 and increased by 5% over the same period in 2017. The highest average prices occurred in March (30,19 EUR/kg) and April 2018 (28,48 EUR/kg) when supply was lowest. The lowest average price occurred in July 2016 at 11,50 EUR/kg for 91 kg.

In **Poland** in January−March 2019, the average price of sea trout was 8,16 EUR/kg, an increase by 3% over the same period in 2018 and a decrease of 3% from 2017. The highest price was recorded in December 2017 when about 200 kg were sold at 9,55 EUR/kg. The lowest price in the three-year period occurred in September 2016 at 4,93 EUR/kg for about 350 kg.

Figure 29. **SEA TROUT: FIRST-SALES PRICE IN SELECTED COUNTRIES**



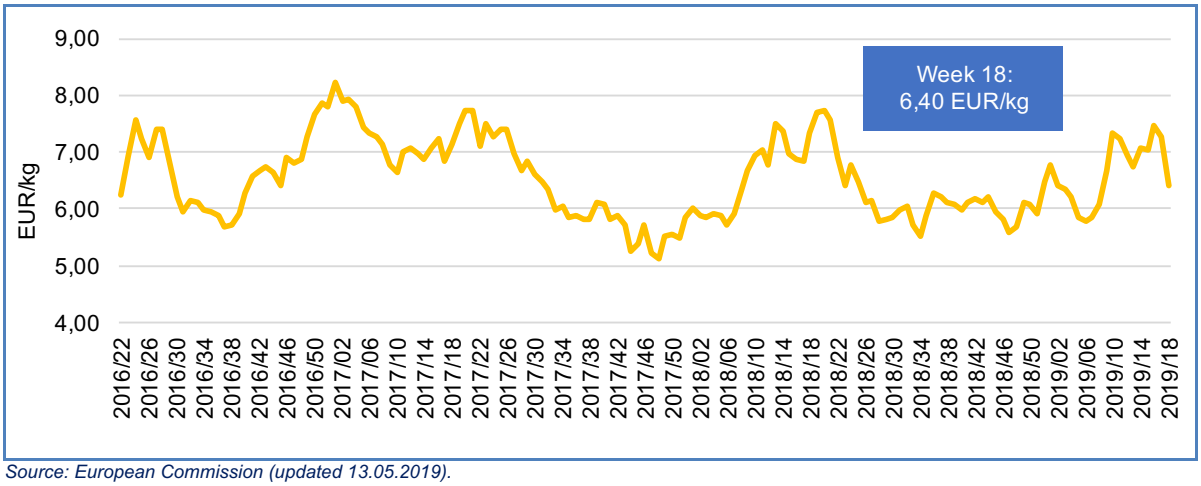
Source: EUMOFA (updated 13.05.2019).

2 Extra-EU imports

Each month, weekly extra-EU import prices (average unit values per week, in EUR per kg) are examined for nine species. Three of them, which are the most relevant in terms of value and volume are examined every month: fresh Atlantic salmon from Norway, frozen Alaska pollock from China, and frozen tropical shrimp (genus Penaeus) from Ecuador. Six other species change every month, and this issue of Monthly Highlights looks at Pacific, Atlantic and Danube salmon fillets, fresh rainbow trout and prepared or preserved salmon examined as part of the month's selected commodity group, salmonids, along with three other products - hake, eel, and deep-water rose shrimp.

The weekly price of **fresh whole Atlantic salmon** (*Salmo salar*, CN code 03021400) imported from **Norway** dropped to 6,40 EUR/kg in week 18 (the end of April and beginning of May), down by 11% from the preceding four-week average of 7,21 EUR/kg and down by 13% from the price of 7,33 EUR/kg prevailing a year earlier. Volume totalled 11.215 tonnes, which was down by 6% from the average during the previous four weeks and up by 10% from a year earlier. Price is very responsive to volume in the short term, and volumes in weeks 17 and 18 were 25% higher than in week 16, and 10% higher than in the same period in 2018.

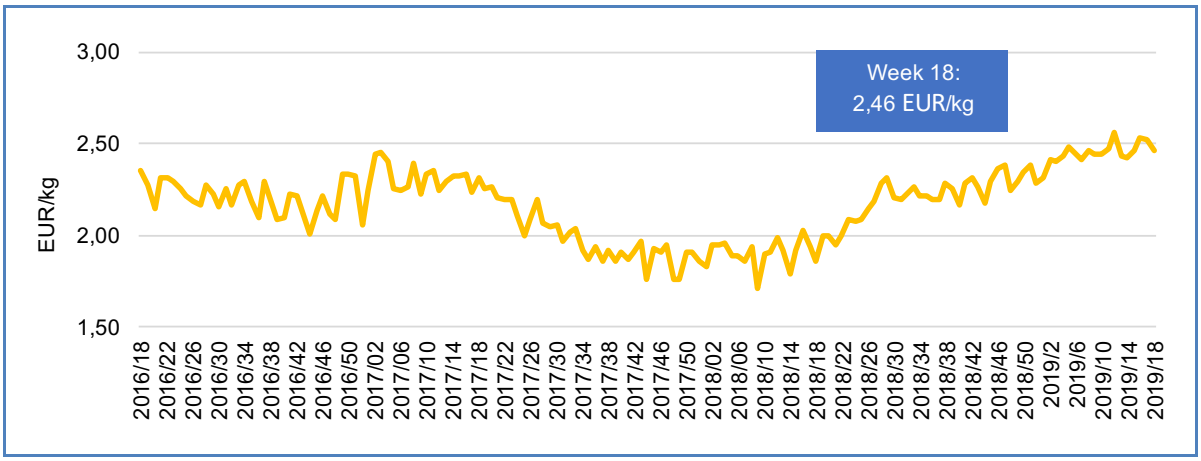
Figure 30. **IMPORT PRICE OF ATLANTIC SALMON, FRESH WHOLE FROM NORWAY**



Source: European Commission (updated 13.05.2019).

For frozen fillets of **Alaska pollock** (*Theragra chalcogramma*, CN code 03047500) imported from **China**, the price in week 18 fell slightly to 2,46 EUR/kg, or 1% below the preceding four-week average, but 33% higher than in the same week of 2018. Volume totalled 2.122 tonnes, up by 16% from the average during the previous four weeks and by 6% from a year earlier. This increased supply to the EU is despite reports of rising domestic demand in China, which would be expected to reduce exports, not boost them.

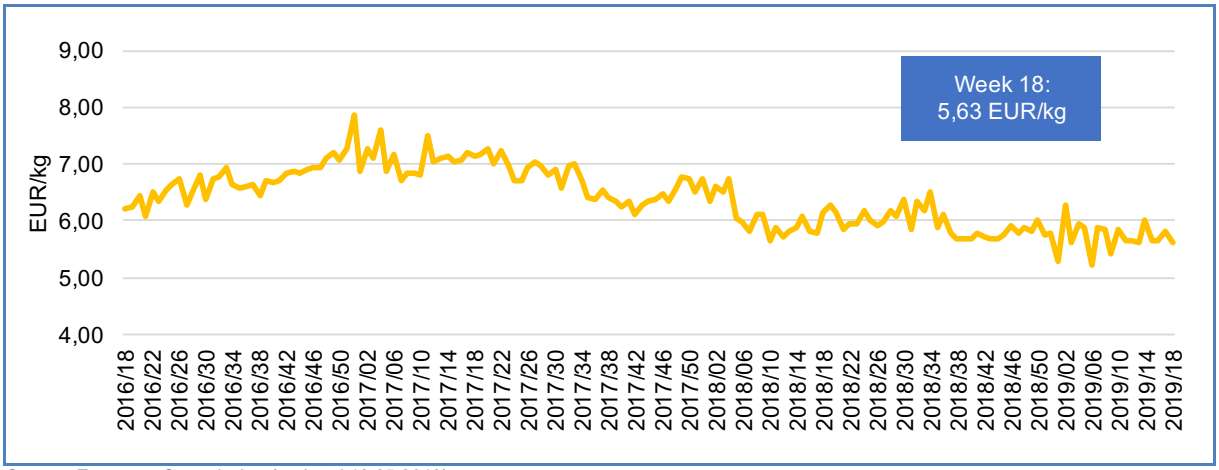
Figure 31. **IMPORT PRICE OF ALASKA POLLOCK, FROZEN FILLETS FROM CHINA**



Source: European Commission (updated 13.05.2019).

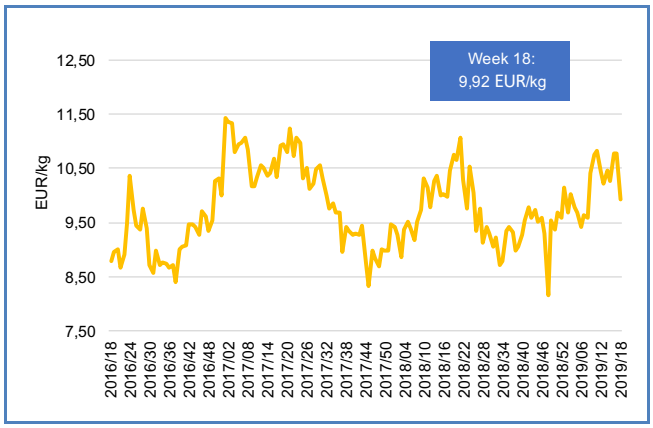
The price of **frozen tropical shrimp** (*Genus penaeus*, CN code 03061792) from **Ecuador** reached 5,63 EUR/kg in week 18, down by 3% for the average during the preceding four weeks and down by 9% from the same week in 2018. Volume in week 18 was down sharply by 49% from the previous four-week average, but not unusually so, for this product has a highly variable supply. Most Ecuadorian shrimp is exported to Asia, and recent reports[14] indicate a large planned increase in production capability, which will make conditions in the EU market even more uncertain. In addition, some scientists reportedly believe this year's El Niño will also augment supply on world markets.

Figure 32. **IMPORT PRICE OF FROZEN TROPICAL SHRIMP FROM ECUADOR**



Source: European Commission (updated 13.05.2019).

Figure 33. **IMPORT PRICE OF FRESH OR CHILLED PACIFIC SALMON, ATLANTIC SALMON, DANUBE SALMON FILLETS FROM NORWAY**



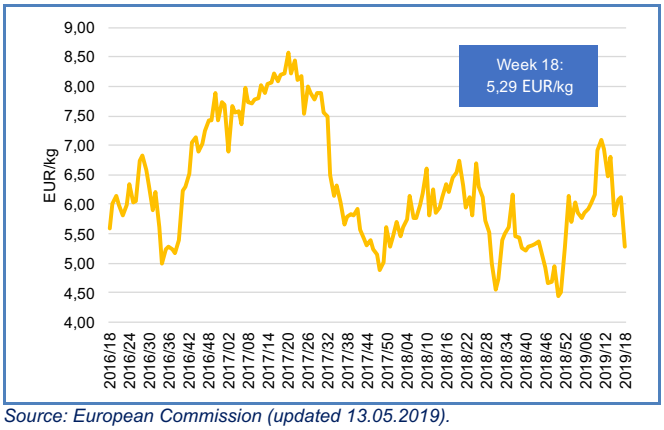
Source: European Commission (updated 13.05.2019).

For **Pacific salmon** (*Oncorhynchus* spp.), **Atlantic salmon** (*Salmo salar*) and **Danube salmon** (*Hucho hucho*) **fillets, fresh or chilled** (CN code 03044100) from **Norway**, the price in week 18 dropped to 9,92 EUR/kg, or 6% below the average for the preceding four weeks, and 5% below the price in week 18 of 2018. Volume of 632 tonnes was 13% below the four-week average but 14% above the volume one year earlier. This price has been rising irregularly since a low point of 8,18 EUR/kg in week 48 of 2018, which was the lowest price in the three-year period under review. Volume, which is annually cyclical, has been slowly declining since at least 2016.

[14] „Ecuadorian shrimp giants sharply increase production capacity," *Intrafish*, 15 May 2019.
https://www.intrafish.com/processor/1781890/ecuadorian-shrimp-giants-sharply-increase-production-capacity

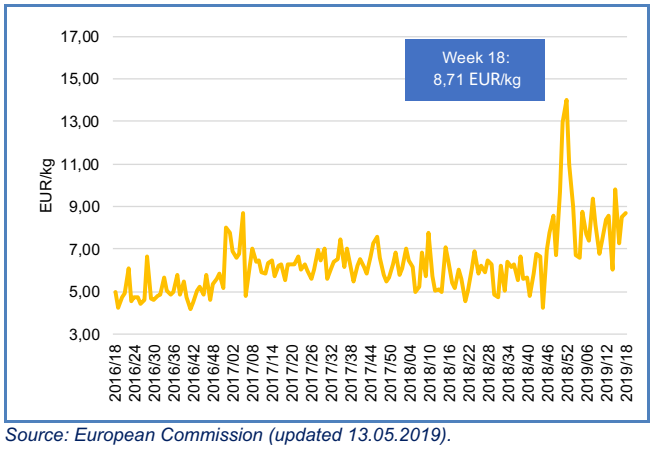
The price of fresh **rainbow trout**, with heads and gills on, gutted (*Oncorhynchus mykiss*, CN code 03021120) from **Norway** went down to 5,29 EUR/kg in week 18, continuing a decline from a recent (week 11) high of 7,10 EUR/kg. Compared with the average of the past four weeks (6,20 EUR/kg), the price in week 18 was down by 15%, and also down by 18% from a year earlier. Volumes imported in week 18 was 112 tonnes, up by 5% from the preceding four weeks but 13% below the volume in the same week a year ago. Over periods of weeks and months, trout prices are highly correlated with volume, and the trends in the last three years match opposite trends in volume.

Figure 34. **IMPORT PRICE OF FRESH RAINBOW TROUT WITH HEADS AND GILLS ON, GUTTED FROM NORWAY**



Source: European Commission (updated 13.05.2019).

Figure 35. **IMPORT PRICE OF PREPARED OR PRESERVED SALMON, WHOLE OR IN PIECES, BUT NOT MINCED FROM THE UNITED STATES**

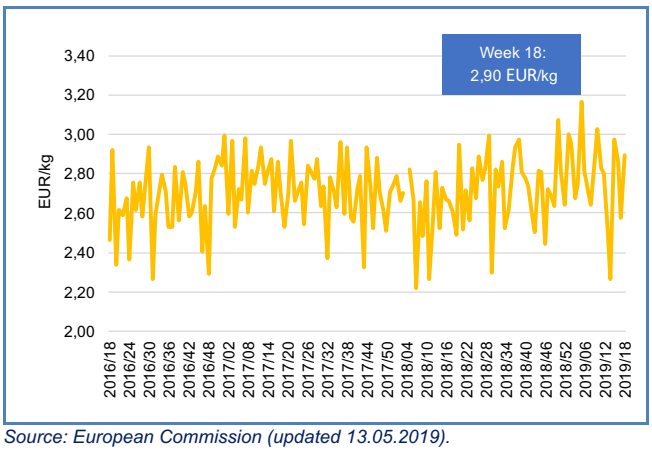


Source: European Commission (updated 13.05.2019).

The price of **salmon**, whole or in pieces, but not minced, prepared or preserved (all species, CN code 16041100) from the **United States** reached 8,71 EUR/kg in week 18, an increase of 11% over the preceding four-week average of 7,88 EUR/kg and 70% higher than the price of 5,14 EUR/kg a year ago. Volume in week 18 fell to 99 tonnes, or 14% below the average of the preceding four weeks and 67% below the volume in week 18 of 2018. This price is not noticeably sensitive to volume: in fact, the peak price of 14,01 EUR/kg in week 52 of 2018 occurred during a time of unusually high volume (more than 300 tonnes in both weeks 51 and 52). Over the long run, the price has been irregularly rising from a low point during the three years under review of 4,17 EUR/kg in week 41 of 2016.

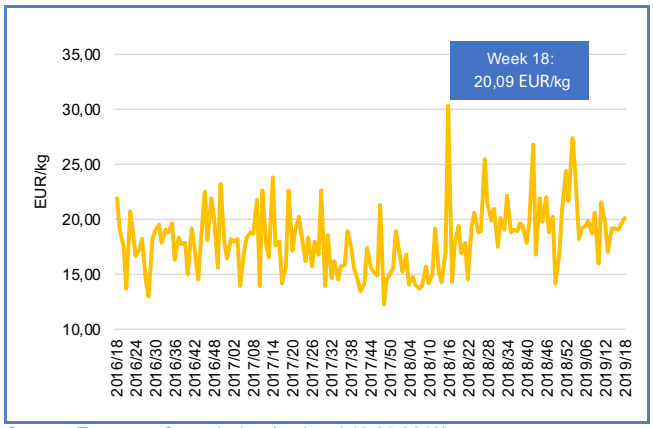
For **Cape hake** (shallow-water hake) (*Merluccius capensis*) and **deepwater hake** (deepwater Cape hake) (*Merluccius paradoxus*), frozen, (CN code 03036611) from **South Africa**, the price in week 18 was 2,90 EUR/kg, an increase of 9% over the average during the preceding four weeks and 11% over the price in the same week of 2018. Volume of 125 tonnes in week 18 was 7% below the four-week average and 61% below the volume a year earlier. This price (an average for two similar hake species) has shown a fair amount of long-run stability, with an average price during the 156-week period of 2,71 EUR/kg. This is despite highly erratic weekly supplies in the reviewed period ranging from 29 to 665 tonnes, often with 100% changes from one week to the next.

Figure 36. **IMPORT PRICE OF FROZEN CAPE HAKE AND DEEPWATER HAKE FROM SOUTH AFRICA**



Source: European Commission (updated 13.05.2019).

Figure 37. **IMPORT PRICE OF PREPARED OR PRESERVED EELS FROM CHINA**

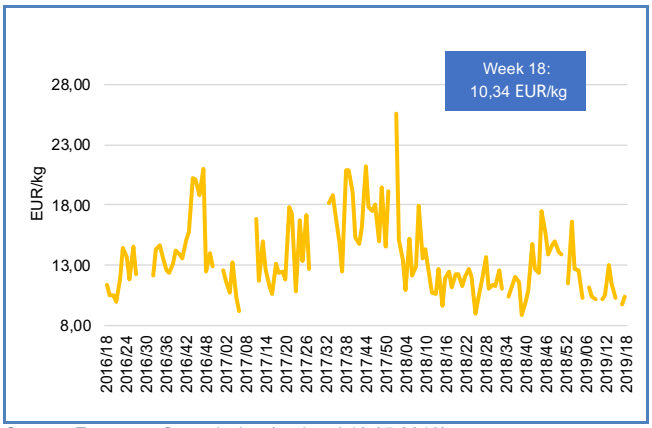


Source: European Commission (updated 13.05.2019).

The price of **eels**, prepared or preserved (CN code 16041700) from **China** was 20,09 EUR/kg, up by 5% over the preceding four-week average of 19,22 EUR/kg and by 14% over the price of 17,70 EUR/kg a year earlier. Volume in week 18 was 5 tonnes, not unusually low but down by 37% from the previous four weeks and down by 85% from the level in the same week of 2018. This price is quite volatile but shows no strong long-run trend. It is highly correlated with volume, which is equally volatile and also shows no long-run trend.

The price of frozen **deepwater rose shrimps** (*Parapenaeus longirostris*, CN code 03061791) from **Morocco** was 10,34 EUR/kg in week 18, down by 1% from the previous four weeks' average and down by 8% from the price in week 18 of 2018. This is a sometimes infrequently trade product, but it has sufficient volume to indicate strong correlation between price and supply. The changes in price, both in the short term and over longer periods, are usually matched by volume changes in the opposite direction. For example, in week 1 of 2018, the price reached a three-year peak of 25,54 EUR/kg and volume in the preceding week was one-tenth of the weekly average during the 156-week period under review.

Figure 38. **IMPORT PRICE OF FROZEN DEEPWATER ROSE SHRIMPS FROM MOROCCO**



Source: European Commission (updated 13.05.2019).

3 Consumption

3.1. HOUSEHOLD CONSUMPTION IN THE EU

In March 2019, consumption of fresh fisheries and aquaculture products increased in Ireland, Italy, the Netherlands and Portugal in both volume and value compared with the same month a year ago. The largest increases occurred in Ireland (+14% in both volume and value). In the UK, consumption remained unchanged, however, an increase by 3% was recorded in value. In the rest of the surveyed Member States, consumption decreased in both volume and value.

Table 3. **MARCH OVERVIEW OF THE REPORTING COUNTRIES (volume in tonnes and value in million EUR)**

Country	Per capita consumption 2016* (live weight equivalent) kg/capita/year	March 2017		March 2018		February 2019		March 2019		Change from March 2018 to March 2019	
		Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Denmark	24,7	552	8,56	612	9,96	580	9,52	581	9,26	5%	7%
France	32,9	19.322	215,68	19.287	215,10	16.707	192,24	17.948	211,09	7%	2%
Germany	13,9	5.074	73,40	6.492	96,81	5.416	77,88	5.240	78,67	19%	19%
Hungary	5,2	222	1,18	458	2,45	349	2,20	266	1,62	42%	34%
Ireland	23,0	1.233	17,46	1.283	18,51	1.069	15,22	1.463	21,14	14%	14%
Italy	31,1	31.715	316,06	30.140	322,75	24,75	261,35	32.605	338,45	8%	5%
Netherlands	21,0	2.832	40,92	2.761	44,50	2.176	35,38	2.814	45,19	2%	2%
Poland	14,5	5.477	29,70	5.055	30,56	3.889	23,99	4.956	30,18	2%	1%
Portugal	57,0	5.229	34,81	4.782	31,43	4.378	27,60	5.289	34,52	11%	10%
Spain	45,7	61.163	457,98	53.238	405,95	47.992	371,00	52.134	396,52	2%	2%
Sweden	26,4	638	8,99	1.001	12,43	620	7,99	591	8,34	41%	33%
UK	23,7	3.733	59,20	3.699	57,57	4.742	76,46	3.701	59,58	0%	3%

Source: EUMOFA, based on Europanel (updated 17.06.2019).
**Data on per capita consumption of all fish and seafood products for all EU Member States can be found at:*
http://eumofa.eu/documents/20178/132648/EN_The+EU+fish+market+2018.pdf

For the past three years, in all Member States surveyed except Denmark and Hungary, household consumption of fresh fisheries and aquaculture products in the month of March has been above the annual volume average. This was visible particularly in Ireland where consumption of fisheries products increased 31%.

In terms of value, consumption in March has been above in all Member States except Hungary, Spain and Sweden.

The most recent weekly consumption data **(up to week 25-2019)** available in EUMOFA can be accessed **here**.

The most recent monthly consumption data **(April 2019)** available in EUMOFA can be accessed **here**.

3.2. Fresh octopus

Habitat: A benthic species living in temperate and tropical waters, mainly in habitats, such as rocks, coral reefs, and grass beds[15].
Catch area: central-east Atlantic off the coast of Africa, from Morocco to Senegal; the Mediterranean Sea; Inland Sea of Japan[16].
Main producing countries in Europe: Spain, Portugal, Italy, Greece[17].
Production method: caught.
Main consumers in the EU: Spain, Italy, Portugal, Greece.
Presentation: Whole or chopped.
Preservation: Fresh, frozen, marinated, canned, smoked and dried.
Preparation: Grilled, boiled, seasoned.

3.2.1 General overview of household consumption in Italy and Portugal

Portugal is the Member State with the highest per capita consumption of fish and seafood products in the EU. In 2016, it averaged 57,0 kg, more than two times higher than the EU average (24,3 kg). Compared with a year ago, it increased by 3%. Compared with consumption in Spain, (the second EU country with the highest per capita consumption,45,7 kg), Portugal's consumption was 25% higher.

Italy is also among the EU countries with the highest per capita consumption of fisheries and aquaculture products. It was 31,1 kg in 2016, a 4% increase compared with 2015 and a 28% increase compared with the EU average. Compared with consumption in Portugal, it was 45% lower. See more on per capita consumption in the EU in table 3.

In Italy and Portugal, retail prices of fresh octopus varied during January 2016–March 2019. Prices in Italy (11,52 EUR/kg on a monthly average) were higher than those in Portugal. Volumes peaked in the winter, particularly in December, where in both countries consumption of octopus increases due to the festive season.

We have covered **octopus** in previous *Monthly Highlights*:

First sales: France (8/2018, 6/2017), Italy (8/2018, 6/2017), Portugal (8/2018, 6/2017, 3/2016, 1/2015, February 2013, August–September 2013)

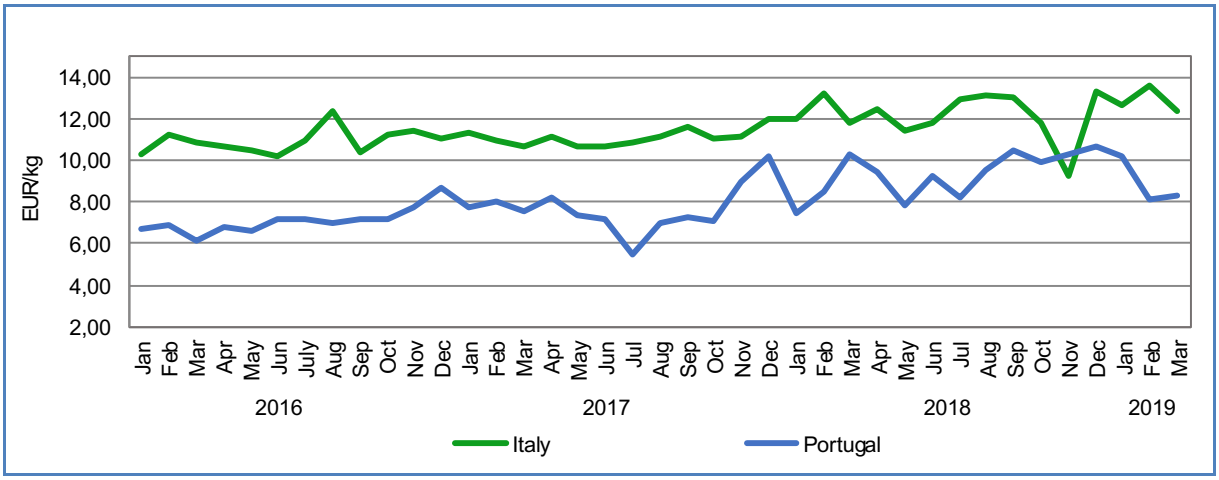
Extra-EU Import: Indonesia (8/2018), Mauritania (1/2018), Morocco (1/2018, 2/2019).

Topic of the month: Octopus in the EU (9/2018), Octopus in Portugal (May 2013).

Consumption: France (8/2017, 1/2016), Spain (8/2017, 1/2016).

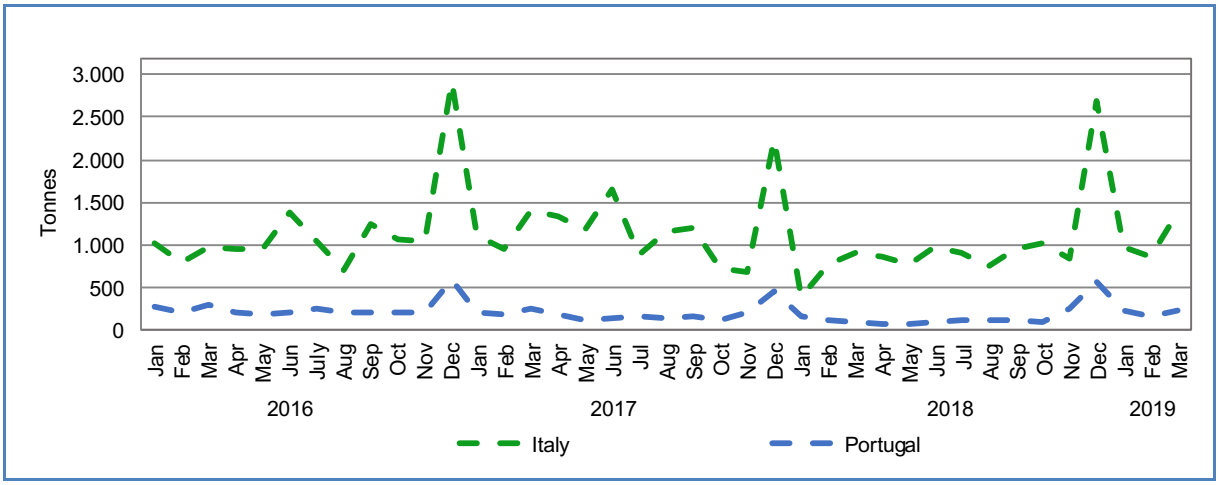
[15] http://eumofa.eu/documents/20178/131001/MH+8+2018.pdf
[16] http://eumofa.eu/documents/20178/131001/MH+8+2018.pdf
[17] http://eumofa.eu/documents/20178/132584/MH+9+2018+EN.pdf

Figure 39. **RETAIL PRICES OF FRESH OCTOPUS**



Source: EUMOFA, based on Europanel (updated 17.06.2019).

Figure 40. **HOUSEHOLD PURCHASES OF FRESH OCTOPUS**

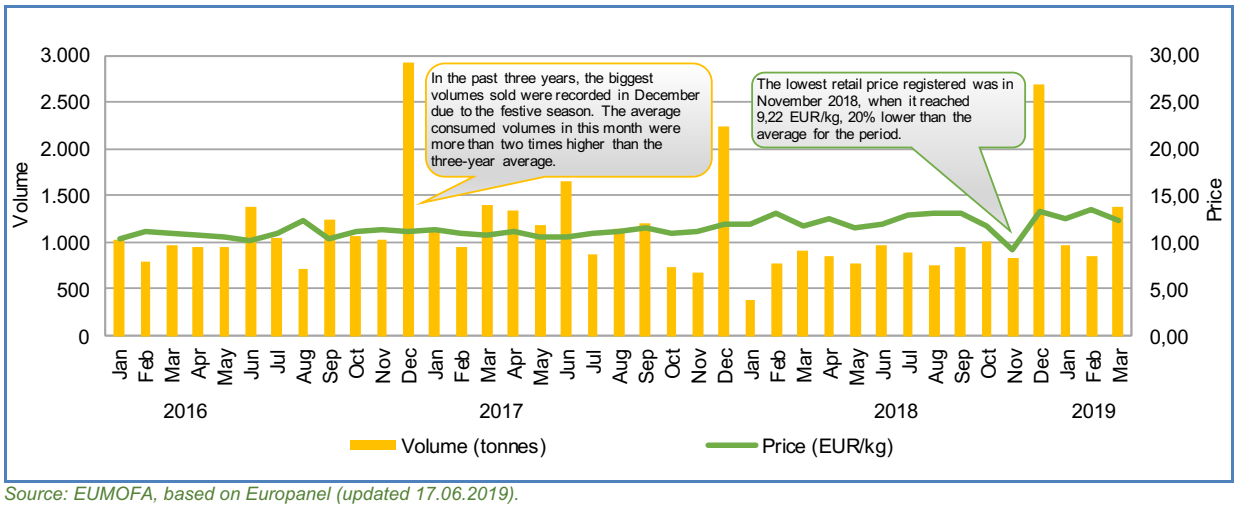


Source: EUMOFA based on Europanel (updated 17.06.2019).

3.2.2 Consumption trend in Italy

Long-term trend, January 2016–March 2019: increasing in volume and decreasing slightly in price.
Yearly average price: 10,93 EUR/kg (2016), 11,11 EUR/kg (2017), 12,18 EUR/kg (2018).
Total yearly consumption: 14.074 tonnes (2016), 14.517 tonnes (2017), 11.776 tonnes (2018).
Short-term trend, January–March 2019: increasing in volume and decreasing slightly in price.
Average price: 12,85 EUR/kg.
Total consumption: 3.209 tonnes.

Figure 41. **RETAIL PRICE AND VOLUME SOLD OF FRESH OCTOPUS IN ITALY**

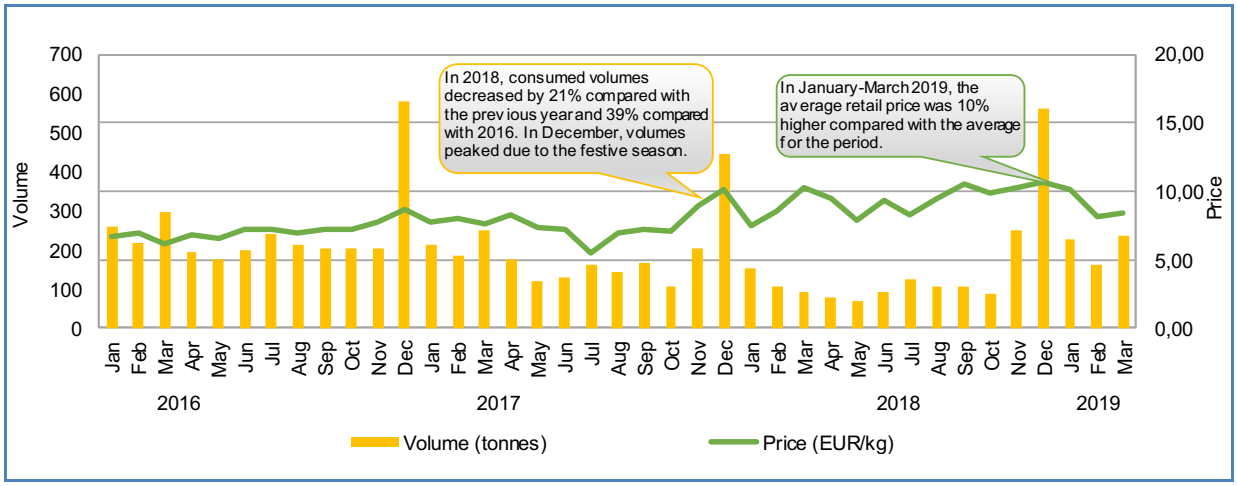


Source: EUMOFA, based on Europanel (updated 17.06.2019).

3.2.3 Consumption trend in Portugal

Long-term trend, January 2016–March 2019: decreasing in volume and increasing in price.
Yearly average price: 7,10 EUR/kg (2016), 7,67 EUR/kg (2017), 9,33 EUR/kg (2018).
Total yearly consumption: 2.987 tonnes (2016), 2.298 tonnes (2017), 1.820 tonnes (2018).
Short-term trend, January–March 2019: increasing slightly in volume and decreasing in price.
Average price: 8,88 EUR/kg.
Total consumption: 627 tonnes.

Figure 42. **RETAIL PRICE AND VOLUME SOLD OF FRESH OCTOPUS IN PORTUGAL**



Source: EUMOFA, based on Europanel (updated 17.06.2019).

First EUMOFA review of trade trends in 2018

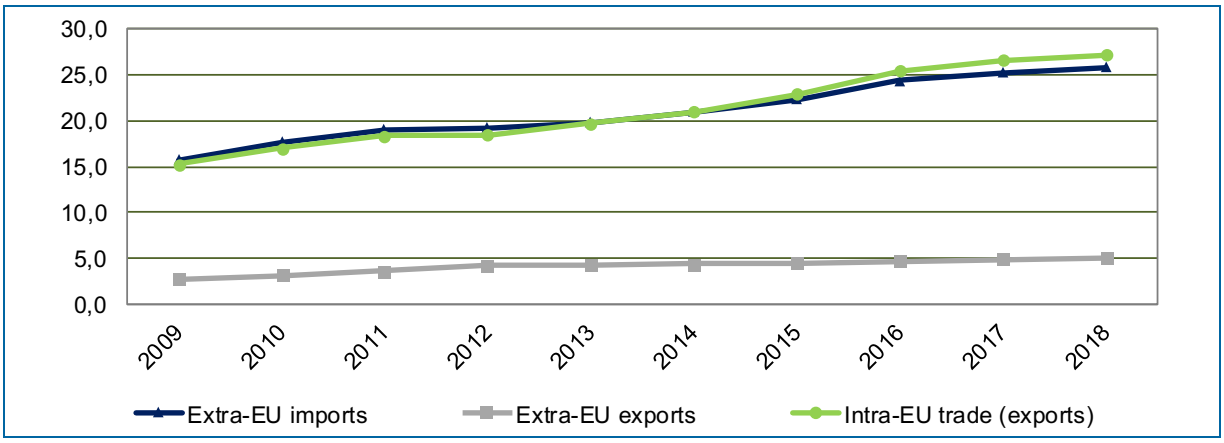
4 Case study – Trade in the EU in 2018[18]

4.1 Trade flow trends

The EU is one of the world's largest markets for fisheries and aquaculture products, and international trade plays a major role in EU seafood consumption and production. With limited room for growth in domestic production, due to the fact that demand exceeds by far the domestic supply, the EU imports a large share of its seafood needs from all around the world. EU exports, while small relative to imports, consist of a wide variety of products and are destined to all major foreign markets. Within the Union, intra-EU trade is also very active, with Member States (MSs) producing products for consumption in other Member States.

The EU market for fisheries and aquaculture products, as measured by its principal component, trade, experienced slow growth in 2017–2018. In 2018, EU imports from third countries (extra-EU imports) grew by 4% in volume[19] and 2% in value over 2017, reaching 6 million tonnes, valued at EUR 25,9 billion. The average unit value of extra-EU imports fell by 2% to 4,17 EUR/kg, causing the slow growth in overall import value. Extra-EU exports grew more rapidly in 2018, up by 5% in volume and 4% in value, to 2 million tonnes, valued at EUR 5,1 billion. Intra-EU trade[20] slightly exceeded EU imports from non-EU countries, similar to the last four years. Intra-EU exports in 2018 grew by 3% in volume and 2% in value, totalling 7 million tonnes, valued at EUR 27,3 billion.

Figure 43. **EU TRADE FLOW (value in billion EUR)**

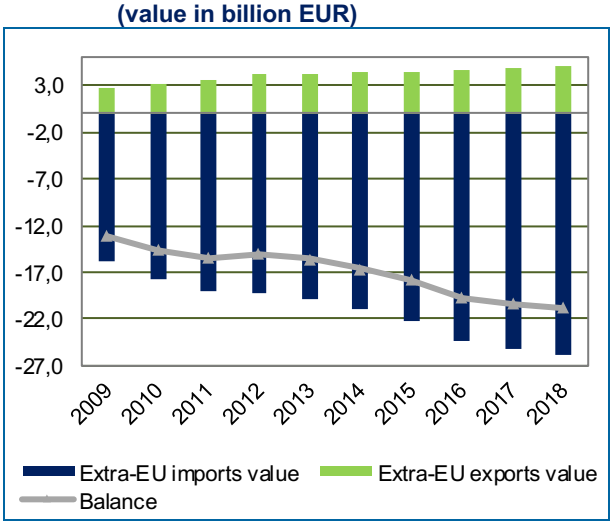


Source: EUMOFA (updated 02.05.2019).

The EU trade balance in fisheries and aquaculture products continued to run in the red, showing the EU's increasing dependence on imported products. The fisheries and aquaculture trade deficit reached a record EUR −20,8 billion, up by 2 % over 2017. Measured in volume terms, the trade deficit grew even larger, up by 4% to −4 million tonnes.

[18] This is the first EUMOFA review of 2018 fisheries and aquaculture trade trends at EU level.
[19] EU trade volumes are reported in product-weight equivalents.
[20] The analysis of intra-EU trade is based only on export data. Intra-EU trade flows as reported by EUROSTAT and cover both arrivals (i.e. imports) and dispatches (i.e. exports). Because of different valuation principle (CIF > FOB), arrivals should be slightly higher valued than dispatches. This is one of the main reasons explaining asymmetries between import and export figures. In general, bilateral comparisons between MSs of intra-EU flows have revealed major and persistent discrepancies. Therefore, comparisons dealing with intra-EU trade statistics and related results must be taken in consideration cautiously and the existence of these discrepancies should be considered.

Figure 44. **EXTRA–EU TRADE BALANCE (value in billion EUR)**

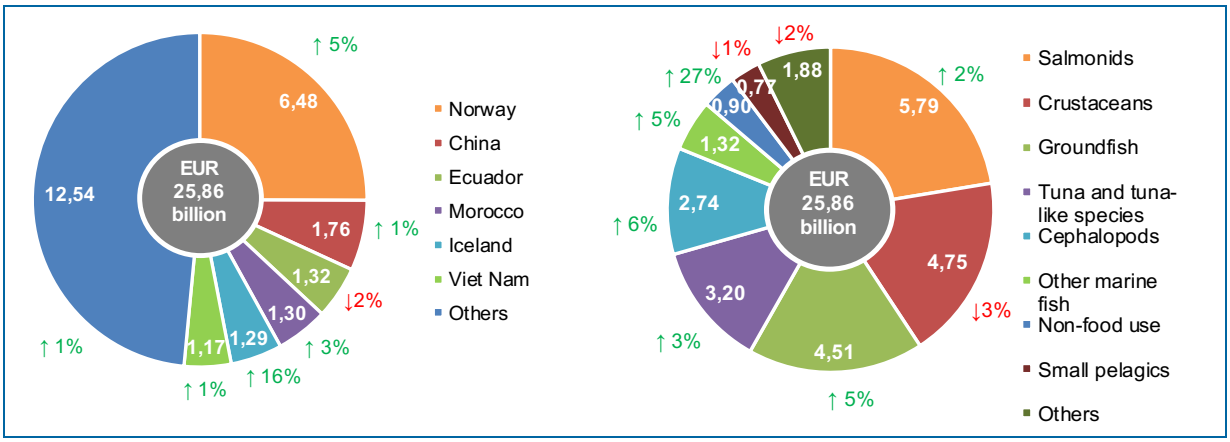


Source: EUMOFA (updated 02.05.2019).

EXTRA–EU IMPORTS: In 2018, imports from third countries grew in volume and value by 4% and 2%, respectively, from 2017. In 2018, salmonids (EUR 5,8 billion), crustaceans (EUR 4,8 billion), and groundfish (EUR 4,5 billion) were the most imported commodity groups (CG), representing 58% of total extra-EU import value. Groundfish (up by EUR 203 million or 5%), fish for non-food use (up by EUR 189 million or 27%), and cephalopods (up by EUR 151 million or 6%) were the main contributors to the overall increase in the extra-EU import value compared to 2017. The largest decreases in value were recorded for crustaceans (EUR −154 million, or −3%) and one of the main reasons behind the decrease was a fall in warmwater shrimp prices. A large decrease in value was also observed for bivalves and other molluscs and aquatic invertebrates (EUR −100 million or −18%). Of the total volume of products imported, groundfish experienced by far the largest increase, growing by 110 million tonnes, or about 40% of the total increase for all products.

The EU imports fisheries and aquaculture products from nearly 150 countries around the world. However, in 2018 nearly 50% of the total value (EUR 12,1 billion) was sourced from only five countries. The main suppliers in value terms were Norway (EUR 6,5 billion, up by 2% compared to 2017, mostly salmonids), China (EUR 1,8 billion, 0,5%), Ecuador
(EUR 1,3 billion, 2%, mostly shrimp and tuna), Morocco (EUR 1,3 billion, 3%), and Iceland (EUR 1,3 billion, 16%). Among the countries with the biggest reductions in EU import trade were India (EUR −193 million, or −19%, mostly shrimp, cephalopods, and squid), the Faroe Islands (EUR −64 million, or −10%, including mackerel, salmon, and shrimp), Thailand (EUR −64 million, or −15%, mainly shrimp, squid, and skipjack), and Ecuador (EUR −28 million, or −2%, including hake, shrimp, rock lobster, and sea crawfish).

Figure 45. **EXTRA–EU IMPORTS: MAIN PARTNERS AND MAIN COMMODITY GROUPS IN 2018 (value in billion EUR)***



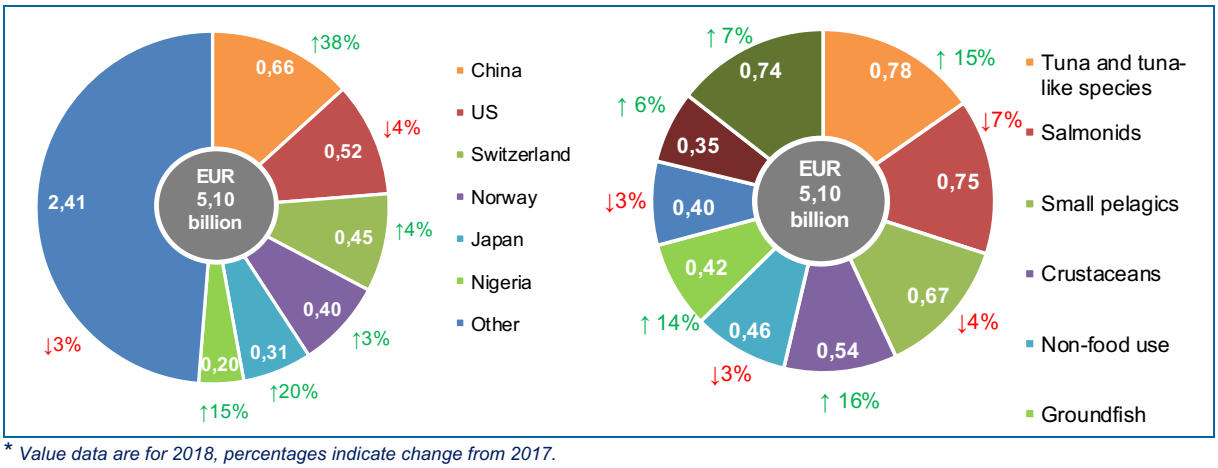
**Value data are for 2018, percentages indicate change from 2017.*
Source: EUMOFA (updated 02.05.2019).

EXTRA–EU EXPORTS: The overall increase in extra-EU exports in 2018 was propelled largely by tuna and tuna-like species (up by EUR 101 million or 15% over 2017), more than half the total value growth. The value growth was driven by higher export volumes while a slight fall was observed for unit prices. Other commodity groups with significant gains included crustaceans with an increase of EUR 77 million or 17%, groundfish EUR 51 million or 14%, and cephalopods EUR 33 million or 18%. The largest declines in extra-EU exports were experienced by salmonids registering a drop of EUR 53 million or −7% and small pelagics (EUR −26 million or −4%), both among the largest categories exported. Changes in volumes among these groups closely matched changes in value, and as a result, average export prices for many products were almost unchanged in 2018.

Of the 182 countries to which extra-EU exports were destined in 2018, five markets accounted for nearly half of total export value (48% or EUR 2,5 billion). Exports to China grew by EUR 170 million in 2018 including Greenland halibut, caviar, sea cucumber, and shrimp, an amount exceeding 90% of the total export value growth in that year. Exports to the EU's second largest market, the United States, fell by 4%. Gains were also seen in exports to Switzerland (+4%), Norway (+3%), and to Japan (+20%) over 2017.

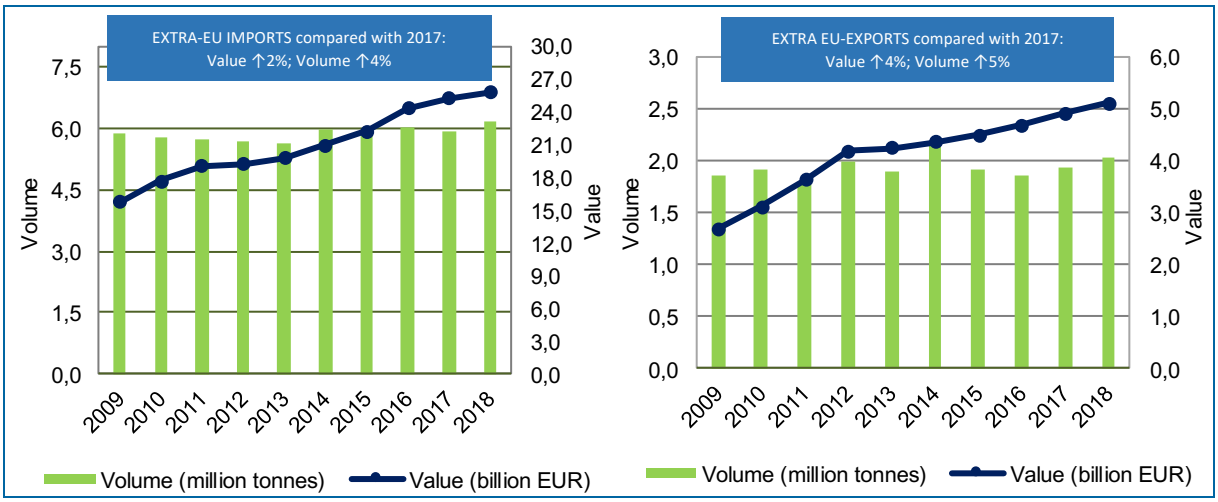
On a volume basis, the five leading export markets are Nigeria, Norway, China, Egypt, and Ukraine, which together accounted for 45% of export volume in 2018. Exports to Nigeria grew by 60.000 tonnes in 2018 or 24% over 2017 levels. Exports to Norway moved up slightly less than 1%, and those to China rose by 12%. The only decline in leading markets was observed in Egypt, where EU exports fell by 10.400 tonnes or 8%. EU exports to Ukraine grew by 14% over 2017 levels.

Figure 46. **EXTRA–EU EXPORTS: MAIN PARTNERS AND MAIN COMMODITY GROUPS IN 2018 (value in billion EUR)***



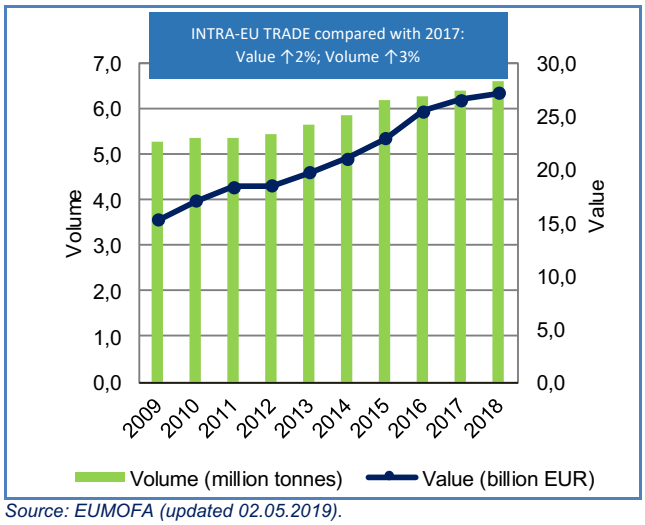
* *Value data are for 2018, percentages indicate change from 2017.*
Source: EUMOFA (updated 02.05.2019).

Figure 47. **10–YEAR TREND OF EXTRA–EU TRADE**



Source: EUMOFA (updated 02.05.2019).

Figure 48. **10–YEAR TREND OF INTRA-EU TRADE**



Source: EUMOFA (updated 02.05.2019).

INTRA–EU TRADE: In 2018, exchanges between EU Member States (intra-EU exports) reached about 7 million tonnes, valued at EUR 27,3 billion, an increase of 3% in volume and 2% in value over 2017. Prices of some major products (e.g., salmon, cod) declined, causing the lower gain in value relative to volume. Salmonids are the most traded species, with 2018 volume of 1 million tonnes, at a value of EUR 8,4 billion. Groundfish trade reached 993.000 tonnes and EUR 3,6 billion, and crustaceans totalled 343.000 tonnes, with a value of EUR 3,1 billion. The largest increase in intra-EU export value in 2018 was seen in salmonids, which grew by EUR 475 million or 6% for 90.000 tonnes, an increase of 9% over 2017. Groundfish also registered significant gains, up by 9% in volume and 4% in value from the previous year. The Member States accounting for the largest gains in intra-EU trade include some of the most active EU traders. Poland had the largest increase in 2018 intra-EU exports with a gain of 46.000 tonnes (+14%) valued at EUR 232 million (+19%). The Netherlands, famous for the "Rotterdam effect"[21], was next with an increase of 14% in volume and 6% in value. The third biggest gainer was Italy, with an export increase of 2% in both volume and value.

4.1. Trade flows of salmon

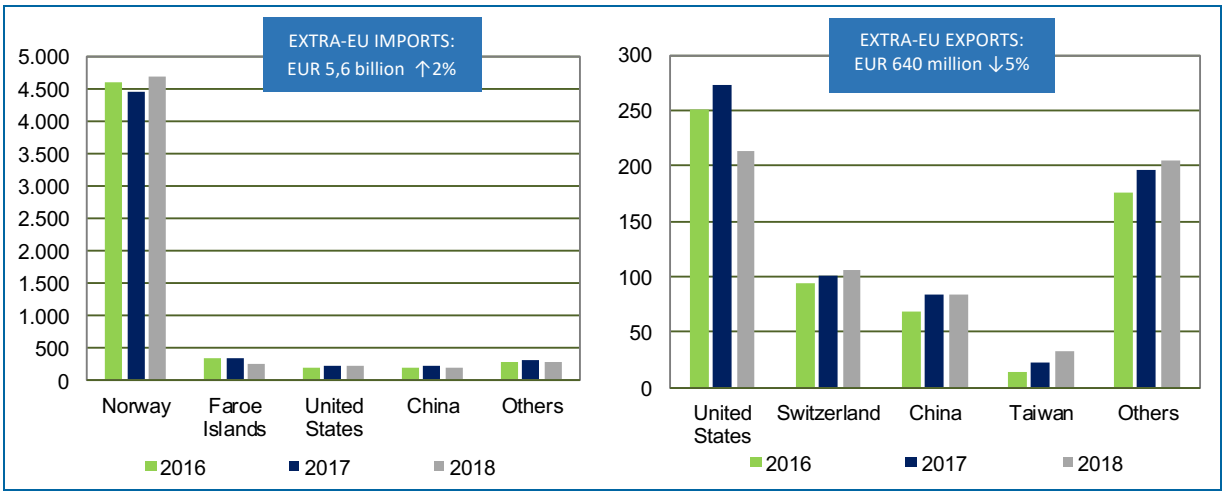
EXTRA–EU IMPORTS: Imports of salmonids in 2018 reached a total value of EUR 5,6 billion and a volume of 847 206 tonnes, increases of 2% and 6%, respectively, over 2017 levels. Salmon species, mainly Atlantic salmon, dominate the trade flows of the salmonids Commodity Group (CG). In addition to Atlantic salmon which is mostly traded within the EU, extra-EU salmon trade involves Danube and various Pacific salmon species. Atlantic salmon is usually farmed, but the bulk of Pacific salmon entering EU trade is wild harvested. Norway supplies most extra-EU imports of salmon (only Atlantic salmon), with 83% of total value in 2018. Much smaller amounts come from the Faroe Islands (Atlantic salmon), the United States (mostly Pacific salmon), and China (mostly Pacific salmon), among others. EU imports from Norway totalled 716.000 tonnes, valued at EUR 4,7 billion in 2018, an increase of 9% in volume and 6% in value compared with 2017. The average unit value was 6,58 EUR/kg. That increase followed a proportionally smaller decline between 2016 and 2017 of 6% in volume and down by 3% in value. Imports from the Faroe Islands declined in both 2017 and 2018, falling in the latter year by 15% in volume from 2017 and by 24% in value. The United States supplies mostly Pacific salmon to the EU, and such trade in 2018 totalled 30.300 tonnes, valued at EUR 223 million, down by 9% in volume and slightly up by 0,1% in value over 2017, due to a 10% increase in average unit value to 7,34 EUR/kg in 2018.

EXTRA–EU EXPORTS: EU salmon exports to the world fell in 2018, due almost entirely to a decrease in shipments to the largest EU salmon market, the United States (33% of total EU export value). Total extra-EU exports in 2018 reached 80.500 tonnes, valued at EUR 640 million, down by 7% and 5%, respectively, from 2017. This decline reversed growth between 2016 and 2017, when exports grew by 2% and 12% in volume and value, respectively. Average unit values grew between 2017 and 2018, albeit at a diminishing rate, from 7,78 EUR/kg in the former year to 7,95 EUR/kg in the latter year. EU salmon exports to the United States totalled 24.000 tonnes, valued at EUR 212,7 million, in 2018, a decrease of 25% in volume and 22% in value from a year earlier. The average unit

[21] The „Rotterdam effect" refers to the impact on EU MSs' trade statistics generated by the fact that an exceptionally large share of EU external trade is channeled through Dutch ports, particularly Rotterdam, regardless of the actual EU destination or source. In the case of imports, for example, the goods destined to other EU Member States arriving in Dutch ports are recorded, according to Community rules, as extra-EU imports by the Netherlands (the country where goods are released for free circulation) and as dispatches from the Netherlands to the Member States of actual destination even though there is no link with the economy of the Netherlands. https://ec.europa.eu/eurostat/web/international-trade-in-goods/faq.

value of such exports recorded a moderate increase of 4% to 8,85 EUR/kg, softening the reduction in export value. The decrease in export volume must be seen in relation to reduction in production in the EU and increased competition from China (as both markets have preferences towards large sized salmon). The second largest market for extra-EU salmon exports in 2018 was Switzerland, absorbing 17% of total exports. Such trade grew by 6% in value between 2016 and 2017, and then again grew by 6% in 2018, reaching 6.600 tonnes and a value of EUR 105,9 million. The Swiss market has strong preference towards eco-labelled salmon and salmon produced under high quality certification standards. EU exports to China grew in 2017, rising by 12% in volume and 23% in value to 11.400 tonnes, valued at EUR 83,1 million. But in 2018, volume declined by 4% to 10.900 tonnes. Export value continued to rise, up by 1% to EUR 84,1 million. EU exports to Taiwan, though small, have grown tremendously in recent years: from a 2016 level of 1.700 tonnes and a value of EUR 13,9 million, exports jumped 137% in volume and 139% in value in 2018.

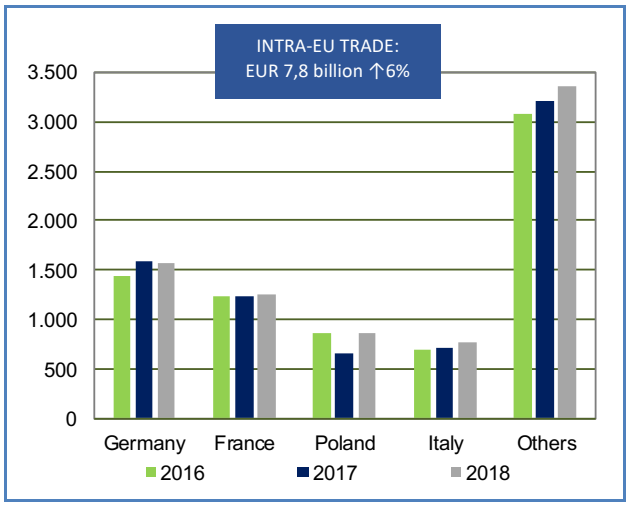
Figure 49. **SALMON: EXTRA-EU IMPORTS AND EXPORTS (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

INTRA–EU TRADE: Salmon trade between the EU Member States has grown in value each year since 2016. By 2018, total intra-EU salmon exports reached 974.100 tonnes, valued at EUR 7,8 billion, increases of 10% and 6% in volume and value from 2017. Average unit value was 8,03 EUR/kg in 2018, down from 8,31 EUR/kg in 2017. The Member States with the largest intra-EU exports are Germany, France, Poland, and Italy, which together held 57% of 2018 total trade value[22]. Germany, with one-fifth of total trade, grew its exports each year since 2016, reaching 151.200 tonnes, valued at EUR 1,6 billion. France had a more mixed performance, with exports in 2016–2017 falling by 3% and 0,3% in volume and value, before rising in 2018 to a volume of 164.800 tonnes and a value of EUR 1,3 billion, both measures up by 2% from 2017. France's export volume exceeds Germany's, but its average unit value is much lower.

Figure 50. **SALMON: INTRA-EU TRADE BY MAIN EXPORTING COUNTRIES (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

[22] The data only include intra-EU trade, although a MS's intra-EU exports may have originally been imported from outside the EU. (For example, Poland might export salmon to other MSs, which it originally imported from Norway.) Intra-EU trade data do not identify whether an exported product (e.g., salmon fillets) was originally imported (e.g., whole salmon).

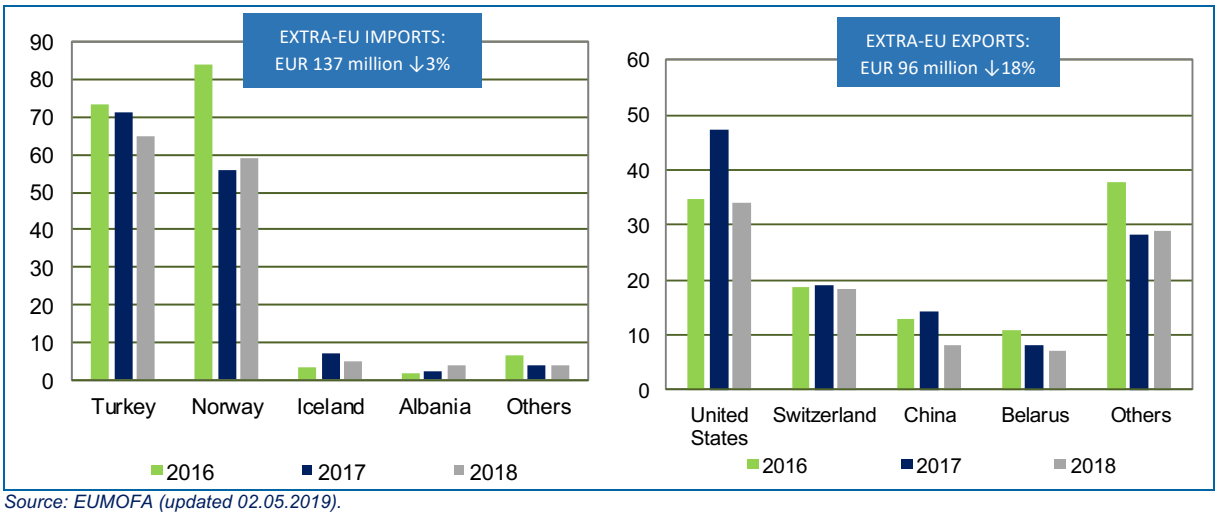
Poland's exports of processed salmon mainly imported from outside the EU dropped sharply in 2017 by 30% in volume and 25% in value from 2016. However, it almost completely recovered one year later, totaling 135.000 tonnes, valued at EUR 866 million, in 2018, up by 42% and 34% in volume and value, respectively.

4.2. Trade flows of trout

EXTRA–EU IMPORTS: Trout, mainly rainbow trout, is the second-most important species within salmonids trade, behind salmon. Supplies are almost entirely farmed, and trout can be raised to sizes large enough to compete in the market with Atlantic salmon, as it has a similar taste and appearance. Most trout enter the EU in fresh or frozen form (45% fresh, 40% frozen in 2018), while 15% is in smoked form. Extra-EU imports of trout fell slightly from 2017 to 2018, to 26.700 tonnes, valued at EUR 137,1 million, declines of 2% and 3% in volume and value, respectively. The average unit value of 5,14 EUR/kg in 2018 was 0,6% lower, augmenting the decline in import value. Turkey and Norway are the main extra-EU suppliers of trout, with more than 80% of total import value between them. In 2018, however, trout imports from Turkey fell by 9% in value and 17% in volume. Higher Norwegian supplies in 2018 (after a sharp drop in 2017) rose by 6% in value and 27% in volume over 2017 levels. In distant third and fourth places as suppliers to the EU are Iceland and Albania, with 4% and 3%, respectively, of extra-EU import value. Imports from Iceland plummeted in 2018, by 29% in value over 2017. Imports from Albania rose sharply during the same period, nearly offsetting the reduced Icelandic supply: such imports increased by EUR 1,8 million or 83% in value.

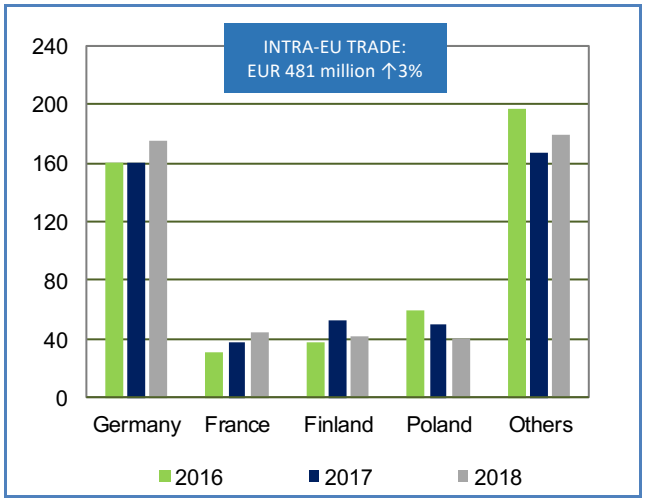
EXTRA–EU EXPORTS: EU trout exports to third-country markets also consist mainly of rainbow trout. Such exports have declined since at least to 2016, and in 2018 totalled 13.000 tonnes, valued at EUR 96,2 million, a drop from 2017 of 11% in volume and 18% in value. Average unit values have fluctuated, rising by 16% year-over-year to 7,96 EUR/kg in 2017, before falling by 7% to 7,38 EUR/kg in 2018. The largest markets for extra-EU trout exports include the United States (35% of total value), Switzerland (19%), China (8%), and Belarus (7%), with a combined 70% share of EU exports in 2018. Following EU growth in the US market of 20% in volume and 36% in value in 2017, EU exports fell in 2018 by 28% in value. The average unit value of such exports dropped by 10% in 2018, following a 13% rise in 2016−2017. In Switzerland, both volume and value from EU exports declined by 4% in 2018 Without a 6% increase in average unit values in 2017, export value would have declined, while in 2018 a small rise in unit value by 1% was not enough to offset the reduced volume.

Figure 51. **TROUT: EXTRA-EU IMPORTS AND EXPORTS (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

Figure 52. **TROUT: INTRA-EU TRADE BY MAIN EXPORTING COUNTRIES (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

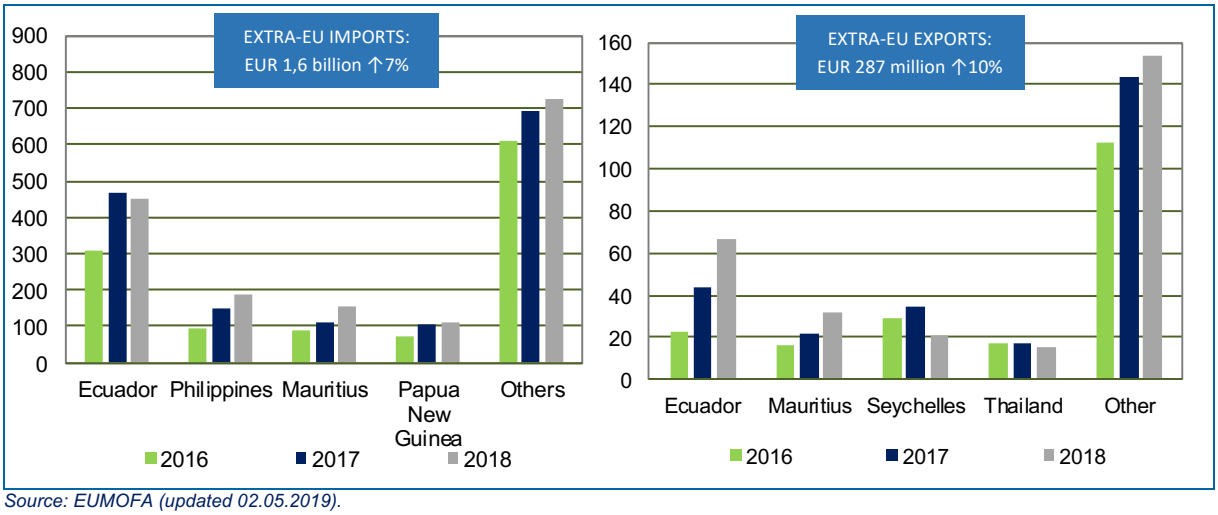
INTRA–EU TRADE: Trout exports between EU Member States in 2018 totalled 83.800 tonnes, valued at EUR 481 million. This represented a slight increase of 1% in volume and 3% in value over 2017. The leading Member States in intra-EU trout exports is, by far, Germany, with 31% of total EU volume and 36% of value in 2018. Following weak performance in 2016−2017, German intra-EU exports grew by 6% in volume and 9% in value in 2018 to reach 26.200 tonnes with a value of EUR 175 million. Almost tied for second place behind Germany are France, Finland, and Poland, with 8%-9% of total intra-EU export value.

4.3. Trade flows of skipjack tuna

EXTRA–EU IMPORTS: Skipjack is one of the most important main commercial species of the tunas and tuna-like species commodity group, and along with yellowfin is one of the two main species used by the world's tuna canning industry. In 2018, extra-EU imports of skipjack of 411.000 tonnes, valued at EUR 1,6 billion, were 2% higher in volume and 7% higher in value than 2017 levels. The average unit value of 3,95 EUR/kg in 2018 was 5% higher than in the preceding year. This is due largely to the fact that imports of higher-valued final products (e.g., canned tuna) increased while imports of lower-valued product (loins) decreased. Skipjack tuna is imported in canned form for direct distribution to retail/restaurant consumers, and in frozen whole or loined forms by canneries for further processing. The largest supplier by far to the EU market is Ecuador, which in 2018 accounted for 28% of the total extra-EU imports value. Ecuadorian shipments jumped in 2017, up by 27% in volume and 51% in value over 2016, encouraged by a free trade agreement with the EU which entered into force in the beginning of 2017, before declining slightly in 2018, reaching 104.300 tonnes, valued at EUR 449 million. The next three largest suppliers are the Philippines, Mauritius, and Papua New Guinea, with market shares of 12%, 10%, and 7%, respectively. From 2017 through 2018, imports rose sharply from the Philippines by 25% and Mauritius by 43%. Nearly all such imports are prepared products, mainly canned tuna.

EXTRA–EU EXPORTS: In 2018, skipjack tuna exports to markets outside the EU reached 186.600 tonnes, up by 34% over 2017 at a value of EUR 287 million, an increase of 10% and an average unit value of 1,54 EUR/kg. Spain, Italy, Germany, and France are the largest producers of skipjack tuna products, including tuna harvested by the fleets of some MSs' in distant waters for delivery to foreign tuna processors. The largest markets for extra-EU exports include Ecuador, Mauritius, Seychelles, and Thailand, which combined accounted for 47% of the total extra-EU exports value of skipjack. Exports to Ecuador have risen dramatically in recent years. During 2017−2018, volume and value grew by 99% and 53%, respectively, reaching 56.200 tonnes, with a value of EUR 66,8 million.

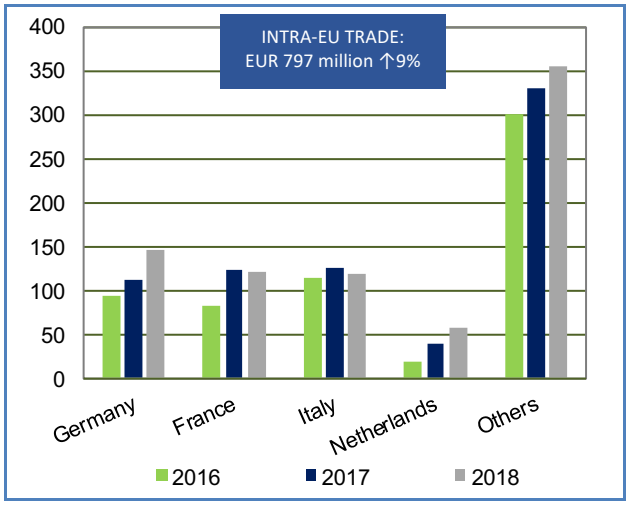
Figure 53. **SKIPJACK TUNA: EXTRA-EU IMPORTS AND EXPORTS (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

INTRA–EU TRADE: Trade of skipjack between EU Member States have risen significantly in recent years. In 2018, intra-EU exports reached 181.500 tonnes, valued at EUR 797,1 million – up from 2017 by 9% in both volume and value, and from 2016 by 21% and 31% in volume and value, respectively. The average unit value during this period rose by 10% to 4,39 EUR/kg in 2018. The leading Member States in intra-EU skipjack exports are Germany, France, Italy, and the Netherlands, with a combined share of 55% of total value in 2018. Germany's exports totalled 30.900 tonnes, valued at EUR 144,9 million, in 2018, an increase of 18% in volume and 30% in value from 2017. This growth put Germany ahead of France, whose 2018 intra-EU exports totalled 26.400 tonnes, valued at EUR 121 million, corresponding to an average unit value of 4,58 EUR/kg. Compared with a year earlier, volume and value were down by 10% and 2%, respectively. France's trade is about the same as Italy's, whose intra-EU exports also fell in 2018, to 21.900 tonnes and EUR 119 million, with average unit value of 5,43 EUR/kg; this represented declines from 2017 of 2% and 6%, respectively, in total volume and value. The Netherlands had the most rapid growth in 2018, up by 56% in volume and 49% in value to 13.900 tonnes, valued at EUR 57,1 million.

Figure 54. **SKIPJACK TUNA: INTRA-EU TRADE BY MAIN EXPORTING COUNTRIES (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

4.4. Trade flows of yellowfin tuna

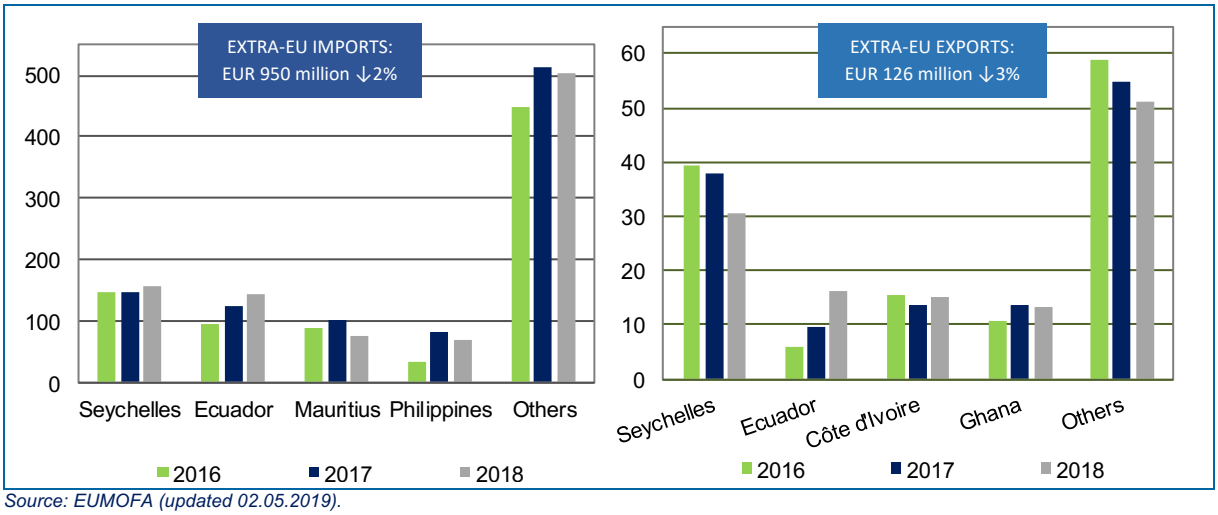
EXTRA–EU IMPORTS: Yellowfin tuna is the primary species used in canned tuna processing in the EU and has also become increasingly popular in filleted form in restaurants and cooking at home. It is a tropical tuna and imported from many sources, including countries where EU MS-flagged fishing vessels land their yellowfin catches. Extra-EU imports of yellowfin grew by 9% in volume and 19% in value between 2016 and 2017, before declining in 2018 by 8% in volume and 2% in value to 232.500 tonnes, valued at EUR 950 million. Average unit value in 2018 was 4,09 EUR/kg. The largest sources of such imports are the Seychelles, Ecuador, Mauritius, and the Philippines, supplying a combined 47% of total EU imports value in 2018. The Seychelles, whose primary industry is fish processing, increased the value of its shipments to the EU each year during 2016–2018, although this was sustained by a rising unit value, as volume declined in 2017. EU imports from the Seychelles in 2018 totalled 37.800

tonnes, up by 3% from 2017, valued at EUR 156 million. EU imports from Ecuador grew steadily during 2016–2018, reaching 30.000 tonnes, up by 21% from 2017 at a total value of EUR 144 million, an increase of 16%. A significant share of volumes imported from the Seychelles, Ecuador and Mauritius are tuna of EU origin.

EXTRA–EU EXPORTS: While extra-EU imports of yellowfin tuna are mainly prepared products such as canned tuna, extra-EU exports are mainly whole frozen fish and frozen loins (fillets), both for processing. Such exports include tuna harvested by EU vessels in distant waters and landed abroad. Total extra-EU exports of yellowfin tuna declined steadily during 2016−2018, from 76.400 tonnes to 61.200 tonnes in volume, and from EUR 130 million to EUR 126 million in value, while average unit value rose from 1,71 EUR/kg in 2016 to 2,06 EUR/kg in both 2017 and 2018.
As is the case with skipjack tuna, the principal markets for extra-EU yellowfin exports are much the same as the sources of extra-EU imports, including the Seychelles and Ecuador. In addition, Côte d'Ivoire and Ghana are significant markets for EU exports. These countries are not large consumers of tuna, they import whole or loined tuna for processing and export prepared product. EU exports to Côte d'Ivoire and Ghana showed mixed trends in 2016−2018: exports to Côte d'Ivoire rose between 2017 and 2018 to 6.912 tonnes, worth EUR 14,9 million, while exports to Ghana fell slightly during this period to 6.285 tonnes at a value of EUR 13,1 million.

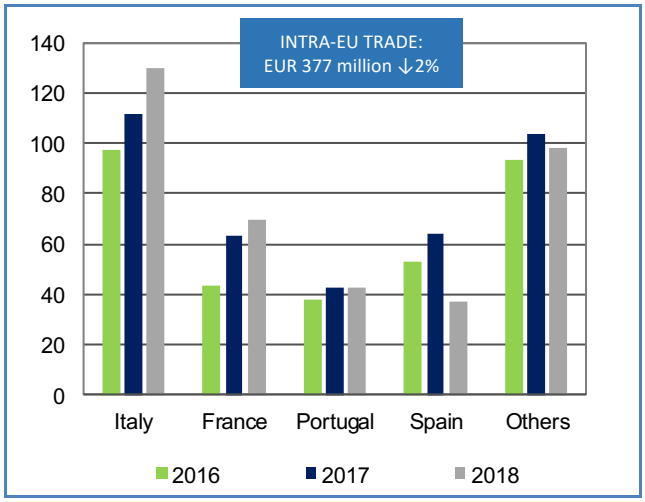
EU exports of yellowfin to the Seychelles decreased by 20% in volume and 19% in value from 2017. Exports to Ecuador followed the opposite trend, jumping by 91% in volume and 66% in value over 2017.

Figure 55. **YELLOWFIN TUNA: EXTRA-EU IMPORTS AND EXPORTS (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

Figure 56. **YELLOWFIN TUNA: INTRA-EU TRADE BY MAIN EXPORTING COUNTRIES (value in million EUR)**



Source: EUMOFA (updated 02.05.2019).

INTRA–EU TRADE: Yellowfin trade between Member States consists mainly of prepared products and has fluctuated in recent years. In 2018, intra-EU yellowfin exports totalled 68.100 tonnes, valued at EUR 377 million, at an average unit value of 5,54 EUR/kg. This represents a decline from 2017 of 14% in volume and 2% in value, and from 2016 a decline of 11% in volume and an increase of 17% in value. The largest yellowfin exporting MSs are Italy, France, Portugal, and Spain, together accounting for 74% of total MSs' export value in 2018. Italy has about one-third of the intra-EU export market, almost twice its nearest competitor, France, and has grown significantly in recent years, especially in total value. In 2018, its exports reached 21.200 tonnes, valued at EUR 130 million, up by 9% in volume and 16% in value from 2017. France also experienced growth in intra-EU yellowfin trade, with exports during 2016−2018 rising by 12% and 62% in volume and value, respectively. Spain's intra-EU exports tumbled in 2018 after a moderate rise of 3% in volume and 22% in value during 2016−2017. Exports in 2018 fell from 2017 by 40% in volume and 42% in value.

5 Case study – Market use of marine invasive species in Europe

Species that have been moved, intentionally or unintentionally, as a result of human activity, into areas where they do not occur naturally are called introduced species or alien species. Many of them perish in their new environment but some thrive and start to take over native biodiversity and affect human livelihoods—these are known as invasive species[23].

When a species establishes in a new environment, it is unlikely to be subjected to the natural controls that kept its population numbers in balance within its natural range. Without such control by predators, parasites or disease, such species tend to increase rapidly, to the point where they can take over their new environment. Marine invasive species have had a significant impact on biodiversity, ecosystems, fisheries and mariculture, industrial development and infrastructure. Managing invasive species in the marine environment (eradication and/or control) presents many more challenges than on land[24].

Some marine invasive species have become a market opportunity for local fishing communities raising a question: how to balance their management between needs to eradicate invasive species or at least control their impacts and needs to maintain a valuable industry. This case study highlights three examples of marine invasive species in Europe that have been exploited by commercial fisheries: the veined rapa whelk in the Black Sea, the American slipper-limpet in France and the red king crab in Norway.

5.1 Veined rapa whelk in the Black Sea

Veined rapa whelk (*Rapana venosa)*, is a predatory marine snail which may impact both natural and cultivated populations of oysters, mussels and other molluscs. In areas where it has been introduced it has caused significant changes to the ecosystem. It has a high ecological fitness as evidenced by its high fertility, fast growth rate and tolerance to low salinity, high and low temperatures, water pollution and oxygen deficiency. Long distance dispersal is facilitated by ship ballast water, in which the larvae of the snail is found in its plankton phase[25]. The veined rapa whelk is an invasive species, originally coming from eastern Asia, and was first recorded in the Black Sea during the 1940s[26].

Veined rapa whelk is associated with a decline in range and density of native mussel settlements, near the Anatolian, Caucasus coasts and Western-Danube shelf region on the Black Sea, which were originally biologically rich areas. Thus, the species has caused important changes in the interaction between fishing and habitat in the coastal waters of the south-eastern Black Sea. While being an introduced species that has attained an important role in the demersal ecosystem of the Black Sea, veined rapa whelk has also become one of the most important commercial species especially for trade.

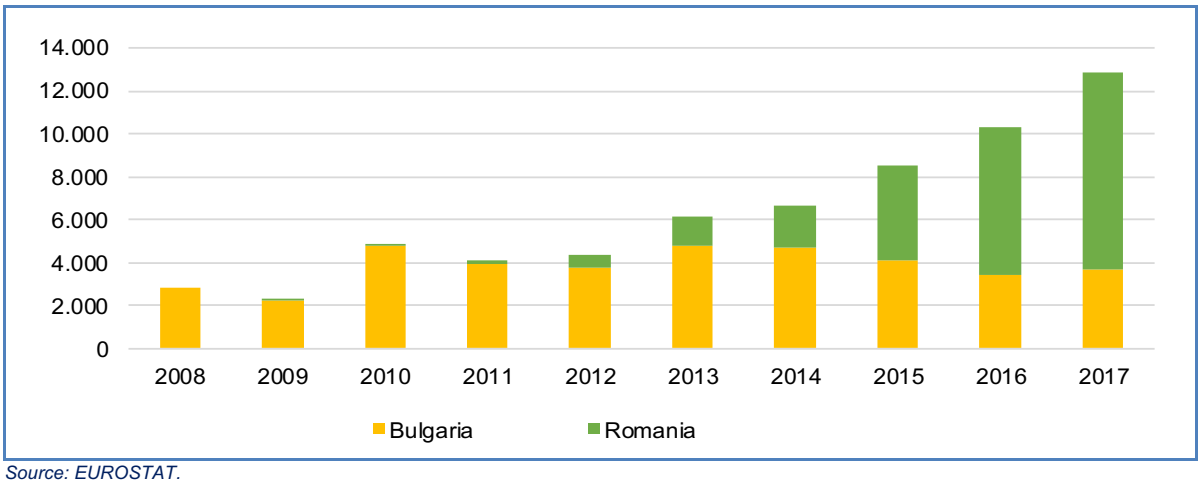
In Turkey, Bulgaria, and most recently Romania, veined rapa whelk is a resource that is collected, processed and exported, usually to South Korea and Japan. First collected by divers, it is now harvested by vessels dredging for snails. The fishery is managed by a quota system allowing to keep balance between the control of the expansion of the species and maintaining related economic activities[27].

[23] https://www.iucn.org/theme/marine-and-polar/our-work/international-ocean-governance/managing-invasive-species
[24] https://www.cbd.int/invasive/doc/marine-menace-iucn-en.pdf
[25] http://www.iucngisd.org/gisd/speciesname/Rapana+venosa
[26] http://www.issg.org/database
[27] http://www.eurofishmagazine.com/component/k2/item/374-processing-rapana-for-korean-buyers

5.1.1 Production

In 2017, landings of rapa whelk in the EU reached almost 13.000 tonnes. The two most important EU fishing countries are Romania (covering 72% of the total volume) and Bulgaria (covering the remaining 28%). Since 2015 Romania has become the main fishing country in the EU in terms of landed volume.

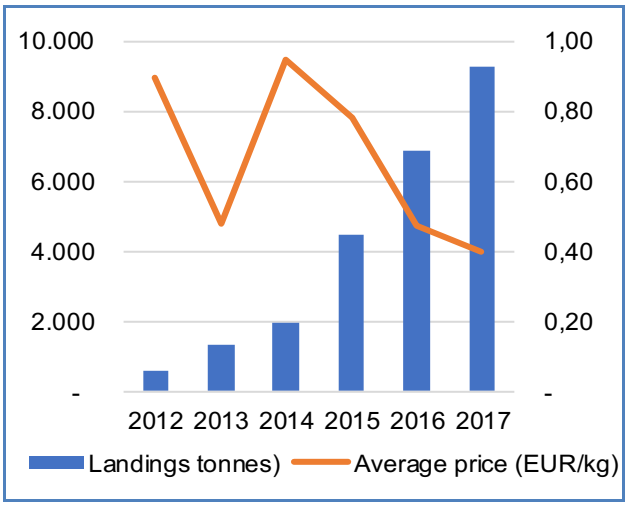
Figure 57. **EU LANDINGS OF RAPA WHELK BY COUNTRIES (volume in tonnes)**



Source: EUROSTAT.

In Romania, between 2013 and 2014, veined rapa whelk first-sale price increased by 97% following the increase of landings by 49%. From 2014 to 2017, first-sale prices decreased by 50% (from 0,95 EUR/Kg to 0,47 EUR/Kg), following the strong increase of landings from 1.953 tonnes to 9.244 tonnes.

Figure 58. **LANDINGS AND FIRST-SALE PRICE OF VEINED RAPA WHELK IN ROMANIA (volume in tonnes, price in EUR/kg)**



Source: EUROSTAT.

5.1.2 Processing

At the processing facility the rapa whelk are first placed in fresh water for a few hours to remove the sand. They are then boiled for a few minutes and immediately afterwards immersed in very cold water. The thermal shock helps to separate the meat from the shell. The meat is then removed from the shell manually, cleaned and graded into one of six sizes before being frozen. The frozen meat is finally packed and shipped to export markets, mostly Korea and Japan[28].

[28] http://www.eurofishmagazine.com/component/k2/item/374-processing-rapana-for-korean-buyers

5.1.3 Trade

There is not a specific statistical trade code for this species, so it is assumed that products corresponding to the MCS "other molluscs and aquatic invertebrates" cover mostly veined rapa whelk for Romanian and Bulgarian exports. For veined rapa whelk in Bulgaria, the trade balance has been positive over the period between 2008 and 2018. During the same period, imports and exports have increased in value by 338% and 149%, respectively. In 2018, exports reached 2.029 tonnes, at a value of more than EUR 13 million (−9% compared to 2017). The main export destinations were South Korea (50% of export value in 2018), and Japan (33%) and to a lesser extent China, Greece, and Vietnam. In the same year, imports were mainly from Romania, with 86% of imports (import figures may include other molluscs than *Rapana venosa*).

In Romania, the trade balance was negative between 2012 and 2015. Between 2008 and 2011, exports largely exceeded imports. The same has been observed between 2016 and 2018. In 2018, 1.252 tonnes of *Rapana venosa* were exported for a value of EUR 2,5 million, mainly to South Korea, with 55% of export value, and Japan (19%).

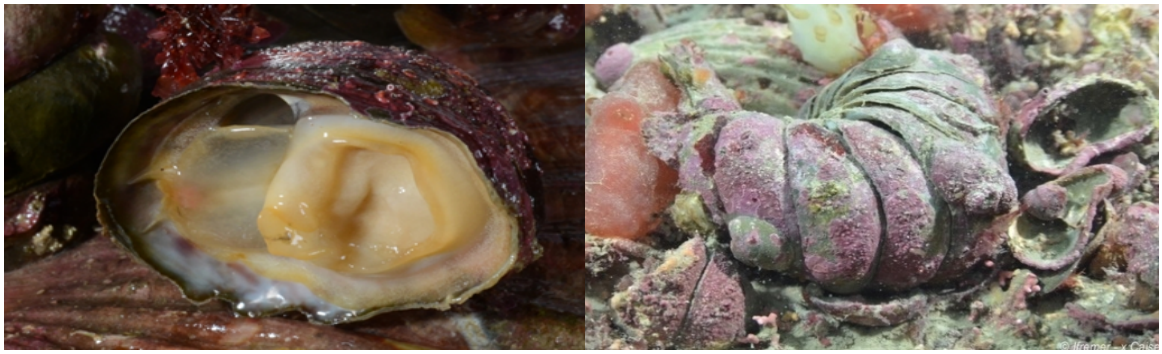
Table 4. **TRADE FLOWS FOR VEINED RAPA WHELK[29] IN ROMANIA AND BULGARIA (value in 1000 EUR)**

Species	Flow type	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Romania	Export	2.542	3.045	4.306	5.115	234	289	332	779	2.510	2.475	2.466
	Import	839	720	749	1.219	657	630	571	894	834	819	1.003
	Trade balance	**1.703**	**2.325**	**3.557**	**3.896**	**-423**	**-340**	**-238**	**-114**	**1.676**	**1.656**	**1.463**
Bulgaria	Export	5.387	4.407	6.228	4.764	4.269	4.034	5.350	6.533	8.646	14.685	13.391
	Import	365	370	177	319	246	443	480	797	1.376	963	1.600
	Trade balance	**5.022**	**4.036**	**6.051**	**4.445**	**4.023**	**3.590**	**4.870**	**5.736**	**7.270**	**13.722**	**11.791**

Source: COMEXT.

5.2 American slipper-limpet in France

American slipper-limpets or Crepidulae (*Crepidula fornicata*) are gastropod molluscs originating from the Atlantic coast of North America. They are usually found in colonies in sheltered areas such as shallow bays or estuaries. They can be attached to a wide variety of seabed: rocky bottom, gravel, sand or mud, and form a chain of individuals stacked on top of each other. They usually sit in stacks on a hard substrate, e.g., a shell of other molluscs, boulders or rocky outcroppings. They feed on phytoplankton by filtration, as algae or bacteria and suspended solids. In general, females can lay twice a year, between 5.000 and 30.000 eggs per spawn grouped in protective capsules. After hatching, the larvae experience a 4 to 5-week pelagic phase which favours their dispersal. Their growth is very fast, and the males can reproduce at the age of 4 months[30].



Source: Ifremer/Xavier Caisey.

[29] CN8 codes corresponding to other molluscs and aquatic invertebrates (excluding mussel, oyster and other main commercial shellfish species).
[30] http://issg.org/database/species/ecology.asp?si=600&fr=1&sts=&%20ang=EN&ver=print&prtflag=false

The slipper-limpet has all the characteristics of an invasive species: a very effective reproduction strategy, high ecological tolerance (it tolerates a wide range of environmental factors), feeding mode (a filter, which is poorly limiting), and an absence of predators.

First introduced to Europe unintentionally with American oysters to England in the 1870s, the slipper limpet spread along the European coasts, and is now found along the Atlantic coast from Spain to Denmark with records also in the Mediterranean Sea and southern Norway[31]. They probably have been introduced again when the Allies landed in France in 1944. It has especially proliferated for thirty years in Normandy and on the northern coast of Brittany, in France[32].

This population increase has had significant effects on the environment in the most densely colonized areas (modification to the sediment and biodiversity), leading to the emergence of a new benthic ecosystem. Anthropic dredging activities are among the causative factors of the spread. But the slipper-limpet competes for space and feed with some commercial species as scallop, mussel or oyster[33]. After decades of expansion and given the size of its population (estimated at 1,5 million tonnes in Brittany), its introduction and development are considered irreversible.

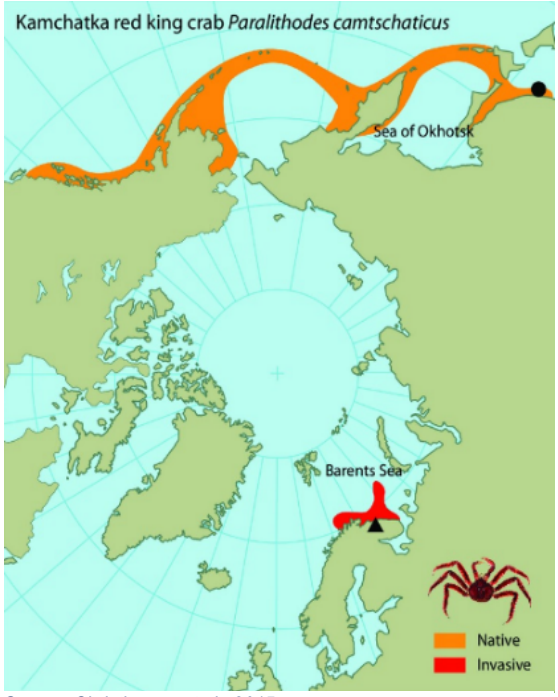
However, the meat of slipper-limpet is appreciated for its finesse and taste, especially in USA, in Canada and Asia. French processors have tried to find a way to harvest and process this huge shellfish stock, turning this harmful invasion into a market opportunity. Since 2008, a French company, Atlantic Limpet Development (ALD), is working on finding an economic model for fishing, processing, marketing and promoting this species. From 2013, one fishing vessel has been authorized - on an experimental basis - to fish (dredging) on the Atlantic slipper-limpet stock in the Bay of Cancale in Brittany. Landings started at 200 tonnes in 2012 to reach 400 tonnes in 2016. Once separated from the shell, the meat was immediately cleaned and frozen and packed to be shipped. The shell of slipper-limpet was then used for non-food purposes: amendments for agriculture (as it is composed of 97% of calcium carbonate) or use for building draining pavements[34].

However, back then, the market for slipper-limpet was still underdeveloped in France and the production targeted export markets, specifically to the United States and Asia, and high-end restaurants. So the targeted markets were export markets (namely North America, but also Italy and Spain as a substitute of clams), foodservice sector and processed meals industry. In addition, the company was expecting on the international recognition of the MSC label to introduce the slipper-limpet on the market for sustainable seafood products. Unfortunately, due to lack of immediate commercial outlets, the company had to cease its activity in 2016, waiting for new investors. However, in 2017, another French company specialised in seafood processing and marketing has taken over the promising company with its unique patented process but so far the production of processed slipper-limpet has not started again.

[31] https://www.researchgate.net/profile/David_Thieltges/publication/223459194_Too_cold_to_prosper-Winter_mortality_prevents_population_increase_of_the_introduced_American_slipper_limpet_Crepidula_fornicata_in_northern_Europe/links/59db47160f7e9b18c2e32b48/Too-cold-to-prosper-Winter-mortality-prevents-population-increase-of-the-introduced-American-slipper-limpet-Crepidula-fornicata-in-northern-Europe.pdf
[32] https://wwz.ifremer.fr/Espace-Presse/Dossiers-thematiques/La-crepidule-se-cherche-une-nouvelle-image
[33] https://archimer.ifremer.fr/doc/00000/6351/
[34] http://www.lacrepidule.com/language/en/description/

5.3 Red king crab in Norway

The red king crab (*Paralithodes camtschaticus*) is native to the Okhotsk and Japan Seas, the Bering Sea, and the northern Pacific Ocean, where it is an important economic resource. In Alaskan waters, red king crabs have historically been the second most valuable species to fishermen after salmon, although since the 1980s overharvesting has led to the closure of some areas to fishing. The red king crab also has an invasive distribution in the Barents Sea, since its introduction in the 1960s, when Red king crab has been deliberately stocked into the Murman coast by Russian scientists for commercial fishery. The population has then increased steadily and expanded its range, which now spans from Sørøya, Norway in the west and Kolguev Island, Russia in the east, and to about 72° north[35]. Soon after this the population skyrocketed, and the majority of fjords in Northern Norway are now occupied by the crab. Their removal of larger bivalves and echinoderms has led to lower diversity and abundance in Norwegian fjords, particularly among species with low motility, and subsequent changes in the entire community composition of local ecosystem[36]. To tackle the expansion of the species, commercial fisheries have been authorized in the early 2000s and a very valuable fishing industry started to harvest red king crab in the Barents Sea. Although red king crab has a negative impact on local biodiversity, it had a positive effect on the Norwegian fishery sector economy, the species being one of the most valuable crab on the market.

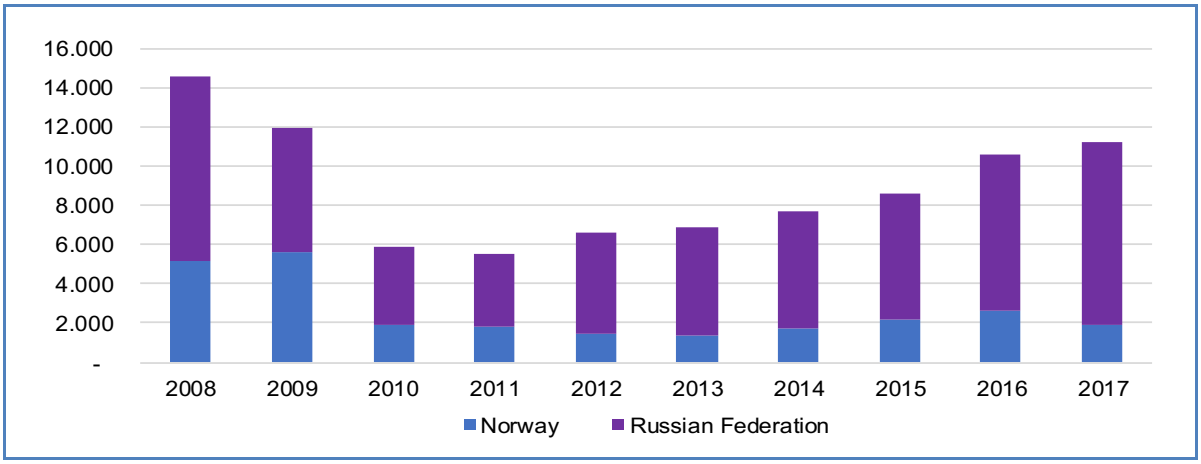


Source: Christiansen et al., 2015.

5.3.1 Production

In North-East Atlantic, catches of red king crab reached 11.246 tonnes in 2017, 83% attributable to Russian fleet and 17% to Norwegian fleet. Since 2010, catches have been rising (+92%), especially due to Russian production, which remains, however, still below the 2008 peak-level (14.538 tonnes).

Figure 59. **NORTHEAST ATLANTIC CATCHES OF RED KING CRAB BY MAIN FISHING COUNTRIES (volume in tonnes)**



Source: FAO.

[35] https://www.grida.no/resources/7734
[36] http://sciencenordic.com/content/norway%E2%80%99s-new-invaders-red-king-crab

Source: National Oceanic and Atmospheric Administration/Department of Commerce.

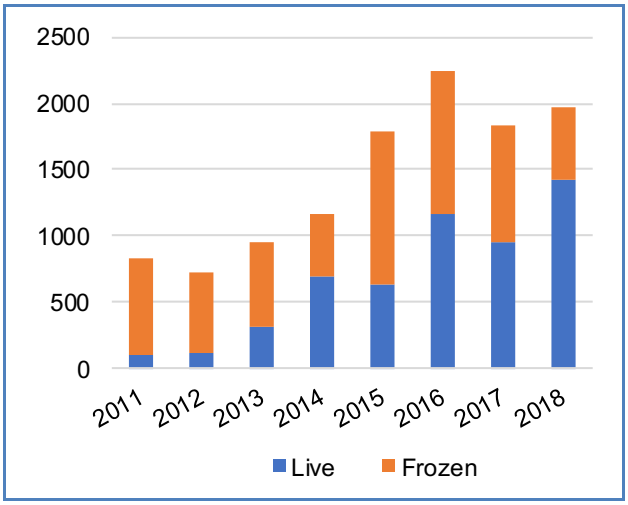
Norway has been fishing red king crab (*Paralithodes camtschaticus*) for many years now. Currently the practice for the Norwegian authorities is to maintain a certain capacity in some areas (and maintain the economic added value for the industry), whilst aiming for fishing to eradication in areas further south to prevent spreading[37]. In 2017, the quota was set at 1.750 tonnes, and Norway exported 1.900 tonnes during that year. In 2019, there is a 20% cut in the red king crab quota to 1.400 tonnes of male crab and 100 tonnes of female crabs. Also, the minimum shell size has been increased to 130 millimetres[38]. In 2019, the TACs for red king crab have been reduced both in Alaska and in Norway. Supplies may therefore be tighter in 2019, as will snow crab supplies leading to potential increasing prices[39].

5.3.2 Trade

Most of the red king crab caught by the Norwegian fleet is exported to third countries. In 2018, Norwegian exports of red king crab reached 1.977 tonnes for a value of EUR 60 million. In value terms, live crab accounted for 67% of exports and frozen crab accounted for 33% of exports. The main destinations for live red king crab exports were South Korea (57% of live crab export value in 2018) and to a lesser extent the USA (15%), Canada (9%) and the EU (9%). For frozen products the main destination was by far the EU (76% of the total value) and to a lesser extent Japan (11%) and Vietnam (4%).

Since 2011, the volume of red king crab exports from Norway has grown, with a peak at 2.239 tonnes (for EUR 57 million) reached in 2016. Moreover, the share of live products in the total export volume has strongly increased leading to an increase of the average export price.

Figure 60. **NORWEGIAN EXPORTS OF RED KING CRAB OVER 2011–2018 PERIOD (volume in tonnes)**



Source: SSB (Statistics Norway).

[37] http://sciencenordic.com/content/norway%E2%80%99s-new-invaders-red-king-crab
[38] Ministry of Trade, Industry and Fisheries of Norway.
[39] http://www.fao.org/in-action/globefish/market-reports/resource-detail/en/c/1189975/

6 Global highlights

EU / Cape Verde / Fisheries: In May, the EU and Cape Verde signed a new protocol to implement the Sustainable Fishing Partnership Agreement (SFPA). The protocol covers a period of five years and is providing fishing opportunities for 69 Union vessels to fish in Cabo Verde waters. The total annual EU financial contribution is EUR 750.000, including EUR 350.000 earmarked to promote the sustainable management of fisheries[40].

EU / IUU: The European Commission launched a new IT tool called "Catch", which was conceived to strengthen the EU fight against illegal, unreported and unregulated (IUU) fishing. The catch certification scheme was established to protect the EU market against products stemming from IUU fishing. CATCH will support Member States in their IUU fishery-related verification tasks and help reduce the risk of fraud, facilitate the trade flows, and reduce the burden on operators and administrations[41].

IUU / Croatia: The new fishing monitoring system of Croatia was presented in Šibenik at the conference on 13 May 2019. The equipment that has been co-financed with EU funds, include six drones (unmanned aerial vehicles), boats, vehicles and stereoscopic cameras for the bluefin tuna fishery as well as a fully digitised fishing centre. The drones presented will be used in fisheries to detect IUU fishing activities at sea and to monitor the Ecological and Fisheries Protection Zone (ZERP).

STECF / Sustainability / EU: The European Scientific, Technical and Economic Committee for Fisheries (STECF) annual report shows overall positive trends for many fish stocks in the ecoregions across Europe. This is clearly confirmed by the fact that in the Northeast Atlantic the proportion of overexploited stocks was reduced almost by half over the last decade. In the Mediterranean and Black Seas there is a decreasing trend in the number of overexploited stocks[42].

NAFO / RFMO: In 2018, the Northwest Atlantic Fisheries Organisation (NAFO) adopted a protocol for NAFO's Greenland halibut management strategy evaluation (MSE), implemented measures to prohibit the directed fishing of Greenland shark and for Contracting Parties to report on efforts to minimize incidental catches and mortalities. Furthermore, NAFO adopted a revision to the NAFO Observer Program to enhance the quality of data being collected by NAFO observers[43].

Philippines / Fisheries: The country's fisheries production grew by 0,9% in the first quarter of 2019, compared with the same period in 2018, reaching 1 million tonnes. Commercial and municipal fisheries subsectors both displayed positive growth rates while a decline in production was noted in aquaculture[44].

Chile / Fisheries: The Chilean government signed an agreement to make its vessel tracking data publicly available through the Global Fishing Watch (GFW) map, which tracks the movements of commercial fishing vessels in real-time. The agreement made between Chile's National Fisheries and Aquaculture Service and GFW will increase transparency of commercial fishing in Chilean waters. Chile's fishing fleet, which comprises more than 700 fishing vessels and 800 vessels that provide support for aquaculture, will be viewable by anyone accessing the public map[45].

[40] https://ec.europa.eu/fisheries/press/sustainable-fisheries-eu-and-cape-verde-sign-new-protocol_en
[41] https://ec.europa.eu/fisheries/press/european-commission-launches-new-tool-strengthen-eu%E2%80%99s-fight-against-illegal-unreported-and_en
[42] http://europeche.chil.me/post/253859/3625-more-fish-in-the-sea-in-only-ten-years
[43] https://www.nafo.int/
[44] https://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=17&id=102890&l=e&country=0&special=&ndb=1&df=0
[45] https://www.fis.com/fis/worldnews/worldnews.asp?monthyear=&day=16&id=102882&l=e&special=0&ndb=0

7 Macroeconomic Context

7.1 Marine fuel

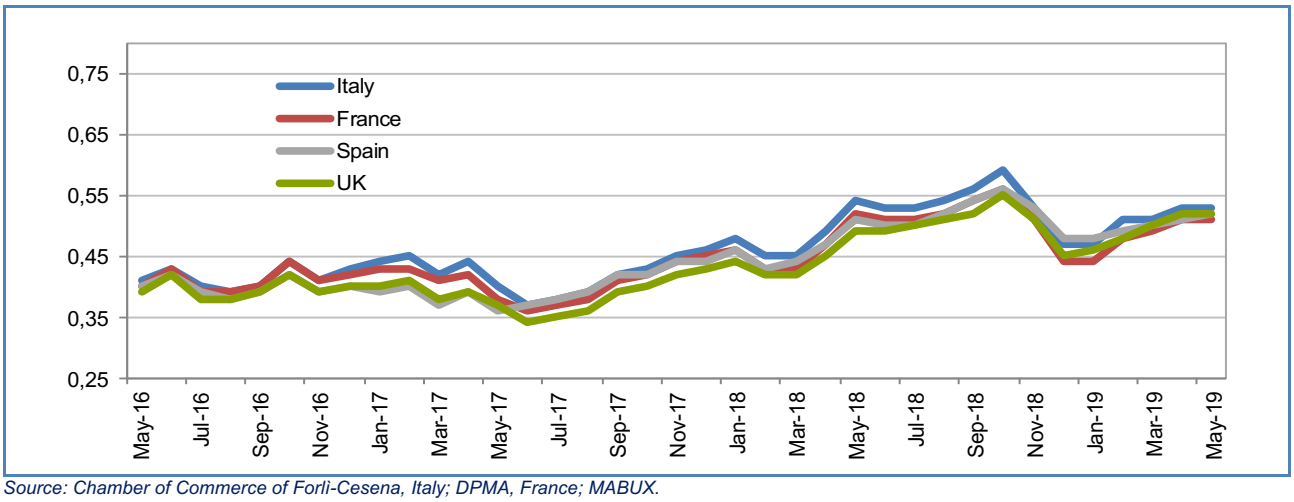
Average prices for marine fuel in **May 2019** ranged between 0,51 and 0,53 EUR/litre, in ports in **France, Italy, Spain,** and the **UK**. These prices were about 0,5% higher compared with the previous month and 1% higher compared with the same month a year ago.

Table 5. **AVERAGE PRICE OF MARINE DIESEL IN ITALY, FRANCE, SPAIN, AND THE UK (EUR/litre)**

Member State	May 2019	Change from April 2019	Change from May 2018
France *(ports of Lorient and Boulogne)*	0,51	0%	-2%
Italy *(ports of Ancona and Livorno)*	0,53	0%	-2%
Spain *(ports of A Coruña and Vigo)*	0,52	2%	2%
The UK (ports of Grimsby and Aberdeen)	0,52	0%	6%

Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; MABUX.

Figure 61. **AVERAGE PRICE OF MARINE DIESEL IN ITALY, FRANCE, SPAIN, AND THE UK (EUR/litre)**



Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; MABUX.

7.2 Consumer prices

The EU annual inflation rate was at 1,9% in April 2019, up from 1,6% from March 2019. A year earlier, it was 1,5%.

Inflation: lowest rates in April 2019, compared with March 2019.

Inflation: highest rates in April 2019, compared with March 2019.

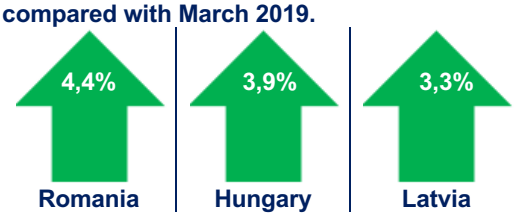


Table 6. **HARMONISED INDEX OF CONSUMER PRICES IN THE EU** (2015 = 100)

HICP	Apr 2017	Apr 2018	Mar 2019	Apr 2019	Change from Mar 2019		Change from Apr 2018	
Food and non-alcoholic beverages	101,97	104,19	105,84	105,92	↑	0,08%	↑	1,66%
Fish and seafood	105,43	108,85	110,18	110,14	↓	0,04%	↑	1,19%

Source: Eurostat.

7.3 Exchange rates

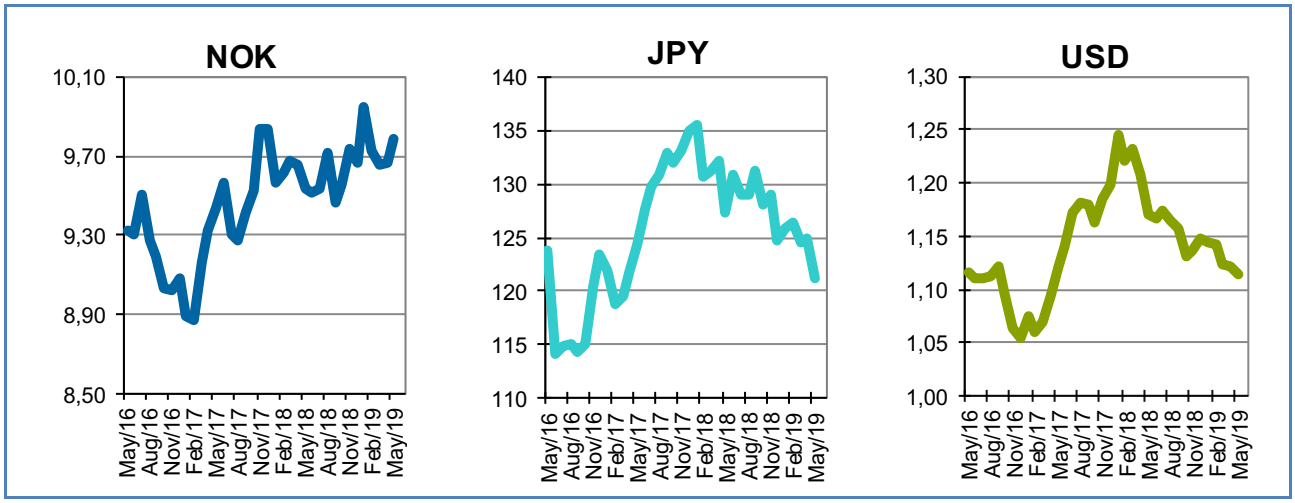
Table 7. **EXCHANGE RATES FOR SELECTED CURRENCIES**

Currency	May 2017	May 2018	Apr 2019	May 2019
NOK	9,4388	9,5375	9,6678	9,7915
JPY	124,40	127,33	124,93	121,27
USD	1,1221	1,1699	1,1218	1,1151

Source: European Central Bank.

In May 2019, the euro appreciated against the Norwegian krone (+1,3%) and depreciated against the Japanese yen (–2,9%) and the US dollar (–0,6%). For the past six months, the euro has fluctuated around 1,13 against the US dollar. Compared with May 2018, the euro has depreciated 4,8% against the Japanese yen and 4,7% against US dollar, but it appreciated 2,7% against the Norwegian krone.

Figure 62. **TREND OF EURO EXCHANGE RATES**



Source: European Central Bank.

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This report has been compiled using EUMOFA data and the following sources:

First sales: European Commission, FAO, ICES, NASCO, fiskpleje.dk.

Consumption: EUROPANEL.

Case studies: International Union for Conservation of Nature (IUCN), Invasive Species Specialist Group (ISSG), Global Invasive Species Database, Eurofish Magazine, ResearchGate, Ifremer, Atlantic Limpet Development, GRID-Arendal, ScienceNordic, FAO, EUROSTAT, Ministry of Trade, Industry and Fisheries of Norway, Convention on Biological Diversity, Statistic Norway.

Global highlights: European Commission, Europeche, Gov.hr, NAFO, fis.com.

Macroeconomic context: EUROSTAT, Chamber of Commerce of Forlì-Cesena, Italy: DPMA, France: ARVI, Spain: MABUX, European Central Bank.

The underlying first-sales data is in a separate Annex available on the EUMOFA website. Analyses are made at aggregated (main commercial species) level and according to the EU Electronic recording and reporting system (ERS).

In the context of this Monthly Highlights, analyses are led in current prices, expressed in nominal values.

The **European Market Observatory for Fisheries and Aquaculture Products (EUMOFA)** was developed by the European Commission, representing one of the tools of the new Market Policy in the framework of the reform of the Common Fisheries Policy. [Regulation (EU) No 1379/2013 art. 42].

As a **market intelligence tool**, EUMOFA provides regular weekly prices, 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 24 languages.

EUMOFA website is publicly available at the following address: www.eumofa.eu.

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