

FISH AND FISHERY PRODUCTS

After falling for much of 2015, international fish prices have given signs of a recovery in the first five months of 2016, while still remaining below their 2015 levels. According to the FAO Fish Price Index, international fish prices averaged 2 percent lower in the first six months of 2016 compared to the same period last year. The recent price strength, which extended to all the major species except for shrimps, generally reflected a tightening of supplies in some major exporting countries, combined with a stronger import demand.

Global fish production is forecast to grow by 1.8 percent to 174.1 million tonnes in 2016, boosted by a 5 percent expansion of aquaculture to 81.4 million tonnes, confirming the sector as the main engine for fishery growth, which compensated for a 1 percent contraction in wild fish output to 92.7 million tonnes.

Consumer demand for fish remains strong, with more people worldwide appreciating the health benefits of regular fish consumption. Direct human consumption, which accounts for more than 85 percent of all fish uses, is projected to grow by 2.3 percent to 152.8 million tonnes in 2016. This would result in a slight increase in per capita fish intake, from 20.3 kg in 2015 to 20.5 kg in 2016.

Although several exporters are likely to face supply constraints associated with El Niño, diseases and fishing quotas, the value of international fish trade may increase by 4 percent in 2016, recouping part of the losses registered in 2015.

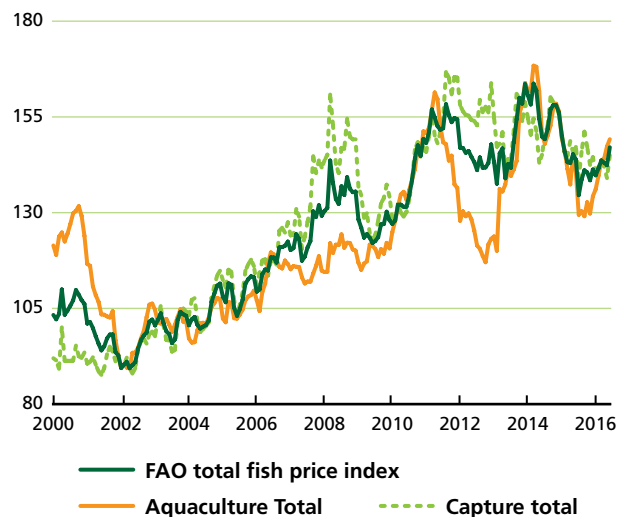
The recent FAO-UNCTAD-UNEP Joint-Statement¹, endorsed by more than 90 countries, international governmental organizations and active civil society organizations, highlighted the importance of having an international regulatory framework to streamline fishery subsidies. Any future regulation in this area will have a significant market-oriented impact on production patterns, prices and trade flows.

¹ Available at http://unctad.org/meetings/en/SessionalDocuments/U14ditc_d16_FishSub_Statement_en.pdf.

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FAO FISH PRICE INDEX (2002-2004 = 100)



Source: Norwegian Seafood Council (NSC)

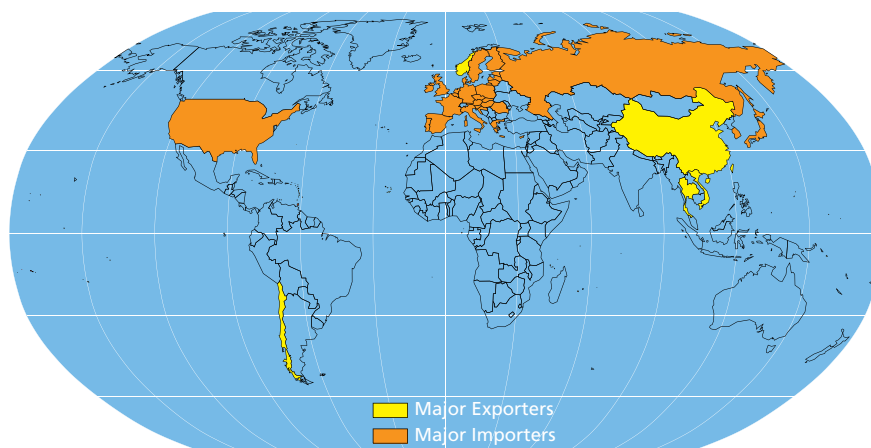
WORLD FISH MARKET AT A GLANCE

	2014	2015 <i>estim.</i>	2016 <i>f'cast</i>	Change: 2016 over 2015
	<i>million tonnes</i>			%
WORLD BALANCE				
Production	167.2	171.0	174.1	1.8
Capture fisheries	93.4	93.5	92.7	-0.9
Aquaculture	73.8	77.5	81.4	5.0
Trade value (exports USD billion)	148.3	134.1	140.0	4.4
Trade volume (live weight)	60.0	59.9	60.0	0.2
Total utilization	167.2	171.0	174.1	1.8
Food	146.3	149.4	152.8	2.3
Feed	15.8	16.5	16.2	-1.8
Other uses	5.1	5.1	5.1	0.0
SUPPLY AND DEMAND INDICATORS				
Per caput food consumption:				
Food fish (kg/yr)	20.1	20.3	20.5	1.1
From capture fisheries (kg/year)	10.0	9.8	9.6	-1.8
From aquaculture (kg/year)	10.1	10.5	10.9	3.9
FAO FISH PRICE INDEX (2002-2004=100)				
	2014	2015	2016 <i>Jan-Jun</i>	Change: Jan-Jun 2016 over Jan-Jun 2015 %
	157	142	143	-1.6

Source: FAO Fish Price Index; Norwegian Seafood Council (NSC)
Totals may not add up due to rounding

FISH AND FISHERY PRODUCTS

Major Exporters and Importers of Fish and Fishery Products



GLOBAL FISH ECONOMY

Global fish production in 2016 is forecast to expand by 1.8 percent, to 174.1 million tonnes, well below the ten year-trend of 2.3 percent. The relatively modest world growth reflects a number of setbacks, including diseases, and regulatory constraints. Under current expectations, the increase in global seafood production would stem from a 5 percent expansion of aquaculture to 81.4 million tonnes, confirming the sector as the main engine for fishery growth, which would compensate

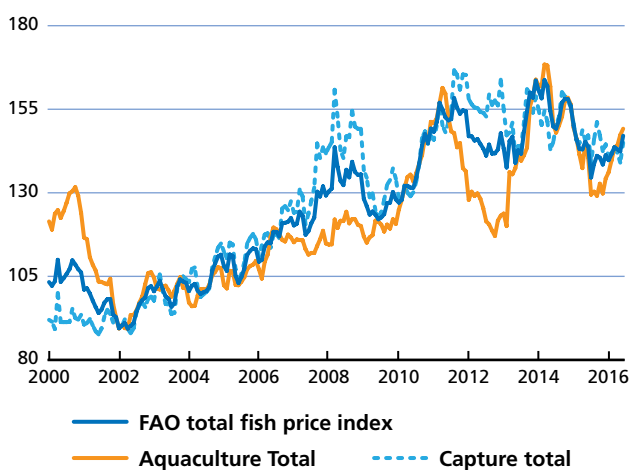
for a 0.9 percent contraction in wild fish output to 92.7 million tonnes.

Across different species, shrimp production continues on a downward trend in some major Asian producing countries, constrained by a recurrence of parasites, bacterial, fungal and viral diseases. Nonetheless, the world production outlook for 2016 is positive overall, thanks to gains in Ecuador, Indonesia and Thailand. Fresh cod faces an upward price trend, and Asian developing countries are expanding their role of important global whitefish processors. Tuna supply is facing constraints associated with seasonal fishing bans and the imposition of import restrictions.

Developing countries continue to play a significant role in the international supply of fish. Among developed nations, Norway, one of the world's largest producers, continues to enjoy an increased positive performance due to upward trends of salmon and cod prices. Among the world's major importers, the US, the European Union and Japan are all expected to see marginal declines in total import value. The overall outlook for the value of seafood trade in 2016 continues to be positive, mainly thanks to rising price prospects.

After the sharp declines registered in the second half of 2015, international seafood prices have shown a tendency to recover over the first months of 2016, while still remaining below their corresponding levels in 2015. According to the FAO Fish Price Index, fish prices averaged 2 percent lower in the first six months of 2016 compared to

Figure 1. The FAO Fish Price Index (2002-2004=100)



Source: Norwegian Seafood Council (NSC)

Table 1. World fish market at a glance

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	<i>million tonnes</i>			%
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Source: FAO Fish Price Index: Norwegian Seafood Council (NSC)
Totals may not match due to rounding.

the same period last year, reflecting a decline of 4 percent for captured fish, while prices of aquaculture products remained stable. Only salmon prices made substantial gains year-on-year, due to a combination of tight supplies in major exporting countries and sustained import demand. By contrast, the losses incurred in the second half of 2015 brought average prices down for the other fish species, in particular shrimps and pelagic fish. Since January, however, most seafood products have witnessed a firming of prices, including fish meal and fish oil, reflecting a significant reduction in the supply of anchoveta together with growing demands for animal and aquaculture feed.

Consumer demand for fish remains strong, with more people worldwide appreciating the health benefits of regular fish consumption. Direct human consumption, which accounts for more than 85 percent of all fish uses, is projected to grow by 2.3 percent to 152.8 million tonnes in 2016. This would result in a slight increase in per capita fish intake, from 20.3 kg in 2015 to 20.5 kg in 2016.

In July 2016, FAO, UNCTAD and UNEP issued a Joint-Statement highlighting the importance for countries and the international community to move forward on trade-related targets under Sustainable Development

Goal (SDG) 14, particularly under a specific target, SDG 14.6, which deals with fisheries subsidies. More than 90 countries, international governmental organizations, and active civil society organizations endorsed this Joint-Statement. In this regard, a future international regulatory framework implemented for fisheries subsidies will have a significant market-oriented impact on production patterns, prices and trade flows.

SHRIMP

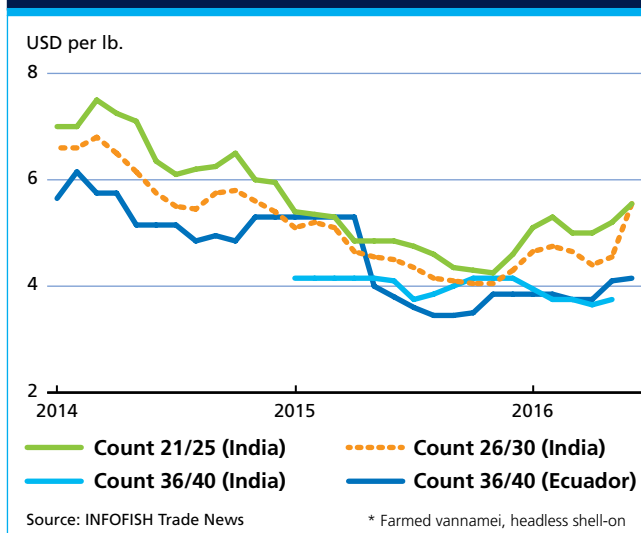
Production of farmed shrimps in Asia remains relatively weak for some producers in 2016, due to an ongoing disease problem in China and the effects of drought and a delayed monsoon in some parts of Southeast Asia. Thailand, however, is ramping up production after suffering severely from disease outbreaks in recent years, and it expects strong production of 270 000 to 300 000 metric tonnes for 2016. Ecuador and Indonesia are also expecting to show strong volume growth rates for 2016 and 2017. The net result of global production is estimated to be positive for 2016

Table 2. Japanese imports of shrimp (by product)

	2011	2012	2013	2014	2015	2016
	<i>Jan-Mar (thousand tonnes)</i>					
Frozen, raw	43.1	42.4	38.5	36.4	27.6	32.3
Cooked, frozen	4.8	5.1	5.2	4.5	3.6	4.0
Prepared/preserved*	11.4	11.6	11.3	8.8	8.2	7.9
Sushi (with rice)	0.7	0.5	0.6	0.4	0.5	0.5
Total*	60.8	60.3	56.1	50.7	40.1	45.1

(*Including other)

Source: Japan Ministry of Finance /INFOFISH

Figure 2. Ex-warehouse prices of shrimp in New York, USA*

and 2017, but increased regional demand, particularly from China, is absorbing supplies previously channelled to traditional developed markets. Overall, China will likely continue to influence the global market and international prices if its domestic production does not improve. In the near term, the market will also be determined by the supply situation in India, where the 2016 production forecast is not promising. However, on a global scale, the direction of future price trends largely depends on the extent to which demand growth in regional markets in Asia offsets global supply increases.

TUNA

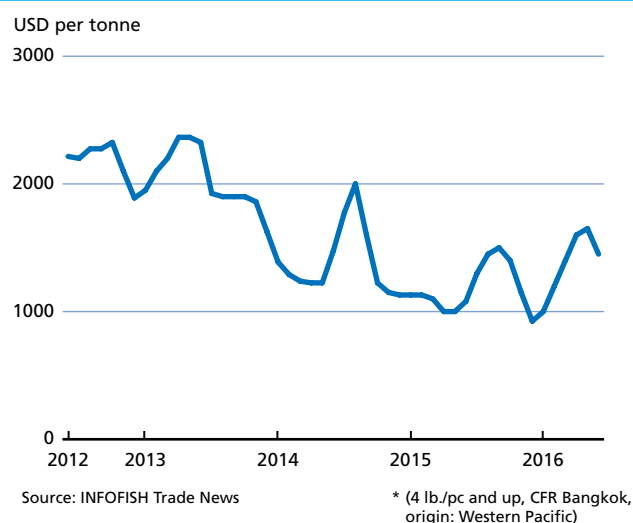
Canned tuna production in Ecuador, the largest supplier to the European market, was lower in May following a mid-April earthquake that slowed cannery operations and impacted the port infrastructure at Manta, making it impossible to land raw material. Combined with a scarcity of tuna arrivals from the Eastern Pacific, this situation pushed prices upwards in early 2016, but they have since stabilized. Starting from 1 July, purse seine operations in the Western and Central Pacific were subjected to the seasonal three-month ban on fish aggregating devices (FADs), which, combined with positive demand for tuna from processors, is likely to keep prices stable or lead to further increases for the remainder of 2016. The most significant

Table 3. Thai exports of canned/processed tuna

	2012	2013	2014	2015	2016
	<i>Jan-Jun (thousand tonnes)</i>				
USA	46.3	54.9	52.4	41.0	44.5
Egypt	27.1	15.7	19.6	31.9	37.8
Australia	19.5	20.0	21.8	20.5	19.2
Japan	16.4	17.2	16.0	16.9	17.1
Canada	15.0	16.4	15.2	13.9	14.9
Saudi Arabia	15.4	11.9	14.6	16.8	14.0
Libya	20.7	17.7	22.3	12.4	8.6
UAE	6.3	6.5	6.4	7.7	8.2
Argentina	3.4	3.6	2.8	3.3	6.7
UK	5.2	8.5	5.9	6.8	6.3
Peru	0.7	2.3	4.0	5.6	5.3
Chile	2.9	5.1	7.6	5.4	5.1
Jordan	2.2	3.0	5.4	3.6	5.1
Israel	1.3	2.5	4.1	4.3	5.0
PN Guinea	4.4	3.1	5.9	5.6	4.2
Lebanon	2.5	2.4	2.7	2.2	3.4
Yemen	5.6	5.4	4.4	3.5	3.1
Tunisia	6.4	5.9	3.4	1.6	3.1
Others	66.5	79.9	79.7	78.0	59.7
Total	267.8	282.0	294.2	281.0	271.3

Source: Thai Customs

Figure 3. Prices of frozen skipjack tuna for canning in Thailand*

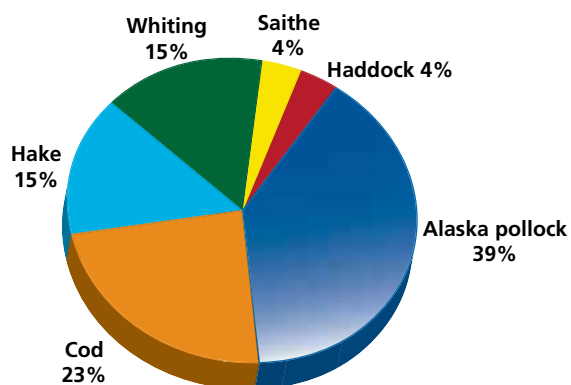


trade-related news for the tuna sector in the future is the European Commission's formal notice (yellow card) issued to Thailand in April 2016 for not taking sufficient measures in the international fight against IUU fishing. In April, the EU stated that it had given Thailand six months to implement a corrective action plan. Should the situation not improve, the EU could resort to banning fisheries imports from Thailand. Last year, the EU imported USD 184 million worth of canned tuna from the country, so if the ban goes into effect, there could be serious repercussions to Thailand, but also the EU, which would have to seek new sources of supply.

GROUND FISH

For the remainder of 2016, a stable supply situation is expected for the majority of groundfish species. Relatively high prices for cod are forecast to continue, while haddock prices are giving sign of recovering. Cuts in Barents Sea quotas for both species have been recommended by the International Council for the Exploration of the Sea (ICES) in 2017, which may result in tighter supplies and firmer prices. Pacific cod quotations are also on the rise, and can be expected to benefit from the same market conditions. Meanwhile, the Barents Sea saithe quota is likely to be raised next year. As for surimi, the processed paste made from fish, including cod and haddock, and transformed into an imitation of crab pulp, there is a danger of overproduction, particularly considering the long-term trend that is seeing consumers move away from processed seafood. Sustainability remains an important concern for the groundfish sector, with an increasing number of fisheries in the US and Europe seeking certification by the Marine Stewardship Council (MSC).

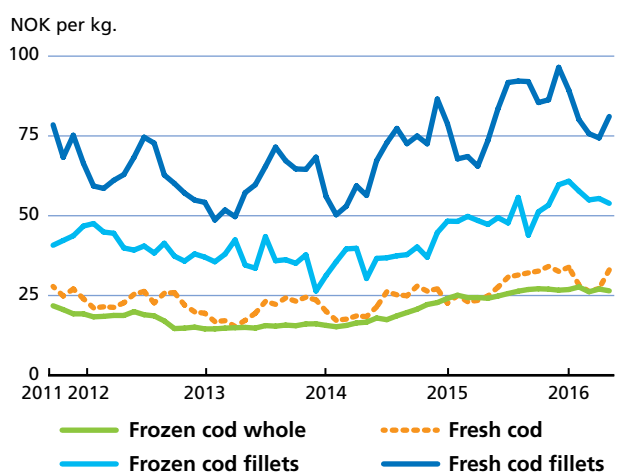
Figure 4. Groundfish production* by main species (2014)



Source: FAO

* Aquaculture+ capture

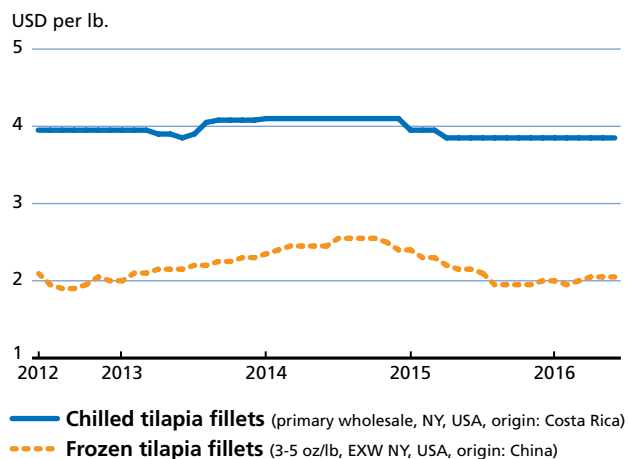
Figure 5. Export prices of cod in Norway*



Source: Norway Seafood Council

* Average export prices, FOB Norway

Figure 6. Prices of tilapia in the USA



Source: INFOFISH Trade News

CEPHALOPODS

The 2016 squid season off South America has been a significant disappointment for the sector thus far. Landings are dramatically down, with the drop generally attributed to the strong El Niño in 2015 and 2016. Catches have been so poor that the authorities are considering at least partial reimbursement of licence fees. As a result of the tightening supply, squid prices are up by more than 30 percent. In contrast, there seems to be reason for a more optimistic view of cephalopod supply in the longer term, as recent research has shown that global cephalopod populations are growing. In the more immediate future, scientists are expecting the current El Niño to taper off and temperature conditions to return to normal in the next 6 to 12 months, which should bring about an improvement in landings in the affected regions over the next year. Squid prices, however, can be expected to remain high for some time with sustained strong demand, while the need to make up a shortfall in supplies of *Illex* and *Loligo* squid may stimulate demand for alternative species.

PANGASIUUS

The current low international prices of pangasius will continue to encourage imports throughout 2016, particularly in the important US market. For the world's number one producer, Viet Nam, lower prices have led the Viet Nam Association of Seafood Exporters and Producers (VASEP) to forecast a 5 percent reduction in total export value for 2016. Growing import demand for farmed pangasius is expected to support growth in producing countries other than Viet Nam and prevent prices from dropping further. In fact, it is likely that increasing feed costs will necessitate a price hike in the medium term.

Table 4. US imports of fresh and frozen pangasius fillets

	2012	2013	2014	2015	2016
	<i>Jan-June (thousand tonnes)</i>				
Viet Nam	47.2	48.9	45.1	54.8	64.3
China	2.4	3.6	4.2	3.3	2.5
Thailand	0.0	0.0	0.0	0.0	0.0
Others	0.1	0.0	0.0	0.1	0.3
Total	49.7	52.5	49.3	58.2	67.1

Source: NMFS

TILAPIA

Despite the weakening of major markets such as the US and production problems in China, the outlook for

Table 5. US imports of tilapia (by product and origin)

	2012	2013	2014	2015	2016
	<i>Jan-Jun (thousand tonnes)</i>				
Fresh fillets					
Honduras	2.5	3.8	5.3	4.8	4.9
Colombia	1.2	1.9	1.9	2.5	2.6
Costa Rica	1.2	3.5	2.9	2.6	2.5
Ecuador	3.3	3.2	1.4	1.4	1.2
Others	0.3	1.7	2.0	2.1	1.9
Total	8.5	14.1	13.5	13.4	13.1
Whole frozen					
China	12.4	10.8	9.5	12.3	12.4
Taiwan Province of China	5.1	7.5	5.6	4.9	5.9
Thailand	0.2	0.2	0.3	0.5	0.3
Others	0.3	0.5	0.6	2.0	0.9
Total	18.0	19.0	16.0	19.7	19.5
Frozen fillets					
China	71.3	56.5	64.8	70.0	59.9
Indonesia	6.4	5.4	5.4	4.9	4.0
Taiwan Province of China	0.8	0.7	0.5	0.6	0.8
Thailand	1.1	0.5	0.8	0.6	0.5
Ecuador	0.4	0.4	0.0	0.0	0.0
Others	0.8	0.4	0.9	1.8	2.0
Total	80.8	63.9	72.4	77.9	67.2
Whole frozen	18.0	19.0	16.0	19.7	19.5
Frozen fillets	80.8	63.9	72.4	77.9	67.2
Fresh fillets	8.5	14.1	13.5	13.4	13.1
Total	107.3	97.0	101.9	111.0	99.8

Source: NMFS

the world's farmed tilapia industry remains promising as demand is strong and growing in a range of markets in Asia, Africa and Latin America and the Caribbean. Prices of Chinese tilapia are expected to start rising again on the back of supply shortages, and a number of countries are looking to significantly expand their tilapia farming industries. In particular, the Indian and Brazilian sectors are set to receive heavy investment from both government and private sources, which may boost global supply in the long term.

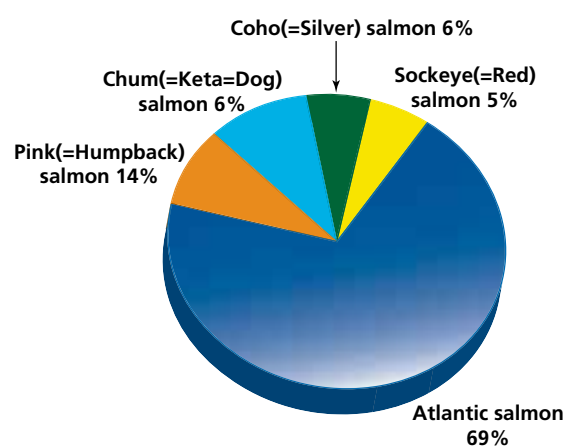
SEABASS AND SEABREAM

The current outlook for the farmed bass and bream sector can be best described as cautiously positive, so long as prices are maintained at economically sustainable levels. This will depend on the rate of production volume growth, and the progress made towards cost reductions at the farm level. Consolidation and investment activities are ongoing in major producing countries of the Mediterranean such as Greece and Turkey, which will allow for achieving improved competitiveness through economies of scale. Prices for both bass and bream did not quite reach the mid-summer peaks achieved last year in major European markets and are

expected to decline steadily in typical fashion as seasonal demand weakens towards the end of the year.

SALMON

The global salmon market, from producer to consumer, has to now come to terms with a new, higher price plateau. After months of upward revisions, forward prices for Norwegian farmed salmon are now set to remain above USD 6 per kg until 2019. For the remainder of 2016, the drop in prices following the traditional late summer harvest in Norway is expected to reverse significantly, moving above last year's levels as year-end demand takes effect. In the longer-term, Norwegian farmers will continue to reap the benefits of physical and regulatory limits on supply. Despite the obvious price benefits of slower and regulated production growth in Chile, the business implications of new regulations on its industry lead to additional costs associated with the regulations' sanitary requirements. The process of regulatory change is still effectively ongoing

Figure 7. Salmon production* (farmed and wild) by species (2014)

Source: FAO

* Aquaculture + capture

Table 6. Norwegian exports of salmon and trout (value terms)

	2012	2013	2014	2015*	2016*
	<i>Jan-Jun (billion NOK)</i>				
Salmon	13.9	17.3	21.3	21.8	27.9
Fresh	10.7	14.0	17.0	17.1	22.2
Frozen	0.6	0.4	0.6	0.6	0.5
Fresh fillet	1.4	1.7	2.2	2.4	3.4
Froz. Fillet	1.1	1.1	1.5	1.6	1.7
Trout	0.8	1.0	1.2	0.8	1.8

Source: Norwegian Seafood Council

in Chile, and certain industry representatives are looking to have the 3 percent annual production growth limit revisited. In the wild salmon sector, with Alaskan harvests exceptionally high this year in contrast to the overall supply situation, the current market conditions may be seen as an opportunity, particularly if product innovation and improved quality control can more closely integrate the wild and farmed fish markets.

SMALL PELAGICS

Supplies of the main small pelagic species, such as mackerel and herring, will be somewhat tighter this year, and prices are generally high. The absence of the Russian market for those exporting countries subject to the trade ban, e.g. Norway and Iceland, is still presenting some difficulties, but strong demand from elsewhere is underpinning sales for key species such as herring and mackerel. In Nigeria, traditionally an important market for small pelagic exporters, the decision of the Nigerian Central Bank (CBM) to float the national currency against the US dollar is expected to stabilize the currency in the

Table 7. Federation of Russian imports of whole frozen herring

	2012	2013	2014	2015*	2016*
	<i>Jan-Jun (thousand tonnes)</i>				
Faroe Islands	9.2	7.9	6.7	18.1	10.6
Norway	35.5	26.7	27.3	0.0	0.0
Finland	2.8	2.0	3.6	0.0	0.0
Iceland	2.3	0.5	2.9	3.3	0.0
Others	2.9	2.0	3.9	10.1	0.1
Total	52.7	39.1	44.4	31.5	10.7

Source: Federal Customs Service of Russia

Table 8. Federation of Russian imports of whole frozen mackerel

	2012	2013	2014	2015*	2016*
	<i>Jan-Jun (thousand tonnes)</i>				
Faroe Isl	0.0	3.9	2.4	11.1	24.6
China	1.9	0.4	0.7	0.4	3.0
Greenland	0.0	0.0	0.0	0.0	0.6
Morocco	1.3	1.3	1.4	0.9	0.5
Norway	12.1	7.4	4.5	0.0	0.0
UK	3.1	8.9	9.9	0.0	0.0
Others	7.0	15.7	15.3	7.8	0.9
Total	25.4	37.6	34.2	20.2	29.6

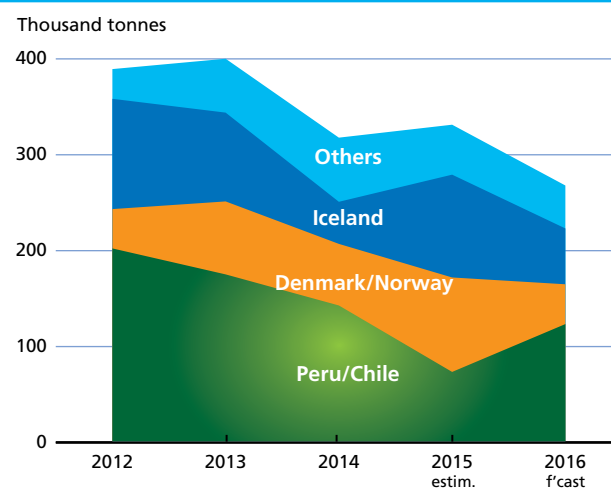
Source: Federal Customs Service of Russia

long run. As a result, industry players are optimistic about future development of the market after a lull following the structured trade embargo introduced in 2014. In South America, meanwhile, supplies of anchoveta will be considerably lower due to ongoing El Niño effects while, in the west coast of North America, there will be no sardine fishing at all. Overall, the price outlook is positive for the major small pelagic species, although this will inevitably also depend on the development of currency exchange rates between key trading partners.

FISHMEAL AND FISH OIL

When Peru established a higher than expected – 1.8 million metric tonnes – anchoveta quota for the first fishing season in June 2016, the fishmeal and fish oil industry was optimistic that the supply of fishmeal from the southeastern Pacific would be adequate in the short-term, despite the disruptive impact of El Niño. However, the authorities ended the season sooner, at the beginning of August, to make way for the spawning season, with only 50 percent of the quota caught and the season's catch of 920,000 metric tonnes the lowest in a decade. This shortfall has inevitably pushed prices upwards once again, and fishmeal prices rose some 27 percent from June to August. Although commentators expect the situation to normalize later in the year, the persistent volatility of prices and an ever-increasing gap between demand from the global aquaculture and livestock sectors and fishery supply can be expected to continue to push prices upwards and drive the development of alternative sources of animal and fish feed.

Figure 8. Top global producers of fishmeal (January-March)



Source: IFFO

CRAB

The availability of crab on the US west coast has markedly increased this year, despite the reduced quotas in the Bering Sea, and average prices are up for both US and Russian suppliers. The favourable market situation has analysts predicting that 2016 will be a very profitable year for the crab industry. However, researchers have recently shown that legal male crab biomass in Alaskan fisheries have decreased for multiple species, which will likely have a negative effect on supply volumes in the long term.

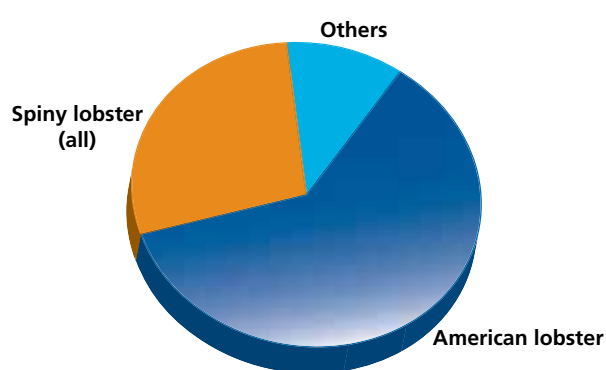
BIVALVES

The nature and extent of the consequences of the Brexit vote on the bivalve trade are difficult to assess at present, and the picture will only become clearer when the characteristics of the UK's future trade deals and regulatory changes are decided upon. However, given that the UK is both an important supplier and a key market for traded scallops, cockles, razor and clam shells, the impact on market dynamics is likely to be significant. Among other effects, the weakened British pound is boosting export-based bivalve businesses while making imports relatively more expensive. Other important market developments include an increased interest in organic mussels, with industry sustained development observed in Denmark and Ireland, and a signed agreement in early April on mutual recognition of organic production equivalence rules and control systems between the EU, Chile and Canada. Elsewhere, a new study published in the *Proceedings of the National Academy of Sciences* suggested that increasing sea temperatures may be heightening food safety risks in bivalves, specifically with regard to incidence of vibrio genus bacteria usually associated with undercooked seafood.

LOBSTER

Supplies of North American lobster were quite tight in the summer of 2016 as catches were low. Coupled with strong demand in the US and Canadian markets, the lack of volume has sent lobster prices soaring higher and has seen processors scrambling to secure raw material. Demand for North American lobster in Asia is also expected to continue to strengthen, in spite of the lull in the Chinese economy. Prices for live lobster generally weaken temporarily in autumn, but the outlook, in general, is very positive.

Figure 9. Lobster production* by species (2014)



Source: FAO

* Aquaculture + capture