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# EUMOPA

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## MONTHLY HIGHLIGHTS

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In Greece, the decrease in hake and picarel first-sales value caused an overall drop in first-sales value during the first five months of 2015, despite increased first-sales value of anchovy, red mullet, and sardine. In Sweden, a significant decrease of the first-sales volume of flounder caused an increase of more than 50% in the average unit price over the same period a year earlier.

A four-year protocol between the European Union and Mauritania provides the EU with fishing opportunities for shrimp, demersal fish, tuna, and small pelagic fish. The Sustainable Fisheries Partnership Agreement allows EU vessels to take up to 281.500 tonnes a year. In addition to catches paid for by the European fleet, the EU will dedicate EUR 59,1 million per year to the partnership.

Turkey is a major player in the Mediterranean and Black seas fisheries and aquaculture. Turkey's exports of seabass, seabream, and trout, which are mostly farmed, to the EU compete with EU-produced fish and enter the EU market at prices much lower than the EU's own products.

In France, retail prices of fresh mussel are the highest among the five Member States surveyed. In Spain, the most important market for hake in the EU, larger sizes of hake are preferred. Prices of European hake larger than 2 kg were relatively stable in the period observed and exhibited a decreasing trend.

Marine fuel in fish harbours in France, Italy and Spain has averaged between 48 and 51 cents/litre in July 2015. It confirms the decrease observed in the past six months.

# 1. First sales in Europe

In **January–May 2015**, ten EU Member States and Norway reported first-sales data for ten commodity groups.<sup>1</sup> First sales increased over the previous year (January–May 2014) in both value and volume for four of the reporting countries.

In Belgium, plaice, ray, and monk were the main contributors to increased first sales in the first five months of 2015. This has caused a significant decrease in price of monk (–13%) and ray (–14%). By contrast, first sales of sole experienced important decreases (–10% in value and –19% in volume), causing an 11% rise in the average price.

In Denmark, in May 2015, first sales decreased in value (–17%), owing to the drop in value of herring, Norway lobster, and coldwater shrimp. First-sales value for January–May 2015 increased 8%, as a result of higher prices of hake and saithe.

In France, the good results for cephalopods (+4.000 tonnes) in January–May 2015, especially squid and cuttlefish, could not totally offset the slight decreases of most other commodity groups (flatfish, small pelagics, other marine fish, bivalves). In value, most major species (scallop, sole, seabass, pollack, and saithe) experienced substantial price increases, which caused an overall increase in first sales (+7%).

Norwegian first-sales value in May 2015 increased 39% over May 2014, reaching EUR 141 million. Volumes were also on the rise, but to a lesser extent (+13 %).

First-sales volume amounted to 235.947 tonnes in May 2015. Strong first sales of coldwater shrimp were primarily responsible for increases in value (+40%) and volume (+11%). Blue whiting had the largest volume increase, with 32.100 more tonnes than last year.

In Portugal, first sales remained globally stable in January–May 2015 (+1% over January–May 2014). In value, overall first sales increased 7%, mostly thanks to increased cephalopods landings (+21%).

Spain landed 80.850 tonnes of fresh fish since the beginning of the year (January–May 2015), a 9% decrease, compared with the same period in 2014. This trend was confirmed in May 2015, when Spain landed 14.000 tonnes of fresh fish, 18% less than May 2014. In January–May 2015, 16 out of the 28 fishing ports recorded decreases in volume from the same period last year. The ports of Vigo and Pasaia showed a different trend, as the volume landed there, which accounted for 45% of all fresh-fish landings, increased 3% and 8%, respectively.<sup>2</sup>

In the UK, first-sales value in May 2015 was EUR 42,9 million, an increase of 2% compared with May 2014. First-sales volume was 18.283 tonnes (–7%). Although volume of both groundfish and cephalopods increased in May, a decline was found among scallop (–15%), crab (–31%), Norway lobster (–32%), and monk (–9%). An increase in the unit prices of all species mentioned, as well as the groundfish species cod, hake, ling, redfish, and saithe, contributed to an increase in first-sales value.

Table 1. **OVERVIEW OF THE REPORTING COUNTRIES** (volume in tonnes and value in million euro)

Country	January–May 2013		January–May 2014		January–May 2015		Change from January–May 2014	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
<b>Belgium</b>	6.763	25,09	7.474	27,32	7.825	28,53	5%	4%
<b>Denmark</b>	77.746	91,82	131.554	90,92	84.439	98,62	–36%	8%
<b>France</b>	79.541	251,02	82.325	247,10	79.520	264,80	–3%	7%
<b>Greece*</b>	5.268	15,55	4.449	13,71	4.647	12,87	4%	–6%
<b>Italy*</b>	3.323	22,74	3.411	19,46	3.395	19,06	0%	–2%
<b>Latvia</b>	29.262	8,13	29.246	8,30	26.735	6,67	–9%	–20%
<b>Lithuania*</b>	1.473	1,27	725	0,56	919	0,69	27%	24%
<b>Norway</b>	1.240.560	806	1.397.085	800	1.496.018	932	7%	17%
<b>Portugal</b>	34.160	62,75	33.737	62,12	34.175	66,29	1%	7%
<b>Sweden</b>	102.486	55,45	93.336	40,67	94.721	40,42	1%	–1%
<b>United Kingdom</b>	136.836	196,75	182.502	284,84	156.778	272,15	–14%	–4%

Source: EUMOFA (updated 13.07.2015); volume data is reported in net weight.

\* Partial data. First-sales data for Greece covers the port of Piraeus (35%). First-sales data for Italy covers 11 ports (10%). First-sales data for Lithuania covers the Klaipėda fish auction.

Table 2. **OVERVIEW OF THE REPORTING COUNTRIES** (volume in tonnes and value in million euro)

Country	May 2013		May 2014		May 2015		Change from May 2014	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
<b>Belgium</b>	1.138	3,72	1.170	4,06	1.165	4,40	0%	8%
<b>Denmark</b>	14.177	18,95	43.250	22,48	13.736	18,66	-68%	-17%
<b>France</b>	15.645	50,27	15.550	47,25	14.273	48,30	-8%	2%
<b>Greece*</b>	1.325	3,66	1.114	3,23	1.325	3,33	19%	3%
<b>Italy*</b>	708	4,42	738	4,09	717	4,16	-3%	2%
<b>Latvia</b>	4.602	1,26	2.187	0,53	2.695	0,70	23%	31%
<b>Lithuania*</b>	177	0,19	179	0,14	231	0,17	29%	21%
<b>Norway</b>	131.930	82	208.295	102	235.947	141	13%	39%
<b>Portugal</b>	9.238	13,78	8.463	13,44	8.437	13,62	0%	1%
<b>Sweden</b>	10.745	7,85	13.190	7,37	27.204	10,33	106%	40%
<b>United Kingdom</b>	16.471	32,79	19.741	42,18	18.283	42,90	-7%	2%

Source: EUMOFA (updated 13.07.2015); volume data is reported in net weight.

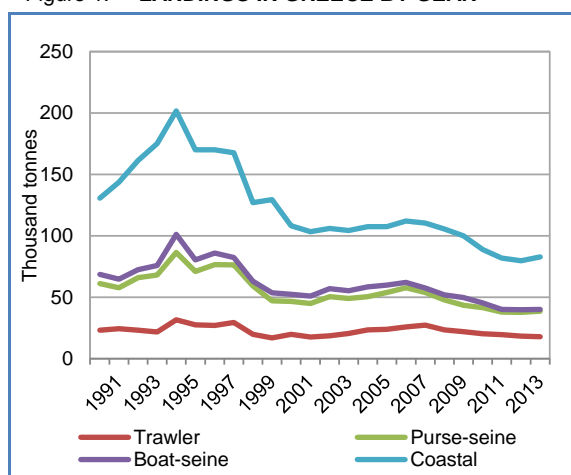
\* Partial data. First-sales data for Greece covers the port of Piraeus (35%). First-sales data for Italy covers 11 ports (10%). First-sales data for Lithuania covers the Klaipeda fish auction.

## 1.1. GREECE

The marine fishery sector is very important for the country, owing to its economic, social, and cultural contribution to the coastal areas of the Greek islands, as well as continental Greece. The coast of Greece is 13.676 km long; approximately 4.000 km is mainland coast and the rest is the coast of 3.500 islands.

The Greek fishing fleet consists of approximately 16.000 vessels, 93% of which are vessels less than 12 m, using polyvalent passive gears dedicated to inshore fishing. The open-sea fishing vessels (trawlers and purse-seiners) represent less than 4% of the total. Most of the fleet is based in the Aegean Sea, and to a lesser extent in the Ionian Sea and the waters around Crete.

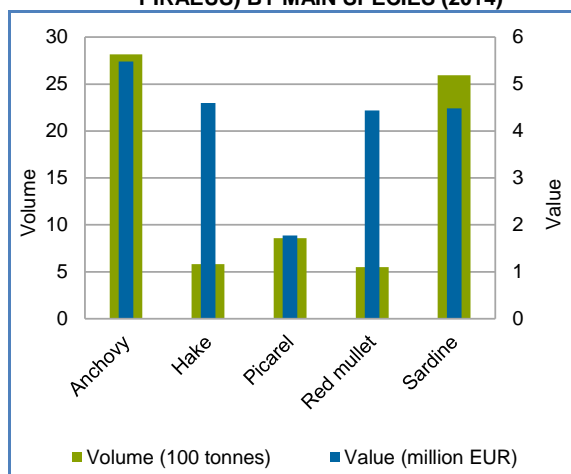
Figure 1. LANDINGS IN GREECE BY GEAR



Source: Hellenic Statistical Authority.

Greek fishing takes multiple species. More than 60 different species are fished. Anchovy, sardine, and hake are predominant. Highly valuable species, such as albacore tuna and swordfish, are also caught. In 2013, the value of landings in Greece was EUR 325,4 million, corresponding to 63.630 tonnes.<sup>3</sup>

Figure 2. FIRST SALES IN GREECE (PORT OF PIRAEUS) BY MAIN SPECIES (2014)

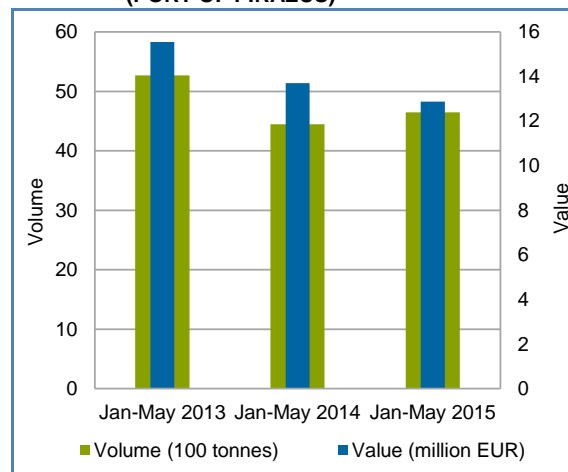


Source: EUMOFA (updated 13.07.2015).

Approximately 33% of the fish landed and sold in the Piraeus port are small pelagics, mostly anchovy and

sardine. Other important species are hake, red mullet, and picarel.

Figure 3. JANUARY–MAY FIRST SALES IN GREECE (PORT OF PIRAEUS)



Source: EUMOFA (updated 13.07.2015).

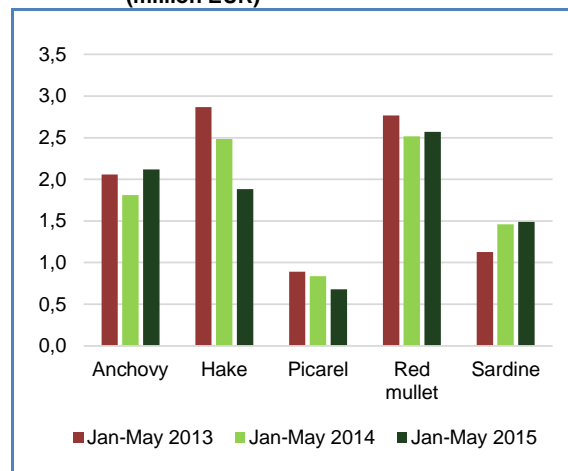
In January–May 2015, first-sales value decreased 6%, while volume increased 4% over January–May last year.

Anchovy, hake, picarel, red mullet, and sardine accounted for 68% of total first-sales value and 69% of total first-sales volume in January–May 2015. Hake and picarel experienced the highest decrease in first-sales value, –24% and –19%, respectively. The overall decrease in first-sales value was not offset by the increase in first-sales value of anchovy (+17%), red mullet, and sardine (+2% each).

First-sales volume of hake and picarel decreased 32% and 18%, respectively, relative to January–May 2014. This was offset by substantial increases in anchovy (+50%) and red mullet (+23%) first-sales volume. The strong decrease in hake first-sales value and volume, led to a significant rise in first-sales prices (+12%).

The average price of main commercial species landed was lower than January–May 2014, led by anchovy (–22%) and red mullet (–17%).

Figure 4. JANUARY–MAY FIRST SALES IN GREECE (PORT OF PIRAEUS) BY MAIN SPECIES (million EUR)



Source: EUMOFA (updated 13.07.2015).

## 1.1.1. RED MULLET



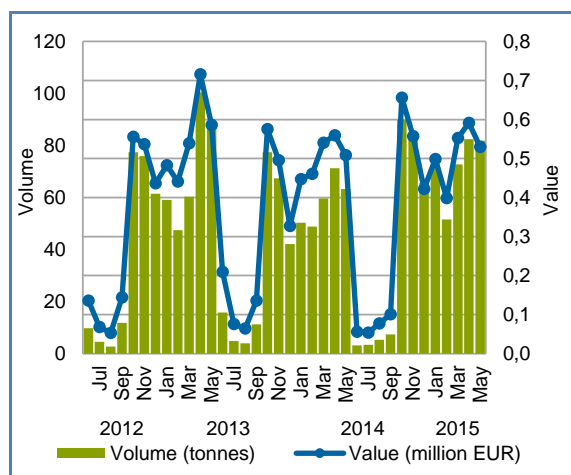
The red mullet lives on muddy bottoms on the continental shelf, in depths of between 5 m and 300 m. The species is also found on gravels and sandy bottoms. Juveniles are found in coastal areas, and adults are distributed farther offshore. They feed on worms, crustaceans, and molluscs. They reproduce from April to August, and grow quickly, sometimes reaching 13 cm in the first year.

Red mullet can be found in the eastern Atlantic, along the European and African coasts from the British Isles to Dakar, the Azores, the Canaries Islands, and the Mediterranean Sea.

Stocks do not seem to be threatened by overfishing, and the species is not subject to quotas. Red mullet is fished mainly with gillnets, trammel nets, and bottom trawls. Catches are seasonal, and the fish is most abundant during September–November.

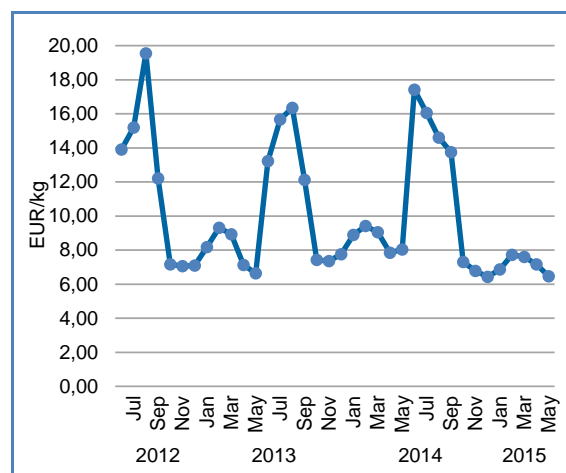
In January–May 2015, the accumulated first sales of red mullet in the port of Piraeus reached EUR 2,57 million and 361 tonnes. This was an increase in both value (+2%) and volume (+23%), over January–May last year. The increase in first-sales value was mostly the result of higher volume of landings.

Figure 5. RED MULLET: FIRST-SALES IN GREECE (PORT OF PIRAEUS)



Source: EUMOFA (updated 13.07.2015).

Figure 6. RED MULLET: FIRST-SALES PRICE IN GREECE (PORT OF PIRAEUS)



Source: EUMOFA (updated 13.07.2015).

The average unit price of red mullet in January–May 2015 was 7,12 EUR/kg. This was a substantial decrease (–17%) compared with January–May 2014.



### 1.1.2. SWORDFISH



Swordfish are a highly migratory fish, distributed globally in the Mediterranean Sea, and in the Atlantic Ocean in

coastal and offshore areas, from Canada to Argentina on the western side, and from Norway to South Africa on the eastern side. The Mediterranean swordfish, however, constitutes a unique stock with growth and maturity characteristics different from the Atlantic Ocean stock.<sup>4</sup>

Swordfish are primarily warm-water species that migrate toward temperate or cold waters for feeding in summer and back to warm waters in autumn for spawning and overwintering. This species uses its sword to kill prey. It feeds mainly on fish but also on crustaceans and squid.<sup>5</sup>

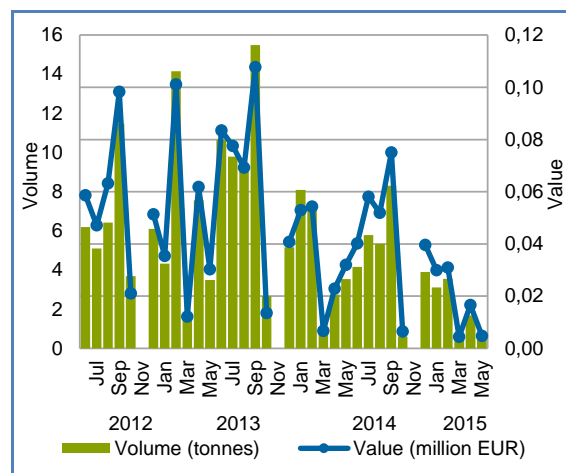
Over the past ten years, the main fishing gears used to catch swordfish are surface longlines (on average, representing 84% of the annual catch) and gillnets. The latter have been eliminated in the Mediterranean Sea since 2012. Swordfish are also caught with harpoons and traps, and also as bycatch in other fisheries (longlines, purse-seines, etc.).<sup>6</sup>

At the recommendation of the International Commission for the Conservation of Atlantic Tunas (ICCAT), swordfish fisheries are closed from 1 October to 30 November and 15 February to 31 March. In addition, commercial fishing vessels require a special licence to fish for swordfish. Other management measures include a minimum landing size and specifications for the technical characteristics of the longline gear.

The Greek swordfish fleet operates throughout the eastern Mediterranean basin exclusively, using drifting longlines. In 2013, approximately 160 vessels were actively involved in the swordfish fishery. During that fishing season, Greece was among the most important nations fishing swordfish in the Mediterranean.<sup>7</sup>

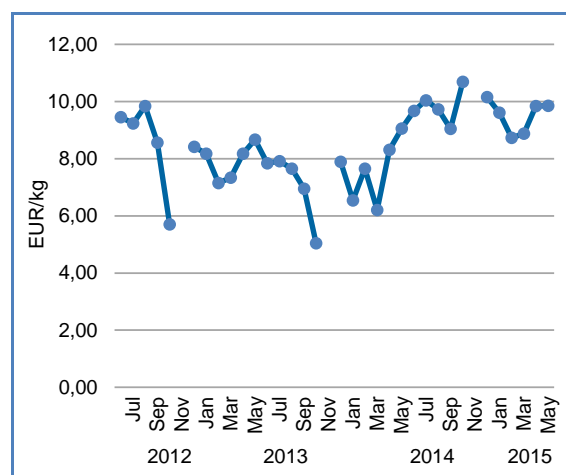
The accumulated first sales of swordfish in January–May 2015 in the port of Piraeus were EUR 90.000 and 9 tonnes. This represented a decrease in both value (–49%) and volume (–59%) from January–May 2014. Compared with January–May 2013, first-sales value and volume registered the same decreasing trend (–64% and –70%, respectively).

Figure 7. **SWORDFISH: FIRST SALES IN GREECE (PORT OF PIRAEUS)**



Source: EUMOFA (updated 13.07.2015).

Figure 8. **SWORDFISH: FIRST-SALES PRICE IN GREECE (PORT OF PIRAEUS)**



Source: EUMOFA (updated 13.07.2015).

The average unit price of swordfish in January–May 2015 was 9,30 EUR/kg, a 24% and 20% increase from January–May 2014 and January–May 2013, respectively.

## 1.2. SWEDEN

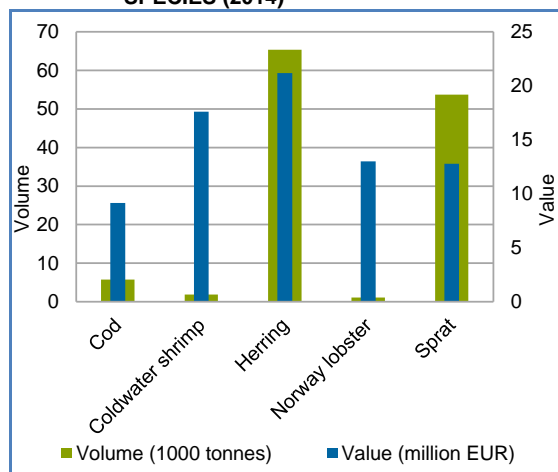
Catches in Sweden derive mainly from marine fisheries. Small volumes are also caught in freshwater (pikeperch, crawfish, and eel), but these volumes represent only 1% of the total catches.<sup>8</sup> In addition, recreational fisheries in Sweden are estimated to be relatively active. The last survey (2013) of fishermen performed by the Swedish Marine and Water Authority suggested that around 16.000 tonnes of fish are caught through recreational fisheries, of which 56% are taken in freshwater.<sup>9</sup>

The main marine fishing areas are in the Baltic Sea and Öresund, representing 60% of total catches in 2014. North Sea fisheries yielded 26% of the total sea fisheries volume, while the Skagerrak and Kattegat areas represented 14%. The Swedish fleet targeting sea fisheries in 2014 consisted of 1.352 vessels, of which 177 vessels measured 12 m or more. Out of the total number of vessels, 18% were fishing with active gear (trawl, purse-seine, and dredging gear), and the remaining 82% used passive gear (net, line, hook, and trap).

The landed volume in 2014 amounted to 137.200 tonnes, of which more than half (69.000 tonnes) was landed in foreign ports, primarily Denmark and a small portion in Norway. Landings outside Sweden are mainly various types of fish for the production of fish meal and fish oil (forage fish such as sandeel and sprat), as well as herring and mackerel. More than 50% of the Swedish catches in volume in 2014, were utilised for fishmeal and fish oil. In value terms, the share of fish caught for fish meal and fish oil production was 20% in 2014.

Fish landed in Swedish ports were sold through 130 authorised fish buyers. They are split between east coast, west coast, and the south. The largest share of the volume is landed on the east coast (49%; mainly herring, other forage fish, and freshwater species), while the west coast represented 30% (herring, groundfish, flatfish, and crustaceans). Of fish landed in the south, cod, herring, and other forage fish were the most abundant.<sup>10</sup>

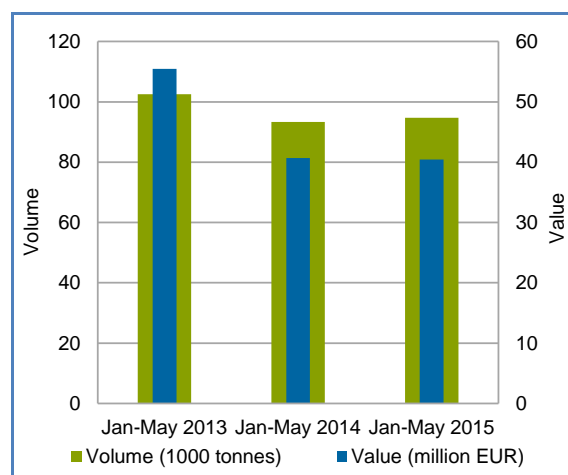
Figure 9. **FIRST SALES IN SWEDEN BY MAIN SPECIES (2014)**



Source: EUMOFA. Volume in net weight.

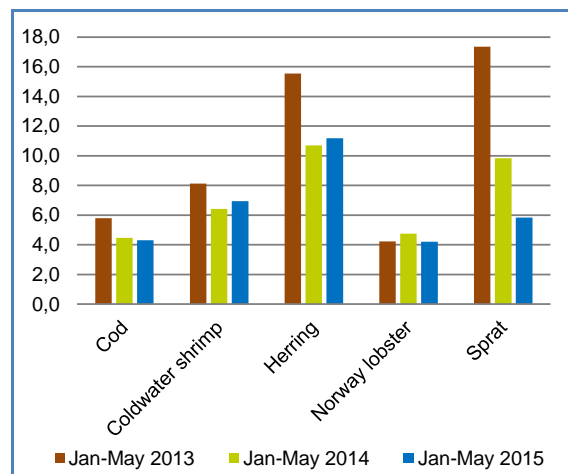
In January–May 2015, the cumulative first-sales value for all reported species was EUR 40,4 million, a decline of 1% compared with last year. The five most important species, herring, coldwater shrimp, sprat, cod, and Norway lobster, represented 80% of the total first-sales value in the period. In May 2015, the first-sales value increased 40%, to EUR 10,3 million, while the volume more than doubled over May 2014, ending at 27.204 tonnes. The main reason for this was an increase in the other marine fish commodity group.<sup>11</sup>

Figure 10. **JANUARY–MAY FIRST SALES IN SWEDEN**



Source: EUMOFA (updated 13.07.2015).

Figure 11. **JANUARY–MAY FIRST SALES IN SWEDEN BY MAIN SPECIES (million EUR)**



Source: EUMOFA (updated 13.07.2015).

## 1.2.1. FLOUNDER



Flounder is a demersal, benthic flatfish that lives on shallow depths with soft bottoms, down to approximately 55 m. It feeds mainly

on invertebrates and small fish.

Flounder is widespread in northern European coastal areas and is important mainly to the fishing nations surrounding the Baltic Sea. Flounder's geographical distribution is from the White Sea in the Eastern Atlantic, south to the Mediterranean and Black seas.<sup>12</sup>

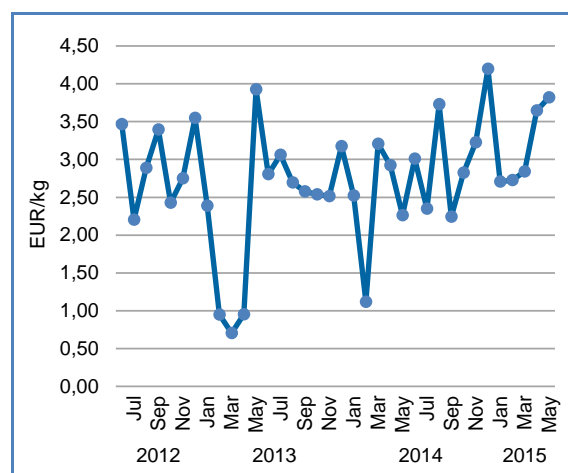
Flounder is caught primarily by trawl and gillnet. In Sweden, a large share of the catch taken by the latter gear type is caught by small-scale coastal vessels, while bycatch from the demersal trawl fleet represent the other part.

In 2014, flounder represented 52% of the first-sales volume of flatfish, followed by plaice, which accounted for nearly 40%. Also, in value, flounder constituted nearly 50% of all flatfish, at almost EUR 1 million. More than two thirds of flounder landings takes place in various ports on the south coast of Sweden, while almost all of the remaining volume, is landed on the east coast.

During January–May 2015, the cumulative first-sales value of flounder was EUR 0,55 million, a 7% increase over last year. In the same period, volume was 182 tonnes, a 30% decrease compared with last year.

Unit prices increased notably from 2014 to 2015 (+55%), driven mainly by stable and high prices in 2015, while a peak in volume in February 2014 led to very low prices in the same month.

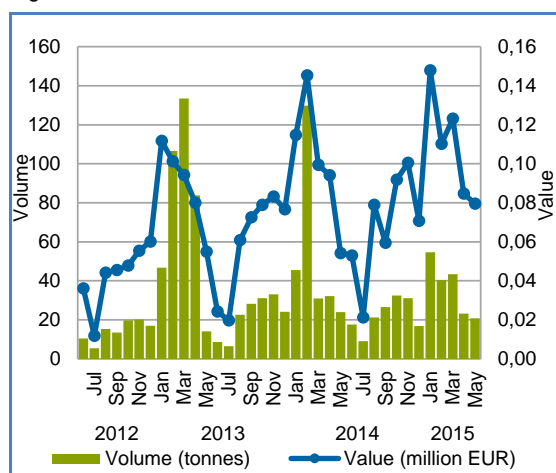
Figure 13. FLOUNDER: FIRST-SALES PRICE IN SWEDEN



Source: EUMOFA (updated 13.07.2015).

The average unit price achieved for the period January–May 2015 was 2,99 EUR/kg, compared with 1,93 EUR/kg in the same period of 2014.

Figure 12. FLOUNDER: FIRST SALES IN SWEDEN



Source: EUMOFA (updated 13.07.2015).



### 1.2.2. SAIthe



Western Atlantic.<sup>13</sup>

Saithe is found from the Barents Sea to the Bay of Biscay in the Eastern Atlantic, around Iceland, and to the southwest of Greenland in the

Commercial fisheries of saithe are directed towards two major stocks, the Northeast Arctic saithe, and the North Sea and Skagerrak saithe. Saithe is both a pelagic and bottom-dwelling fish, and may occur at depths ranging from 0 to 300 m. Young fish form schools in the upper layers of the water column, and mature fish inhabit deeper waters.<sup>14</sup>

This requires the use of various gear types in saithe-directed fisheries, such as bottom and pelagic trawls, purse-seines, Danish seines, gillnets, longlines, and also trolling with spoons.<sup>15</sup>

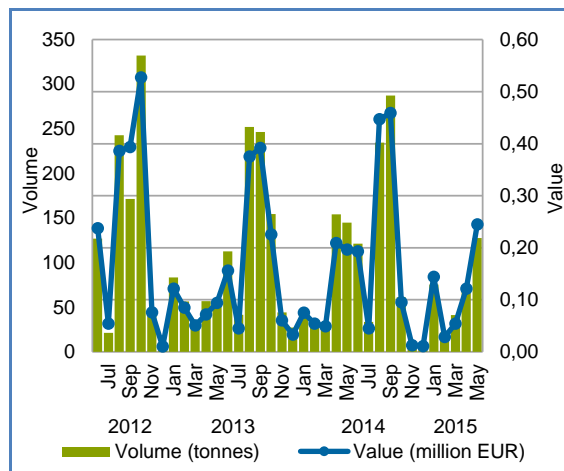
The species is taken by trawl fishery year-round in the North Sea. The gillnet fishery is most intensive during winter, whereas the purse-seine fishery occurs mainly in summer.

Saithe catches are subject to total allowable catches (TACs), and Sweden's quota for 2015 is 1.253 tonnes, a 5% decrease from 2014. This quota includes 880 tonnes of saithe in Norwegian waters south of 62°N. Sweden is the sixth largest EU Member State in the size of its saithe quota, after France, the UK, Germany, Denmark, and Ireland.

Göteborg is the main Swedish port for saithe landings.

In January–May 2015, the first-sales value of saithe in Sweden was EUR 0,59 million, an increase of 2% compared with last year. First-sales volume in the same period was down 15%, to 340 tonnes.

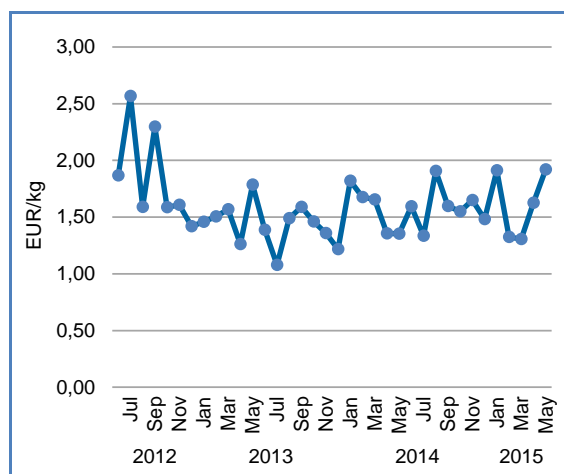
Figure 14. SAIthe: FIRST SALES IN SWEDEN



Source: EUMOFA (updated 13.07.2015).

Following a strong price in January 2015 and a drop in February 2015 (from 1,91 to 1,33 EUR/kg), the development from February till May has been positive, with the May average price of 1,92 EUR/kg being the highest unit price registered since September 2012.

Figure 15. SAIthe: FIRST-SALES PRICE IN SWEDEN



Source: EUMOFA (updated 13.07.2015).

## 2. Global Supply

**Resources / EU:** Fish stocks in many EU waters have recovered substantially over the past year, with a majority of stocks in the Atlantic, North Sea, and Baltic on track for long-term sustainability. This is in line with the EU's Common Fisheries Policy, which aims to meet maximum sustainable yield (MSY) for all fish stocks by 2020, at the latest.<sup>16</sup>

**Resources / EU / Seabass:** To better protect stocks, the EU has raised the minimum size of northern seabass from 36 cm to 42 cm. The new rule applies to both commercial and recreational fishermen, and will further protect this valuable stock and increase its reproduction rates before being caught. This represents the latest step in the package of measures proposed by the European Commission for 2015, to halt the decline of the seabass stock and prepare the ground for further management measures in 2016.<sup>17</sup>

**Fishing opportunities / World:** At the initiative of the EU, the Inter-American Tropical Tuna Commission (IATTC) has adopted a retention ban on mantas. In addition, it was also agreed to establish a marking scheme for fish aggregating devices (FADs), and to strengthen current measures against illegal fishing. Both mantas and devil rays are under serious threat. In addition, the IATTC will set up a data-collection programme as of 2017, to monitor the devil ray's status.<sup>18</sup>

**Sustainability / Cyprus:** The European Commission has adopted the Cyprus Operational Programme of the European Maritime and Fisheries Fund (EMFF), which foresees a EUR 53 million investment package available for the period 2014–2020, to strengthen the economic viability of the maritime, fishery, and aquaculture sectors. In particular, the programme will improve the livelihood of fishing communities, limit the impact of fishing on the marine environment, ensure the balance between fishing capacity and available fishing opportunities, and promote economically and environmentally sustainable aquaculture and processing sectors.<sup>19</sup>

**EU / Mauritania / Fisheries Partnership Agreement:** The European Union and the Islamic Republic of Mauritania have reached a Sustainable Fisheries Partnership Agreement setting out the fishing opportunities for EU vessels. The four-year protocol provides the EU with fishing opportunities for shrimp, demersal fish, tuna, and small pelagic fish, up to 281.500 tonnes a year. In addition to catches paid for by the European fleet, the EU will dedicate EUR 59,1 million/year to the partnership, of which EUR 4,1 million is for the support of the fishing communities in Mauritania.<sup>20</sup>

**Fisheries / Scotland:** Scallop stocks around Scotland will be protected through new conservation measures. The minimum landing size of scallop will be increased

from 100 mm to 105 mm. In addition, restrictions will be placed on the number of dredges that scallop vessels are allowed to tow in inshore waters. These measures will take effect in spring 2016 and will be kept under review to ensure the long-term sustainability of the scallop fishery.<sup>21</sup>

**Fisheries / Iceland:** Icelandic vessels took close to 73.000 tonnes of fish in June 2015, an increase of 16.400 tonnes over June 2014. The increase was caused mainly by larger catches of pelagics (+63%) and flatfish (+40%). The total catch increased 266.000 tonnes in the past 12 months. Of this, 236.000 tonnes (+22%) were pelagic catches.<sup>22</sup>

**Fisheries and Aquaculture / World:** The OECD-FAO Agricultural Outlook 2015 states that fisheries and aquaculture production worldwide is projected to expand 19% between the 2012–2014 base period and 2024, reaching 191 million tonnes. Aquaculture, which is expected to reach 96 million tonnes by 2024, 38% higher than the base period (average 2012–2014) level, will be the main driver of this increase. Aquaculture will remain one of the fastest growing food sectors, notwithstanding a slowdown of its average annual growth rate from 5,6% in the previous decade to 2,5% in the projection period. In 2023, aquaculture will surpass total capture fisheries.<sup>23</sup>

**Aquaculture / Finland:** In 2014, 13.300 tonnes of fish were cultivated for human consumption in Finland, representing a decrease of approximately 300 tonnes, compared with 2013. The value of farmed fish was slightly lower than in the previous year. Trout is the most farmed: 12.400 tonnes of rainbow trout were produced, representing more than 90% of all fish farmed in Finland.<sup>24</sup>

**Processing / Portugal:** On account of the lack of domestic raw material following the suspension of sardine fishing, the Portuguese canning industry imports approximately 50–60% of the fish from Morocco, Spain, and France. The 20 operating canneries began to diversify their production (e.g. the number of processed species almost doubled).<sup>25</sup>

**Trade / Norway:** Norway's seafood exports were worth NOK 34 billion (EUR 3,9 billion) in the first half of 2015, a 5% increase over the previous year. In June 2015, seafood exports were NOK 5,8 billion (EUR 0,66 billion), 20% more than June 2014. Salmon exports were worth NOK 3,8 billion (EUR 0,43 billion), an increase of 15% over the same month last year. Poland, France, and the UK were the largest EU importers of Norwegian salmon. Fresh cod exports increased 22% compared with last year; clipfish (salted and dried fish) and salted fish, also increased. By contrast, trout exports fell 22% in the first half of 2015. The main buyers of Norwegian trout are Belarus and Poland.<sup>26</sup>

### 3. Case study: Fisheries and aquaculture in Turkey

Turkey has an extensive coastline of 8.483 km, of which 20% (1.719 km) is on the Black Sea.

Turkey is a major player in the Mediterranean and Black seas fisheries and aquaculture. Its production reached 537.000 tonnes in 2014, with 56% of it supplied by fisheries and 44% by aquaculture. It is the second aquaculture producer after Italy, if shellfish is included. The sector, however, plays a limited role in the country's economy, contributing only 0,2% to GDP.

Thanks to its export of seabass, seabream, and trout, Turkey is a net exporter of fishery and aquaculture products, generating a surplus of EUR 360 million in 2014.

Domestic consumption followed a decreasing trend in the past decade, but is expected to grow significantly in the next years as a result of aquaculture development plans.

#### 3.1. Production

##### Catches

Turkey catches 27% of the total volume taken in the Mediterranean and Black seas. More than 70% occurs in the Black Sea.

With catches totalling 302.200 tonnes in 2014, a drop of 11% compared with 2013, Turkey is far ahead of Italy, Tunisia, and Algeria in these seas.

Table 3. **MEDITERRANEAN AND BLACK SEA: VOLUME OF LANDINGS (2013) – MAIN COUNTRIES**

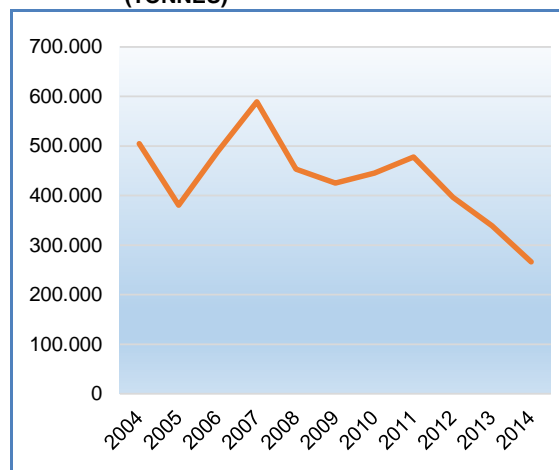
Rank	Countries	Thousand tonnes
1	Turkey	339
2	Italy	174
3	Tunisia	110
4	Algeria	100
5	Spain	82
6	Ukraine	78
7	Croatia	75
8	Egypt	63
9	Greece	62
	Other	155

Source: FAO.

##### Marine fisheries

Catches have decreased markedly in past years, from 589.000 tonnes in 2007 to 266.000 tonnes in 2014.

Figure 16. **TURKEY: LANDINGS OF MARINE FISH (TONNES)**

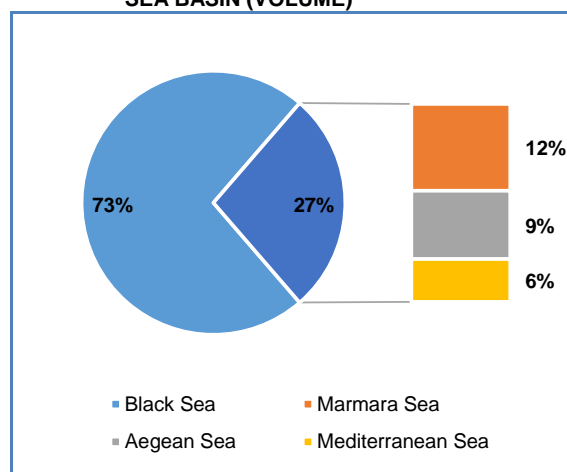


Source: Turkish Statistical Institute.

The main species caught are small pelagics. Anchovy (96.000 tonnes), sprat (42.000 tonnes), sardine (18.000 tonnes), and horse mackerel (12.000 tonnes) represent 73% of total landings. In 2014, landings of anchovy (-46%), sardine (-24%), and horse mackerel (-44%) decreased strongly. Conversely, sprat landings increased 400% in 2014, but remained far below previous levels (87.000 tonnes in 2011).

Other most common species caught by the Turkish fleet are Atlantic bonito, whiting and bluefish.

Figure 17. **TURKEY: LANDINGS OF MARINE FISH BY SEA BASIN (VOLUME)**



Source: Turkish Statistical Institute.

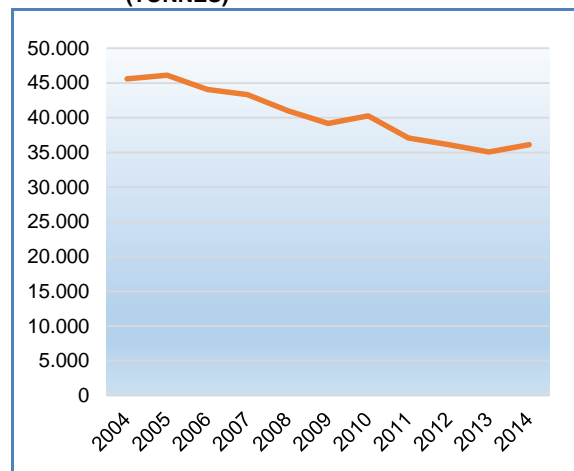
The fleet consists of approximately 13.700 vessels greater than 5 m, of which 11.400 are less than 10 m. Nearly 4.900 vessels fish the Black Sea, 4.500 fish the Aegean Sea, 2.500 fish the Marmara Sea, and 1.800

fish the Mediterranean Sea. The fleet employs 33.500 people, of whom 14.900 work on the Black Sea.

### Inland fisheries

Inland fishery production followed a steadily decreasing trend in the past ten years ( $-2,3\%$  per year on average) to reach 36.000 tonnes in 2014.

Figure 18. **TURKEY: LANDINGS OF INLAND FISH (TONNES)**



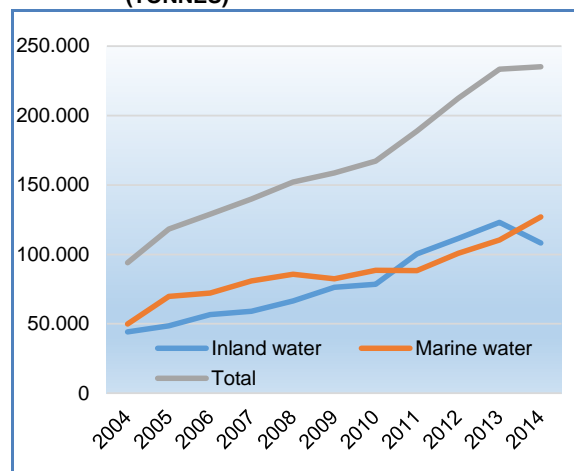
Source: Turkish Statistical Institute.

Main species are common carp, pearl mullet, sand smelt, and Gibel carp, covering 78% of total freshwater catches.

### Aquaculture

The Turkish aquaculture grew vigorously in the past decade (+150%). Marine aquaculture increased steadily during the period, as did freshwater aquaculture, except for trout farming, which suffered a 12% decrease in the past year.

Figure 19. **TURKEY: AQUACULTURE PRODUCTION (TONNES)**



Source: Turkish Statistical Institute.

Turkish aquaculture is based on three species: seabass and seabream, both farmed in marine aquaculture, and trout, farmed mostly in freshwater. A few companies are also involved in tuna fattening.

Ambitious targets have been set for aquaculture. According to the Ministry of Development, Turkey's aquaculture production will reach 600.000 tonnes by 2023 (including freshwater production), and aquaculture exports will grow to USD 1 billion (EUR 750 million) by 2023 (compared with EUR 428 million in 2013).

After the development of a National Marine Aquaculture Development Plan in 2008 and the move of inshore marine farms to newly allocated offshore zones, conflicts between the marine aquaculture sector and other coastal users, such as the tourism industry, have been significantly reduced.

### Processing

The processing industry focuses mainly on fishmeal and fish oil production, which used 88.000 tonnes of fish in 2013 (down from 229.000 tonnes in 2011), canning, which used 29.000 tonnes in 2013 (up from 26.000 tonnes in 2011), and trout smoking.

Major seabass and seabream farming companies are fully integrated, and have their own processing and packaging facilities.

Fish processing plants are concentrated in the Marmara Sea and Aegean regions. There are about 160 licensed fish processing plants nationwide, out of which 101 are approved to export to the EU.

## 3.2. Trade

### TURKEY'S TRADE BALANCE

#### • Overall

Turkey's overall trade balance for fishery and aquaculture products is strongly positive: exports reached EUR 509 million in 2014, while imports amounted to EUR 150 million.

Farmed seabream, seabass, and trout dominate exported fishery products and represent about 70% of total exports. Fresh bluefin tuna (7% of total exports in value) also generates good returns, reaching a unit export price higher than 14 EUR/kg. Main destinations are the EU, Japan, Russia, and Lebanon.

Table 4. **TURKEY: EXPORTS BY MAIN PRODUCTS (2013)**

Product	Tonnes	1000 EUR	EUR/kg
Fresh trout	3.461	9.017	2,61
Frozen trout	12.377	32.086	2,59
Fresh trout fillets	282	1.158	4,11
Frozen trout fillets	655	2.746	4,19
Smoked trout filets	4.081	31.801	7,79
Fresh carp	8.525	4.855	0,57
Fresh bluefin tuna	2.035	28.537	14,02
Live seabass (juveniles)	115	741	6,44
Fresh seabass	16.902	68.855	4,07
Frozen seabass	1.140	5.039	4,42
Live seabream (juveniles)	186	1.916	10,30
Fresh seabream	18.037	61.411	3,40
Frozen seabream	3.846	15.187	3,95
Other fresh fish fillets*	5.001	42.538	8,51
Other frozen fish fillets*	2.717	24.962	9,19
Other	21.703	96.719	4,46
<b>Total</b>	<b>101.063</b>	<b>427.568</b>	<b>4,23</b>

Source: Turkish Statistical Institute.

\*including seabass and seabream fillets

The main products imported by Turkey are frozen mackerel (25% of total import value), fresh salmon (20%), frozen tuna for the canning industry (15%), frozen saithe fillets (10%), and frozen squid (7%). Main suppliers are Norway, the EU, Iceland, Morocco, and Guinea.

Table 5. **TURKEY: IMPORTS BY MAIN PRODUCTS (2013)**

Product	Tonnes	1000 EUR	EUR/kg
Fresh salmon	5.059	28.611	5,66
Live bluefin tuna (for fattening)	564	7.498	13,29
Frozen yellowfin tuna (for canning)	1.728	3.368	1,95
Frozen skipjack tuna (for canning)	10.168	17.753	1,75
Frozen bigeye tuna (for canning)	289	553	1,91
Frozen mackerel	28.838	35.441	1,23
Frozen saithe fillets	4.245	14.205	3,35
Frozen squid	3.608	9.856	2,73
Other	13.031	24.608	1,89
<b>Total</b>	<b>67.530</b>	<b>141.895</b>	<b>2,10</b>

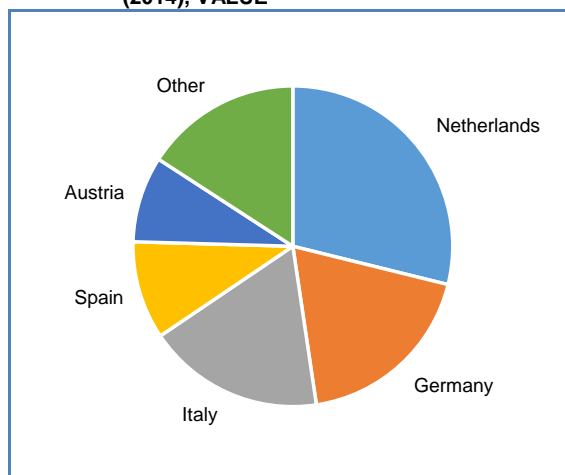
Source: Turkish Statistical Institute.

- With the EU

Turkey's trade balance for fishery products is also strongly positive with the EU, because EU exports to Turkey are low (EUR 25 million for less than 17.000 tonnes), and EU imports are significant (EUR 348 million for 69.000 tonnes) in 2014.

#### EU imports from Turkey

Turkey is the EU's 17th largest partner, providing 1,6% of total extra-EU imports to the EU in 2014. The Netherlands, Germany, Italy, and Spain are the main Member States importing from Turkey.

Figure 20. **EU: IMPORTS OF FISHERY PRODUCTS FROM TURKEY BY MAIN MEMBER STATES (2014), VALUE**

Source: EUMOFA.

The EU imports mostly farmed fish (seabass, seabream, and trout) from Turkey. These products compete with EU-produced fish and enter the EU market at prices much lower than EU products.

Table 6. **IMPORT PRICE OF SELECTED SPECIES BY ORIGIN (2014)**

CN code	Product	Import price (EUR/kg)		
		Intra-EU	Turkey	Other extra-EU
03 02 84 10	Fresh seabass	5,52	4,93	7,05
03 02 85 30	Fresh Gilthead seabream	4,81	4,55	12,28
03 02 11 80	Fresh trout (< 1,2 kg)	3,53	3,08	3,98
03 03 14 90	Frozen trout (< 1,2 kg)	3,47	3,03	3,52
03 05 43 00	Smoked trout	10,05	7,99	12,66

Source: EUMOFA.

Following a complaint lodged by the Danish Aquaculture Association on behalf of several EU producers, who complained that Turkish trout producers were competing

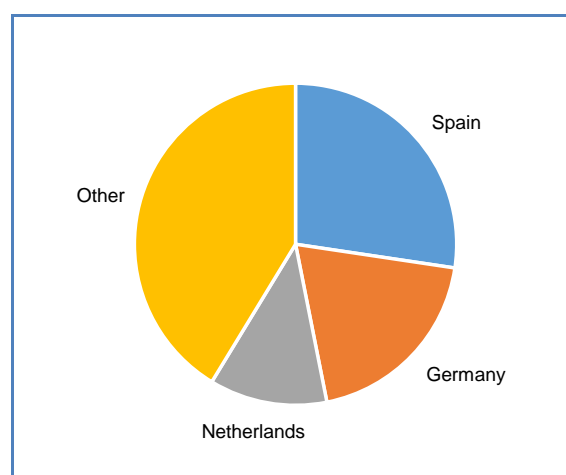
unfairly thanks to domestic subsidies, the European Commission decided to impose countervailing duties of between 6,7% and 9,5% on imports of portion-sized rainbow trout originating in Turkey (implementing Regulation 2015/309 of 26 February 2015).

### EU exports to Turkey

EU exports to Turkey are very limited and concern mainly frozen fish (small pelagics, tuna, and cephalopods).

Spain, Germany, and the Netherlands are Turkey's major partners, accounting for nearly 60% of total EU exports to Turkey.

Figure 21. **EU: EXPORTS OF FISHERY PRODUCTS TO TURKEY BY MAIN MEMBER STATES (2014), VALUE**

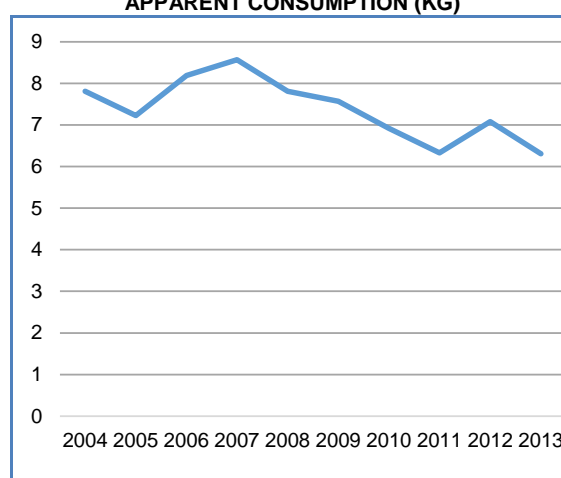


Source: EUMOFA.

Seafood consumption differs between the regions. In all, 70% of fishery production is consumed in the Black Sea region. Anchovy, rainbow trout, horse mackerel, and whiting are widely consumed and are typical for the Turkish seafood market. They can be considered as national species. Anchovy is the most popular fresh fish. Throughout Turkey, the most common way of consuming fish is whole and fresh, because cooled and frozen storage and processing of fishery products are not common practices.

Domestic consumption followed a decreasing trend in the past decade. Should the goals set for the aquaculture sector be achieved, the consumption per capita could almost double by 2023.

Figure 22. **TURKEY: EVOLUTION OF PER CAPITA APPARENT CONSUMPTION (KG)**



Source: Turkish Statistical Institute.

## 3.3. Consumption

Although the country is surrounded by seas, fish consumption in Turkey is only half of the world average and one third of the EU average. In 2013, per capita consumption of fishery and aquaculture products amounted to 6,3 kg.

Table 7. **TURKEY: APPARENT CONSUMPTION (TONNES) OF FISHERY AND AQUACULTURE PRODUCTS (2013)**

Production (fisheries + aquaculture)	607.500
Export	101.100
Import	67.500
Fish meal and oil factories	87.900
Not processed or consumed	6.400
Domestic consumption	479.600
Per capita consumption	6,3 kg

Source: Turkish Statistical Institute



## 4. Consumption

### MUSSEL



Mussel is widely consumed in Europe, particularly in Spain, France, and Italy, which contribute 78% of the mussel volume consumed in the EU. The apparent mussel consumption in the EU is 1,27 kg/capita (2012), of which 88% is of farmed mussel. Two types of mussel are typically consumed: the blue mussel (*Mytilus edulis*), which is small (4–6 cm), and the slightly larger Mediterranean mussel (*Mytilus galloprovincialis*; 5–8 cm, maximum 15 cm).<sup>27</sup>

Both species originate mainly from aquaculture and they are farmed on the Atlantic and North Sea coasts (blue mussel) and in the Mediterranean, Adriatic, and Black

seas, and the northwest coast of Spain, (Mediterranean mussel).

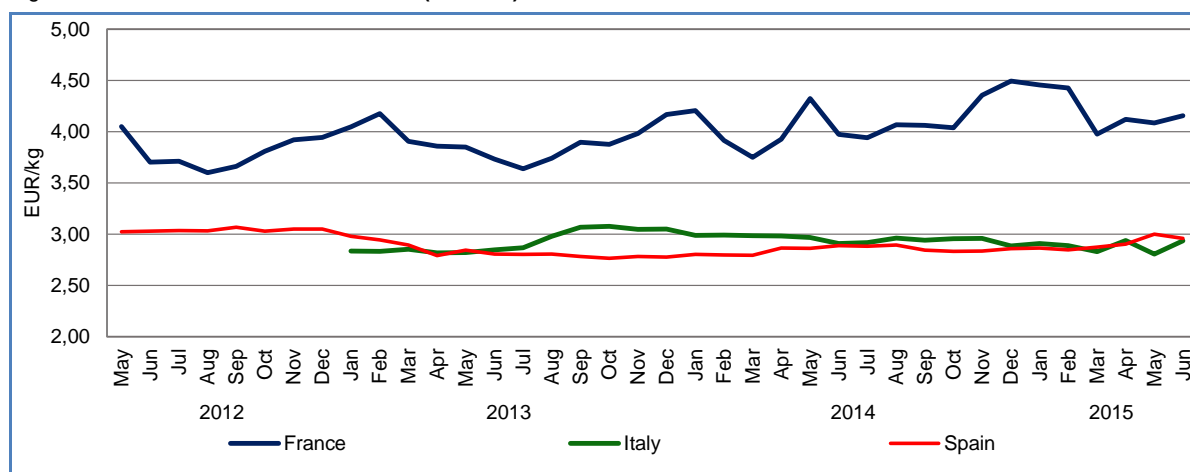
Mussel meat is rich in minerals, is an abundant source of protein, and is highly competitive with other high-protein food. On the market, mussels are sold mostly live, but can also be sold frozen or as processed products, canned or marinated.

In **France**, the retail prices of fresh mussel (in bulk) fluctuated between 3,60 and 4,50 EUR/kg during the three-year period and registered the highest prices among the surveyed Member States. In summer 2013, particularly in July, the price sunk to one of its lowest levels, 3,64 EUR/kg. Since July 2014, retail prices have risen, relative to massive mortality episodes in some major production basins (Vendée, Charente) and in December, it reached its highest level, 4,50 EUR/kg. During the following months, the price returned to the average level, but remained mainly above 3,98 EUR/kg.

In **Italy**, monthly retail prices of fresh mussel varied between 2,80 and 3,08 EUR/kg (May 2012–June 2015), maintaining a stable yearly average. In May 2015, the price reached a two-year low of 2,80 EUR/kg, 6% lower than May the year before. In the period January–June 2015, the average retail price dropped 2% compared with the same reference period a year earlier.

In **Spain**, prices of live mussel varied little during the three-year period, registering an average of 2,90 EUR/kg. The highest prices were registered in 2012. Since January 2012, they have started to decrease slowly. In October 2013, the price was 2,76 EUR/kg, the lowest in the surveyed period. During the first five months of 2015, prices reached 2,91 EUR/kg, 3% higher than January–June 2014.

Figure 23. RETAIL PRICES OF MUSSEL (EUR/KG)



Source: EUMOFA (updated 13.07.2015).

## HAKE



Hake is consumed largely in Europe, particularly in Spain, France, and the UK. Hake has less than 3% fat and a high protein content of great biological value; it is also a good source of minerals. The European hake (*Merluccius merluccius*) is widely distributed over the Northeast Atlantic shelf and the Mediterranean Sea. Supply peaks from April to August. Fresh and frozen hake, imported from Argentina, Peru, and Chile, as well as South Africa and Namibia, are also available. The fish are typically sold as fresh whole gutted, as well as fillets and steaks, both to retail and food service. In the EU, the apparent consumption of hake is 0,86 kg/capita (2012). In France and Spain, there are two distinctive markets for hake: large versus small hake.

In **Greece**, monthly retail prices of fresh European hake were the highest of the Member States. Average prices fluctuated between 16,51 and 20,69 EUR/kg in the period surveyed. At the beginning of 2015, particularly in February–March, the average retail prices were highest (20,69 EUR/kg), 7% higher than the same period in 2013. Since April 2015, the retail price has decreased 10%.

In **Italy**, retail prices of whole, fresh, hake have remained relatively stable over the past 30 months. In September 2014, the price was 17,11 EUR/kg, the highest for the period surveyed. In January–June 2015, the average retail price was 15,77 EUR/kg, 8% and 6% higher than the same period in 2014 and 2013, respectively.

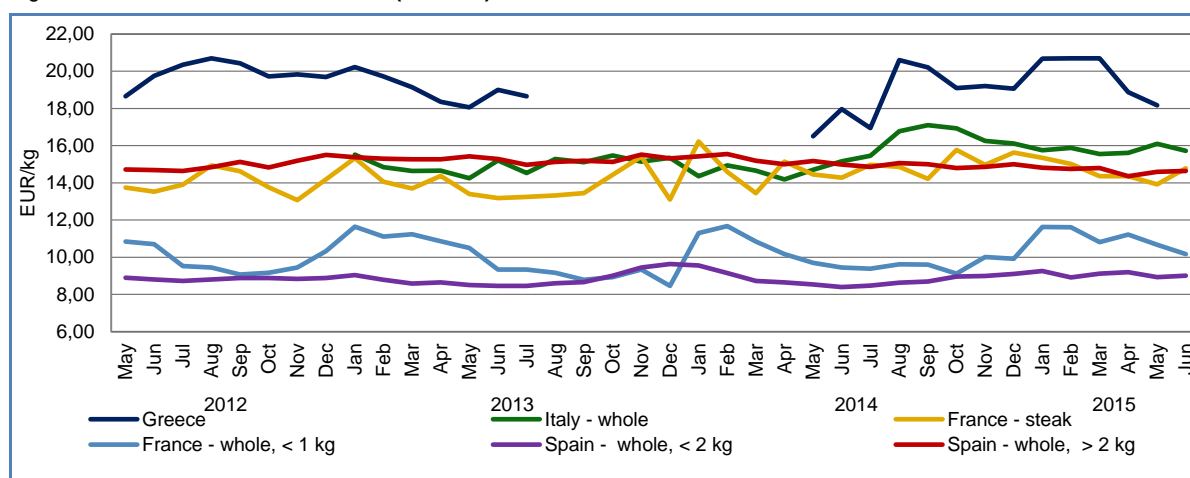
In **France**, the retail price of hake, steak, have exhibited considerable variations over the past three years, fluctuating between 12,31 and 16,22 EUR/kg. The average price during the first half of 2015 remained stable over the same period a year before, but grew 5% over January–June 2013.

Prices for small hake, whole (less than 1 kg), are seasonal, with peaks in January–February, caused by reduced supply. In December 2013, the retail price reached a three-year low, at 8,45 EUR/kg. Since the beginning of the year, prices increased 5% and 2% over one year and two years ago, respectively. In June 2015, the average price reached 10,16 EUR/kg.

In **Spain**, the average retail price of larger hake is approximately 60% higher than smaller specimens. Prices of European hake larger than 2 kg were relatively stable in the period observed and exhibited a decreasing trend. The January–June 2015 average price at 14,66 EUR/kg is 4% lower than the same period of one and two years ago.

Retail prices of smaller hake (less than 2 kg) were also stable during the past three years and followed a similar trend on a yearly basis. However, since the beginning of the year (January–June 2015), they have demonstrated an opposite trend, increasing 3% over the same period a year ago.

Figure 24. RETAIL PRICES OF HAKE (EUR/KG)

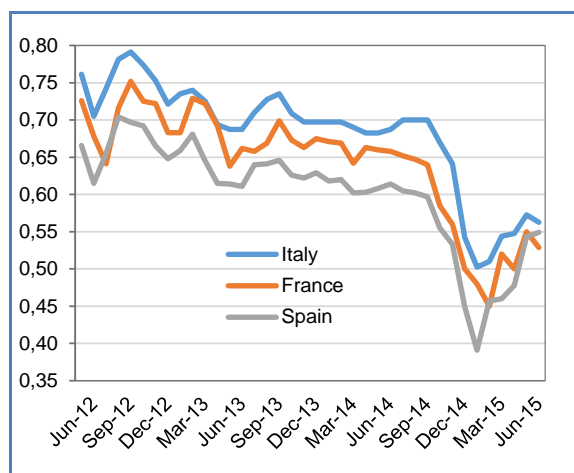


Source: EUMOFA (updated 13.07.2015).

## 5. Macroeconomic context

### 5.1. MARINE FUEL

Figure 25. **AVERAGE PRICE OF MARINE DIESEL IN ITALY, FRANCE, AND SPAIN (EUR/LITRE)**



Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; ARVI, Spain; MABUX (May–May 2015).

In July 2015, the fuel price in the French ports of Lorient and Boulogne was 0,48 EUR/litre, 9% less than in June 2015.

In Italy, in the ports of Ancona and Livorno, the average price of marine fuel in July 2015 was 0,50 EUR/litre. This was 9% lower compared with the previous month.

The price of marine fuel in the ports of A Coruña and Vigo (Spain) reached 0,51 EUR/litre in July 2015. It was 8% lower than the previous month.

### 5.2. FOOD AND FISH PRICES

Annual EU inflation was 0,1% in June 2015, down from 0,3% in May. In June 2015, negative annual rates were observed in Cyprus (–2,1%), Greece (–1,1%), Romania and Slovenia (both –0,9%), while the highest annual rates were recorded in Latvia (+1,2%), Malta (+1,1%), Austria (+1,0%), Belgium and the Czech Republic (both +0,9%).

Compared with May 2015, annual inflation fell in 13 Member States, remained stable in 7, and rose in 8.

In June 2015, prices of food and non-alcoholic beverages decreased, and prices of fish and seafood remained stable compared with the previous month (May 2015).

Since June 2013, food prices decreased 0,9%, while fish prices increased 2,2%.

Table 7. **HARMONISED INDEX OF CONSUMER PRICES IN THE EU (2005 = 100)**

HICP	June 2013	June 2014	May 2015	June 2015 <sup>28</sup>
<b>Food and non-alcoholic beverages</b>	126,82	125,51	126,26	<b>125,66</b>
<b>Fish and seafood</b>	124,02	125,15	126,74	<b>126,72</b>

Source: EUROSTAT.

### 5.3. EUROPEAN UNION ECONOMIC OVERVIEW

In January–March 2015, the EU GDP grew at a rate of 0,4%, which was stable compared with October–December 2014. The annual GDP growth rate improved to 1,0%, compared with 0,9% growth in October–December 2014, according to a second estimate.

The highest GDP growth was observed in the Czech Republic (2,5%), Romania (1,6%), and Cyprus (1,5%). Annual GDP growth rates registered largest numbers in the Czech Republic (+4,0%), Poland (+3,5%), Malta (+3,5%), and Hungary (+3,3%).

Lithuania and Estonia experienced a slowing of economic growth in January–March 2015, compared with October–December 2014. Economic growth contracted 0,3% in Estonia and 0,6% in Lithuania, compared with 1,0% and 0,7% expansion, respectively, in October–December 2014.<sup>29</sup>

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**THIS REPORT HAS BEEN COMPILED USING EUMOFA DATA AND THE FOLLOWING SOURCES:**

**First sales:** EUMOFA. EUROSTAT. Data analysed refers to the month January-May 2015 and May 2015.

**Consumption:** EUMOFA, FAO.

**Global supply:** European Commission, Directorate-General for Maritime Affairs and Fisheries (DG MARE); The Scottish Government; Statistics Iceland; OECD-FAO Agricultural Outlook 2015-2024; Natural Resources Institute, Finland; <http://www.publico.pt>; Norwegian Seafood Council.

**Macroeconomic context:** EUROSTAT; ECB, Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; ARVI, Spain; MABUX.

The underlying first-sales data is in a separate Annex available on the EUMOFA website.

**Case study:** EUMOFA; FAO; Turkish Statistical Institute.

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 four languages: English, French, German, and Spanish.

EUMOFA website is publicly available at the following address: [www.eumofa.eu](http://www.eumofa.eu).

## 6. Endnotes

<sup>1</sup> Bivalves and other molluscs and aquatic invertebrates, cephalopods, crustaceans, flatfish, freshwater fish, groundfish, other marine fish, salmonids, small pelagics, and tuna and tuna-like species.

<sup>2</sup> [http://www.puertos.es/es-es/estadisticas/Paginas/estadistica\\_mensual.aspx](http://www.puertos.es/es-es/estadisticas/Paginas/estadistica_mensual.aspx)

<sup>3</sup> EUROSTAT.

<sup>4</sup> <http://firms.fao.org/firms/resource/10025/en>

<sup>5</sup> <http://www.fao.org/fishery/species/2503/en>

<sup>6</sup> [https://www.iccat.int/Documents/Meetings/Docs/2014\\_SWO\\_MED\\_ASSESS\\_rep\\_ENG.pdf](https://www.iccat.int/Documents/Meetings/Docs/2014_SWO_MED_ASSESS_rep_ENG.pdf)

<sup>7</sup> [https://www.iccat.int/Documents/Meetings/Docs/2014\\_SWO\\_MED\\_ASSESS\\_rep\\_ENG.pdf](https://www.iccat.int/Documents/Meetings/Docs/2014_SWO_MED_ASSESS_rep_ENG.pdf)

<sup>8</sup> <https://www.havochvatten.se/download/18.64e1919f14d5425666572b58/1432719232032/officiell-statistik-JO56SM1501.pdf>

<sup>9</sup> <https://www.havochvatten.se/download/18.203ea9d8149410b71c2c7c54/1416390851137/officiell-statistik-JO57SM1401.pdf>

<sup>10</sup> <https://www.havochvatten.se/download/18.64e1919f14d54256665a8455/1433237369917/officiell-statistik-JO55SM1501.pdf>

<sup>11</sup> Cobia, dogfish, European seabass, gilthead seabream, gurnard, John dory, monk, other marine fish, other seabass, other seabreams, other sharks, picarel, ray, red mullet, scabbardfish, smelt, weever.

<sup>12</sup> <http://www.fao.org/fishery/species/2550/en>

<sup>13</sup> <http://www.fishbase.org/summary/1343>

<sup>14</sup> [http://www.imr.no/temasider/fisk/sei/nordostarktisk\\_sei/en](http://www.imr.no/temasider/fisk/sei/nordostarktisk_sei/en);

[http://www.imr.no/temasider/fisk/sei/sei\\_i\\_nordsjoen\\_skagerrak\\_og\\_vest\\_av\\_skottland/en](http://www.imr.no/temasider/fisk/sei/sei_i_nordsjoen_skagerrak_og_vest_av_skottland/en)

<sup>15</sup> <http://www.fao.org/fishery/species/3016/en>

<sup>16</sup> [http://ec.europa.eu/information\\_society/newsroom/cf/mare/itemlongdetail.cfm?item\\_id=24553&subweb=343&lang=en](http://ec.europa.eu/information_society/newsroom/cf/mare/itemlongdetail.cfm?item_id=24553&subweb=343&lang=en)

<sup>17</sup> [http://ec.europa.eu/information\\_society/newsroom/cf/mare/itemlongdetail.cfm?item\\_id=24262&subweb=343&lang=en](http://ec.europa.eu/information_society/newsroom/cf/mare/itemlongdetail.cfm?item_id=24262&subweb=343&lang=en)

<sup>18</sup> [http://ec.europa.eu/information\\_society/newsroom/cf/mare/itemlongdetail.cfm?item\\_id=24456&subweb=343&lang=en](http://ec.europa.eu/information_society/newsroom/cf/mare/itemlongdetail.cfm?item_id=24456&subweb=343&lang=en)

<sup>19</sup> [http://ec.europa.eu/information\\_society/newsroom/cf/mare/itemlongdetail.cfm?item\\_id=24488&subweb=343&lang=en](http://ec.europa.eu/information_society/newsroom/cf/mare/itemlongdetail.cfm?item_id=24488&subweb=343&lang=en)

<sup>20</sup> [http://ec.europa.eu/information\\_society/newsroom/cf/mare/itemlongdetail.cfm?item\\_id=24516&subweb=343&lang=en](http://ec.europa.eu/information_society/newsroom/cf/mare/itemlongdetail.cfm?item_id=24516&subweb=343&lang=en)

<sup>21</sup> <http://news.scotland.gov.uk/News/New-Scallop-Conservation-Measures-1b2b.aspx>

<sup>22</sup> <http://www.statice.is/Pages/444?NewsID=11298>

<sup>23</sup> [http://www.oecd-ilibrary.org/agriculture-and-food/oecd-fao-agricultural-outlook-2015\\_agr\\_outlook-2015-en;jsessionid=3fbltk99gf81c.x-oecd-live-03](http://www.oecd-ilibrary.org/agriculture-and-food/oecd-fao-agricultural-outlook-2015_agr_outlook-2015-en;jsessionid=3fbltk99gf81c.x-oecd-live-03)

<sup>24</sup> <http://www.luke.fi/en/tiedote/the-demand-for-edible-fish-bred-in-finland-exceeds-supply/>

<sup>25</sup> <http://www.publico.pt/economia/noticia/industria-conserveira-forcada-a-comprar-sardinha-a-marrocos-espanha-e-franca-1699783>

<sup>26</sup> <http://en.seafood.no/News-and-media/News-archive/Press-releases/Best-half-year-ever-for-Norwegian-seafood-export>

<sup>27</sup> FAO GLOBEFISH Research Programme: The European market for mussels, Volume 115.

<http://www.fao.org/fishery/species/3529/en>

<sup>28</sup> Estimated provisional.

<sup>29</sup> Eurostatistics – Data for short-term economic analysis, Issue number 7/2015.

<http://ec.europa.eu/eurostat/documents/3217494/6909414/KS-BJ-15-007-EN-.pdf/c85badcb-52ec-4ad4-bfc3-a671fb19937e>