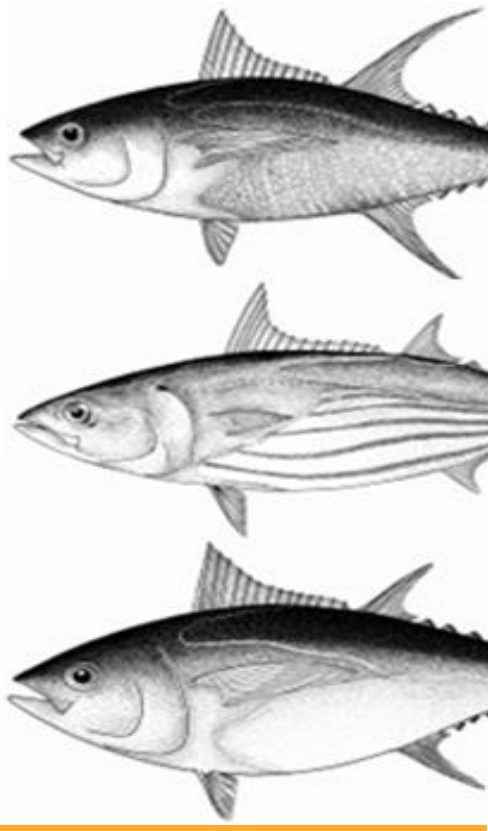
European Commission



CASE STUDY

CANNED TUNA IN SPAIN

PRICE STRUCTURE IN THE SUPPLY CHAIN

EUMOFA

European Market Observatory for Fisheries and Aquaculture Products

Maritime Affairs and Fisheries

LAST UPDATE: JUNE 2017

WWW.EUMOFA.EU

Contents

Summary

- The case study focuses on the main species of tuna: skipjack tuna, yellowfin tuna and bigeye tuna.
- Tuna catches are on an upward trend since 2007 and reached 5,6 million tonnes in 2015 (+11% compared with 2007). The EU (especially Spain, France and Portugal) is the third-largest producer in the world (7% in 2015) after Indonesia and Japan. The main non-EU producers are Indonesia, Japan, the Philippines and Taiwan. These four countries represent 36% of the world production.
- The EU market for canned tuna reached 809.000 tonnes in 2015. Spain has the largest apparent market (25% of the EU consumption). With Italy, France and Portugal, it accounts for 56% of the global EU market (in volume, in 2015).
- EU supplies for the canned tuna industry are mainly composed by frozen whole tuna (91.000 tonnes in 2015) and tuna loins (132.600 tonnes in 2015).
    - Spanish imports represent almost 60% of the EU imports of frozen tuna (whole and fillets), followed by Italy, France and Portugal. EU main suppliers for frozen tuna are Guatemala, France, Korea, Vietnam, Spain, Philippines and Brazil. These 7 countries account for 62% of the total EU supplies.
    - Spain imported 60% of the loins imported by the EU (followed by Italy, France and Portugal) in 2015. The main suppliers of loins are Ecuador, China, Papua New Guinea, Indonesia, Mauritius and Guatemala. These 6 countries account for 56% of the total EU supplies of loins.
- EU imported 587.000 tonnes of canned tuna in 2015. Spain is the third European importer of canned tuna (40.000 tonnes in 2015), after France (101.000 tonnes) and Italy (86.000 tonnes).
- In 2015, EU exports were composed by 229.371 tonnes of prepared and preserved tuna (including 7% of loins) and 163.190 tonnes of frozen whole tuna. 98% of the frozen tuna is exported by Spain (57%) and France (41%).
- Loins and frozen whole tuna are the main supplies of the Spanish canned tuna industry. The share of prepared and preserved tuna in the Spanish imports fluctuated between 2006 and 2015 but increased by 4,1% between 2006 and 2015 reaching 63,5% of the total imports in 2015. Within the prepared and preserved products imported, loins are the main ones and their share increased over the period from 45% in 2006 until 70% in 2015.
- Canned tuna is the key product of the Spanish canned fish and seafood industry: it represents 69% in volume and 51% in value in 2015.
- Within the canned fish products consumed in Spain, tuna is the main category with more than 70% in volumes in 2015.
- It was not possible to obtain detailed data on costs and margins. Processor's costs and margins as well as retailer's costs and margins remain unknown.
- Available data collected are the raw material price (2,96 EUR/kg in 2015) and retail price of ordinary canned tuna (9,16 EUR/kg).

0. TASK REMINDER – Scope and content

0.1 Scope of the case study

The case study will aim at illustrating how to concretely analyze price and value structure in seafood supply, using the European observatory datasets (prices at different levels of the chain) and complementary tools and data (interviews with experts and key actors in the supply chain).

The analysis will be focused on one national market (the most, or one of the most important for the considered product), which means that analysis will be developed in the most possible detailed way only for this country. This will lead to organize specific data collection and physical missions, in-depth interviews and information exchange with key actors of those markets.

The rationale for choosing canned tuna to analyze price structure and distribution of value in Spanish supply chain is described in the following table.

Products	Origin	Characteristics	Market and price drivers
Canned Tuna (yellowfin tuna, skipjack and bigeye tuna)	**Loins**: Ecuador, Mauritius, China, Papua Guinea **Frozen whole tuna**: Guatemala, EU (France), Brazil.	80% of the EU catches of tuna are dedicated to the canned industry. In Spain, canned tuna represents 69% of the total canned fish production.	Imports of raw material are mainly from third countries. The raw material cost is the main price driver of the final product (65 to 70% of the final price). Strong competition with the third countries markets.

As agreed with the steering committee:

- The study focuses on the most important market: i.e. Spain, which means that analyses are developed in the most possible detailed way only for this country;
- An overview of available information and preliminary analysis is proposed for the other relevant markets and a specific focus is made on France and Italy.

Species -Products	Main MS (focus)	other MS (overview)
Canned tuna	Spain	France, Italy

0.2 Content of the document

The methodology proposed, and agreed, for developing case studies on price transmission in EU supply chains for fisheries and aquaculture products involves two main complementary tasks:

- First, mobilizing the maximum of available data and statistics and developing specific investigations (such as group analysis for establishing economic performance of key actors of the supply chains);
- Second, conducing a limited number of interviews with experts and stakeholders (tuna producers/importers, processors, retailers), in the objective of getting qualitative comments on structured data produced in task 1, and for collecting complementary information on standard costs and margins.

Consequently, the present document is a structured presentation of the quantitative information available on tuna production, international trade, market, consumption and price and margin analysis.

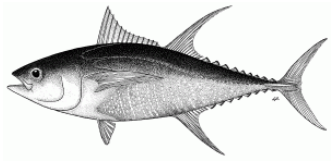
The key elements of analysis for each chapter, organized on a synthetic way, with specific consideration on price structure and distribution of value in the chains.

1. DESCRIPTION OF THE PRODUCT(s) AND MARKET(s)

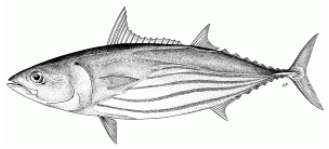
1.1 Name, presentation, place in the nomenclature

Main products

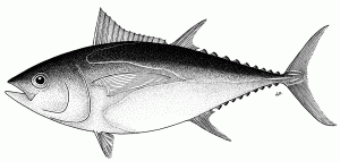
Name: Yellowfin tuna (*Thunnus albacares, YFT*)



Skipjack (*Katsuwonus pelamis, SKJ*)



Bigeye tuna (*Thunnus obesus, BET*)



Source pictures: FAO

Several fish species are included under the name "tunas". The present case study focuses on the three main species used as raw material for the tuna canned industry:

- Yellowfin tuna
- Skipjack
- Bigeye tuna

White tuna and bluefin tuna are not in the scope of the study.

Related codes

Tunas are differentiated in the COMEXT nomenclature for the whole fish (fresh and frozen) but not for fillets (except loins for the canning industry).

Tuna species (yellowfin tuna, skipjack and bigeye tuna) are only differentiated for the whole fish (fresh and frozen); for the fillets, all tuna species are included except loins for the canned fish industry, the COMEXT nomenclature differentiates the yellowfin tuna and skipjack from the others.

Regarding the raw material, the case study will only consider the codes identified for the "industrial manufacturing products".

Regarding the prepared and preserved products, fillets as loins are differentiated from the other materials used in the canned industry.

Whole fish:

- Fresh or chilled tuna
  - Yellowfin tuna for the industrial manufacture of products of heading 1604 (*Thunnus albacares*): **03023210**
  - Skipjack or stripe-bellied bonito for the industrial manufacture of products of heading 1604: **03023310**

- Bigeye tuna for the industrial manufacture of products of heading 1604 (*Thunnus obesus*): **03023410**

- Frozen tuna (whole)
  - Yellowfin tuna for the industrial manufacture of products of heading 1604 (*Thunnus albacares*)
    - Whole, weighing more than 10 kg each: **03034212**
    - Whole, others: **03034218**
    - Others, weighing more than 10 kg each: **03034242**
    - Others, other: **03034248**
  - Skipjack or stripe-bellied bonito for the industrial manufacture of products of heading 1604: **03034310**
  - Bigeye tuna for the industrial manufacture of products of heading 1604 (*Thunnus obesus*): **03034410**

Fillets:

- Tuna (of the genus of *Thunnus*, skipjack or stripe-bellied bonito (*Euthynnus (Katsuwonus) pelamis*): **03048700**

Prepared or preserved fish:

- Fillets as 'loins', also used by the canning industry
  - Skipjack: **16041426**
  - Yellowfin tuna: **16041436**
  - Other tuna: **16041446**
- Others
  - Skipjack in vegetable oil: **16041421**
  - Skipjack – other: **16041428**
  - Yellowfin tuna in vegetable oil: **16041431**
  - Yellowfin tuna – other: **16041438**
  - Other tuna in vegetable oil: **16041441**
  - Other tuna – other: **16041448**
- Other prepared or preserved fish
  - Tuna, skipjack or other fish of the genus *Euthynnus*: **16042070**

1.2 Production and availability of tuna

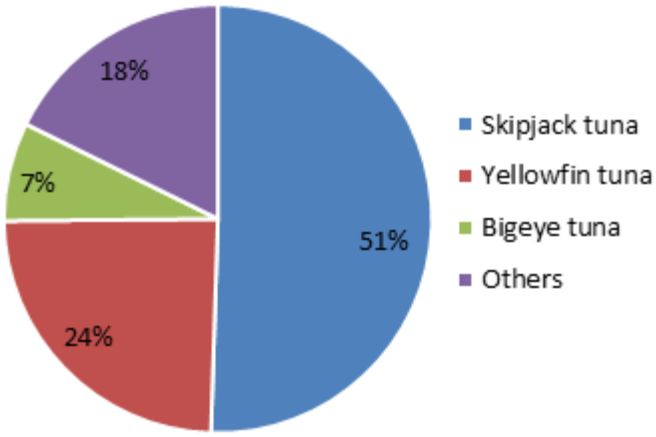
The study focuses on the main species of tuna: skipjack tuna, yellowfin tuna and bigeye tuna.

Table 1 – World production of tuna by species (1.000 t)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Skipjack tuna	2.501	2.509	2.686	2.617	2.608	2.772	2.974	2.986	2.822
Yellowfin tuna	1.101	1.197	1.161	1.236	1.204	1.343	1.312	1.347	1.359
Bigeye tuna	441	431	410	374	387	423	400	401	416
Others	589	505	513	537	531	549	512	683	712
Of which albacore	*231*	*198*	*233*	*239*	*222*	*257*	*242*	*238*	*223*
Of which bluefin tuna	*35*	*25*	*21*	*13*	*12*	*12*	*15*	*14*	*18*
TOTAL*	**5.049**	**4.970**	**5.101**	**5.084**	**4.993**	**5.412**	**5.520**	**5.716**	**5.586**

*For tuna of the genus Thunnus and skipjack

Figure 1 – World capture of tuna by species in volume (2015)



Sources:
FAO - Fisheries and Aquaculture Information and Statistics Service – Global capture of tuna.

Key analysis:

- Tuna catches are on an upward trend since 2007 and reached 5,6 million tonnes in 2015 (+11% compared with 2007).
- This evolution since 2007 shows a stable period between 2007 and 2011 at around 5 million tonnes and a significant growth since 2011 (+12% between 2011 and 2015).
- The main species in terms of volumes captured is the skipjack tuna with 2.8 million tonnes in 2015. Yellowfin tuna and bigeye tuna are the second and third ones.
- Among the other tuna species, albacore is the main one (23% of the production of other species).
- The EU (especially Spain, France and Portugal) is the third-largest producer in the world (7% in 2015) after Indonesia and Japan.
- The main non-EU producers are Indonesia, Japan, the Philippines and Taiwan. These four countries represent 36% of the world production.

Figure 2 – World capture of tuna (1.000 tonnes)

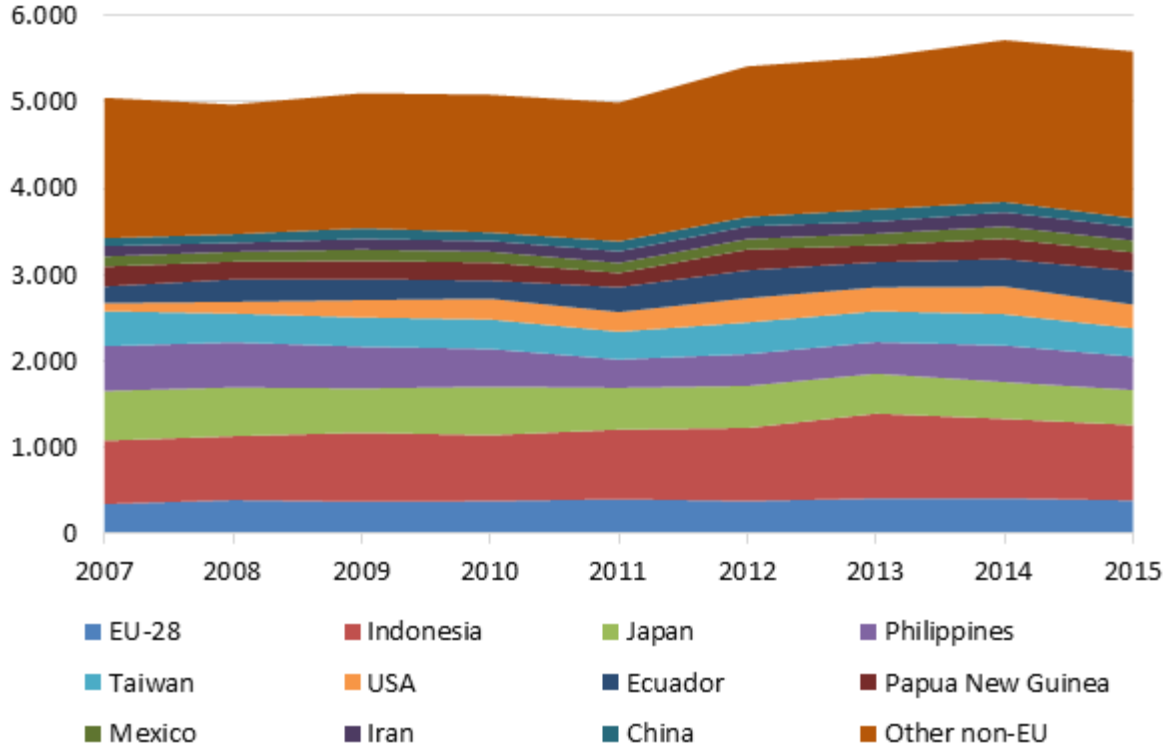


Table 2 – World catch of Tuna (1.000 tonnes)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Spain	213	262	257	267	290	281	306	280	266
France	101	103	92	91	89	80	88	112	105
Portugal	17	11	9	18	14	12	11	14	6
Other EU-28	16	18	17	7	11	9	7	8	13
EU-28	**347**	**394**	**375**	**383**	**404**	**383**	**413**	**414**	**390**
Indonesia	734	738	799	762	806	846	981	919	871
Japan	576	564	511	560	483	486	461	425	405
Philippines	518	522	483	437	328	369	367	424	386
Taiwan	404	334	339	341	321	365	356	362	329
USA	94	135	201	240	227	282	277	318	274
Ecuador	193	259	240	210	288	322	291	319	388
Papua New Guinea	230	206	213	208	165	240	194	237	216
Mexico	117	115	131	126	116	122	135	138	137
Iran	118	103	123	124	134	148	141	167	154
China	93	99	125	98	116	108	142	118	105
Other non-EU	1.626	1.500	1.561	1.593	1.606	1.743	1.762	1.872	1.930
Non-EU	**4.702**	**4.575**	**4.726**	**4.701**	**4.589**	**5.029**	**5.106**	**5.302**	**5.196**
%EU-28	*7%*	*8%*	*7%*	*8%*	*8%*	*7%*	*7%*	*7%*	*7%*

Sources:
FAO - Fisheries and Aquaculture Information and Statistics Service – Global capture of Tuna (tuna of the genus Thunnus and skipjack).

2. THE EU MARKETS FOR TUNA

2.1 Structure of the EU markets

2.1.1 Apparent market by Member State

The EU market for canned tuna was estimated at 809.000 tonnes in 2015. Spain, with both high production and high imports, has the largest apparent market (30% of total EU apparent market).

Italy, with a lower production and high imports, is the second largest EU market with 18% of total EU apparent market.

France and Portugal are the third and fourth ranked EU markets.

These four main countries account for 65% in the global EU market (in volume).

Table 3 – Apparent market for canned tuna in the EU in 2015 (tonnes)

Member State	Production	Import	Export	Apparent market
Italy	71.799	85.810	22.575	135.034
Spain	**269.634**	**39.715**	**103.264**	**206.085**
France	19.928	101.380	4.745	116.563
Portugal	20.477	12.845	5.931	27.391
Others	53.095	346.795	76.174	323.716
TOTAL EU-28	**434.933**	**586.545**	**212.689**	**808.789**

Sources:
PRODCOM – Prepared or preserved tuna, skipjack and Atlantic bonito, whole or in pieces (excluding minced products and prepared meals and dishes (Code: 10202540).
COMEXT – Codes of heading 1604 (prepared or preserved fish) related to tuna (excluding loins).
Apparent domestic market for each Member State is calculated in tonnes as follows: production – export + import.

2.1.2 Supply of the main EU markets for prepared tuna

EU supplies for the canned tuna industry are mainly composed by frozen whole tuna (91.000 tonnes in 2015) and loins (132.600 tonnes in 2015).

Yellowfin and skipjack tuna are the main species imported as frozen whole.

Imports of frozen whole tuna, mainly used for canned tuna, increased to more than 115.000 tonnes in 2012 and then decreased by 21% between 2012 and 2015.

Imports of loins are on an increasing trend since 2006 (+46% between 2006 and 2015); and imports of canned tuna reached 586.545 tonnes in 2015 (-0,7% compared with 2006).

EU imports a small volume of frozen fillets of tuna (25.000 tonnes in 2015) which is mainly used as defrosted by fishmongers. Fresh whole tuna is not significant.

Table 4 – EU imports in volume (tonnes)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fresh whole tuna	**5.835**	**3.293**	**507**	**942**	**1.259**	**1.713**	**1.226**	**904**	**897**	**1.197**
Frozen fillets of tuna	**16.947**	**19 039**	**19.067**	**17.646**	**19.585**	**19.363**	**19.067**	**17.333**	**20.117**	**25.121**
Frozen whole tuna	**82.836**	**108 476**	**115.075**	**128.450**	**113.239**	**102.498**	**115.312**	**109.280**	**90.483**	**90.985**
Yellowfin tuna	*59.948*	*90.975*	*89.703*	*90.794*	*83.386*	*78.119*	*89.789*	*85.104*	*68.366*	*58.299*
Skipjack	*22.291*	*16.292*	*23.083*	*35.168*	*25.999*	*21.563*	*22.480*	*19.779*	*18.097*	*27.456*
Bigeye tuna	*596*	*1.209*	*2.289*	*2.488*	*3.854*	*2.816*	*3.044*	*4.397*	*4.020*	*5.231*
Prepared or preserved tuna	**681.509**	**681.961**	**693.556**	**649.390**	**655.449**	**678.471**	**641.210**	**689.706**	**716.441**	**719.126**
Loins	*90.933*	*90.060*	*92.300*	*120.180*	*109.781*	*114.446*	*106.690*	*113.486*	*118.546*	*132.581*
Canned tuna	*590.575*	*591.901*	*601.256*	*529.209*	*545.667*	*564.024*	*534.520*	*576.221*	*597.894*	*586.545*

Sources:
Elaboration from COMEXT – Fresh tuna (whole from the species yellowfin tuna, skipjack and bigeye tuna), frozen tuna (whole from the species yellowfin tuna, skipjack and bigeye tuna + fillets) and prepared or preserved tuna - Data of volume – 2015.

Figure 3 – Main European importers of frozen tuna (left side) and loins (right side) for the canning industry in 2015 – in volume

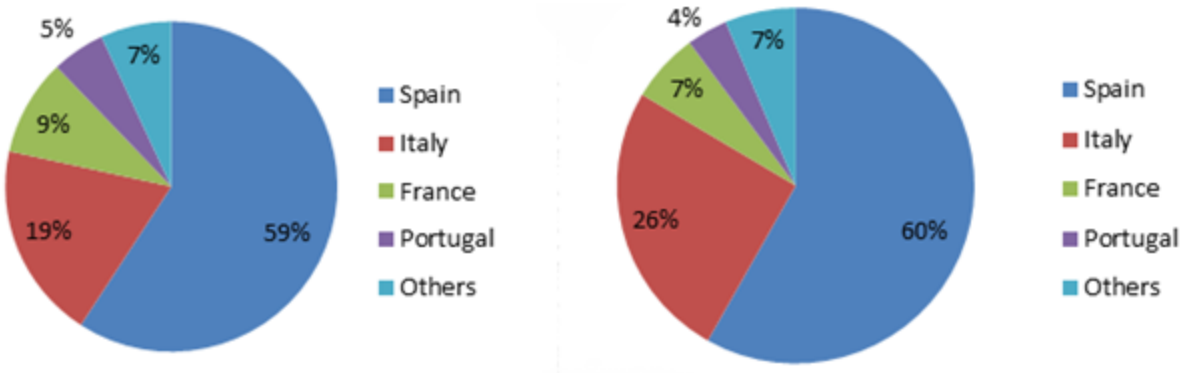
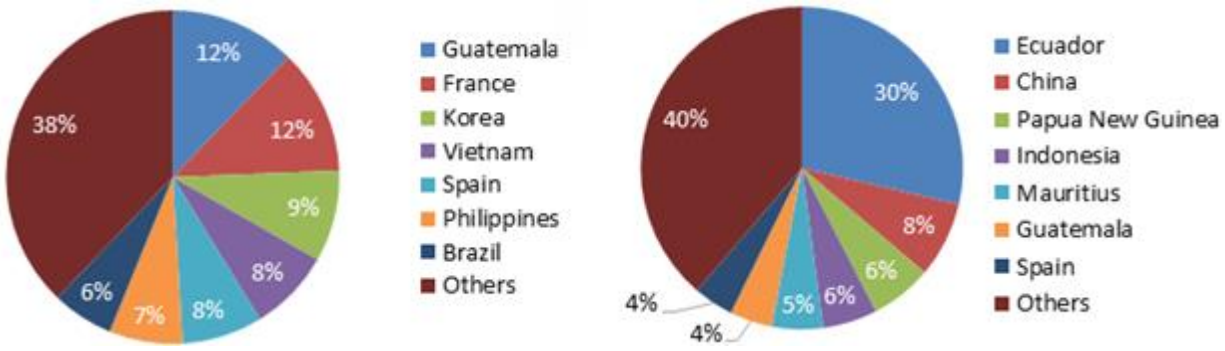


Figure 4 – Main intra and extra-EU suppliers for frozen tuna (left side) and loins (right side) for the canning industry in 2015 – in volume



Sources:
Elaboration from COMEXT – Frozen tuna (whole from the species Yellowfin tuna, Skipjack and Bigeye tuna + fillets) and loins - Data of volume – 2015.

Spain is the main EU importer of frozen tuna and tuna loins for the canning industry. Spanish imports represent almost 60% of the EU imports of frozen tuna and 60% of the EU imports of loins (followed by Italy, France and Portugal).

The main intra and extra-EU suppliers for frozen tuna are Guatemala, France, Korea, Vietnam, Spain, Philippines and Brazil. These seven countries account for 62% of the total EU supplies. Regarding loins for the canning industry, the main EU suppliers are Ecuador, China, Papua New Guinea, Indonesia, Mauritius, Guatemala and Spain (these loins are mainly from their own catches). These seven countries account for 60% of the total EU supplies.

2.1.3 Main exporting countries within the EU

In 2015, EU exports were composed by 229.371 tonnes of prepared and preserved tuna (including 7% of loins) and 163.190 tonnes of frozen whole tuna (mainly yellowfin and skipjack tuna).

Between 2006 and 2015, exports of frozen whole tuna decreased by 20% whereas exports of prepared and preserved tuna increased by 22,7%.

Table 5 – EU exports in volume (tonnes)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fresh whole tuna	**87**	**96**	**58**	**710**	**513**	**450**	**1.314**	**696**	**351**	**769**
Frozen fillets of tuna	**10.901**	**10.680**	**8.855**	**7.803**	**8.460**	**9.836**	**9.862**	**10.100**	**11.940**	**11.661**
Frozen whole tuna	**204.783**	**181.162**	**243.072**	**221.025**	**144.080**	**144.846**	**177.201**	**158.538**	**131.940**	**163.190**
Yellowfin tuna	*79.090*	*61.193*	*108.922*	*72.751*	*75.797*	*71.538*	*104.354*	*99.596*	*81.836*	*86.870*
Skipjack	*116.510*	*110.318*	*120.765*	*127.399*	*60.301*	*64.136*	*64.631*	*49.237*	*41.008*	*66.616*
Bigeye tuna	*9.182*	*9.650*	*13.384*	*20.875*	*7.982*	*9.172*	*8.216*	*9.706*	*9.096*	*9.703*
Prepared of preserved tuna	**186.838**	**201.610**	**215.296**	**196.658**	**175.649**	**197.064**	**188.017**	**182.996**	**206.173**	**229.371**
Loins	*7.987*	*8.492*	*6.503*	*7.121*	*5.727*	*5.727*	*6.735*	*8.523*	*14.054*	*16.683*
Canned tuna	*178.852*	*193.118*	*208.794*	*189.537*	*169.922*	*191.338*	*181.282*	*174.473*	*192.119*	*212.689*

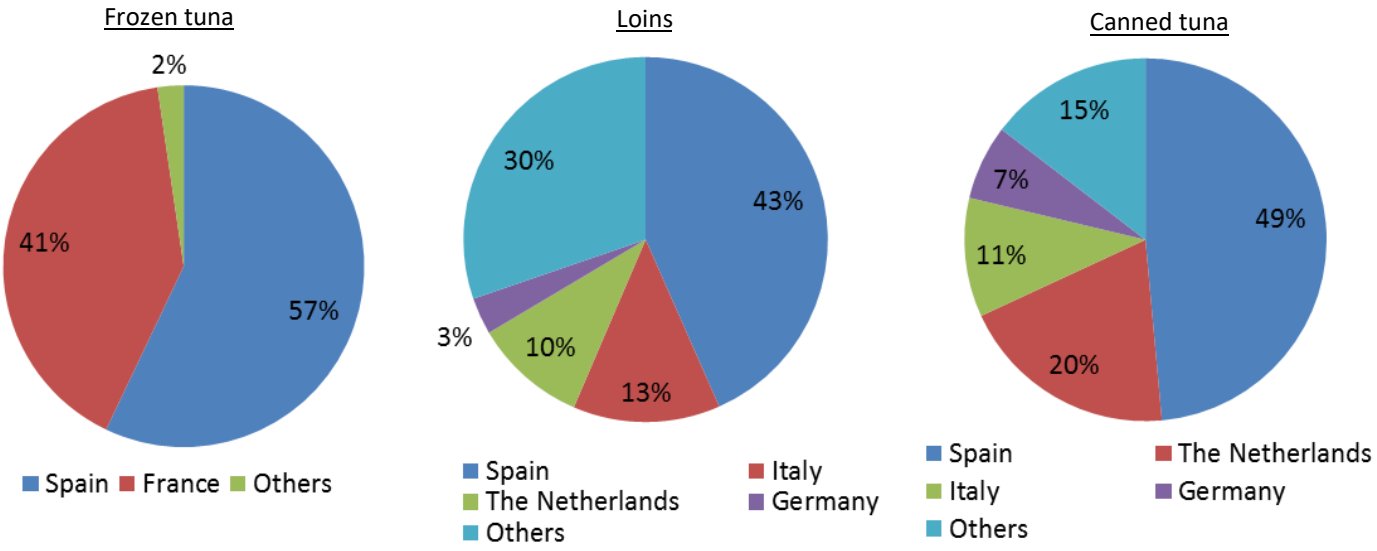
Sources:
Elaboration from COMEXT – Fresh tuna (whole from the species Yellowfin tuna, skipjack and bigeye tuna), Frozen tuna (whole from the species yellowfin tuna, skipjack and bigeye tuna + fillets) and prepared or preserved tuna - Data of volume – 2015.

98% of the **frozen tuna** is exported by Spain (57% mainly to Seychelles, Mauritius, Portugal and Ecuador) and France (41%); and prepared tuna (excluding loins) is mainly exported by Spain (49%), followed by The Netherlands (20%), Italy (11%) and Germany (7%).

Exports of **loins for the canning industry** accounted for 7% of prepared and prepared tuna exported by EU-28 in 2015. Spain was the largest exporter (43% mainly to Portugal, Italy and France), followed by Italy (13%), the Netherlands (10%) and Germany (3%).

Exports of **canned tuna** accounted for 93% of prepared and preserved tuna exported by EU-28 with 212.700 tonnes in 2015. Spain exported half of this volume mainly to Italy, Portugal and France; followed by the Netherlands (20%) and Italy (11%).

Figure 5 – Main European exporters of frozen and prepared tuna for the canning industry in 2015 in volume



Sources:
Elaboration from COMEXT – Frozen tuna (whole from the species Yellowfin tuna, Skipjack and Bigeye tuna + fillets) and prepared or preserved tuna - Data of volume – 2015.

2.2 The Spanish market

2.2.1 Large supply of frozen tuna and few imports of canned tuna

Supplies of raw material are mainly composed by frozen whole tuna and tuna loins:

Loins and frozen whole tuna are the main supplies of the Spanish tuna canning industry (see figure 6). As presented in table 2, Spain captured 266.000 tonnes of tuna in 2015 and total imports accounted for 188.558 tonnes this same year.

As catches, imports are on an increasing trend over the 10 last years: +26% between 2006 and 2015. But if there is no linear trend for frozen whole tuna over the period, an upward trend can be observed for tuna loins.

Figure 6 – Spanish imports of tuna in 2015 – in volume

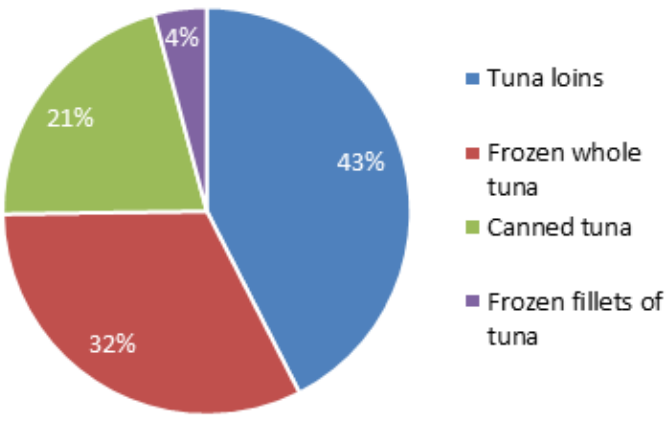


Table 6 – Spanish imports of tuna

	VOLUME (TONNES)									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Frozen whole tuna	56.597	76.796	78.370	86.597	76.589	64.158	74.144	70.898	53.757	60.874
Yellowfin tuna	*40.377*	*66.014*	*64.712*	*66.035*	*55.558*	*49.153*	*56.078*	*53.913*	*35.733*	*31.517*
Skipjack	*15.660*	*9.595*	*11.399*	*18.112*	*17.374*	*12.577*	*15.748*	*13.573*	*14.694*	*24.544*
Bigeye tuna	*561*	*1.188*	*2.259*	*2.450*	*3.657*	*2.428*	*2.318*	*3.412*	*3.330*	*4.813*
Frozen fillets of tuna	4.077	3.349	3.428	3.116	5.756	4.690	5.239	5.245	6.045	7.849
Prepared and preserved tuna	88.491	84.448	83.527	97.799	95.583	95.261	92.159	93.101	98.822	119.835
Loins	*37.494*	*38.471*	*46.161*	*68.925*	*66.115*	*68.425*	*62.574*	*63.120*	*65.351*	*80.119*
Canned tuna	*50.997*	*45.977*	*37.366*	*28.874*	*29.468*	*26.836*	*29.586*	*29.981*	*33.471*	*39.715*
TOTAL	**149.164**	**164.593**	**165.324**	**187.512**	**177.928**	**164.109**	**171.542**	**169.244**	**158.624**	**188.558**

	VALUE (1000 EUR)									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Frozen whole tuna	69.595	117.619	122.808	105.311	110.556	108.769	161.152	157.274	97.395	92.904
Yellowfin tuna	*55.474*	*106.667*	*106.971*	*86.437*	*89.930*	*90.616*	*129.985*	*128.016*	*72.645*	*53.849*
Skipjack	*13.423*	*9.261*	*12.571*	*16.032*	*16.004*	*14.080*	*26.109*	*21.906*	*18.491*	*32.552*
Bigeye tuna	*698*	*1.692*	*3.266*	*2.842*	*4.622*	*4.072*	*5.059*	*7.353*	*6.259*	*6.504*
Frozen fillets of tuna	10.856	9.894	12.175	10.122	19.861	17.878	22.344	24.772	26.553	37.488
Prepared and preserved tuna	246.474	255.644	287.149	295.454	304.187	332.260	435.370	451.836	385.462	427.331
Loins	*111.330*	*126.335*	*168.137*	*214.433*	*220.427*	*247.393*	*315.060*	*322.018*	*267.108*	*299.524*
Canned tuna	*135.143*	*129.309*	*119.013*	*81.021*	*83.760*	*84.867*	*120.311*	*129.818*	*118.354*	*127.807*
TOTAL	**326.925**	**383.157**	**422.133**	**410.888**	**434.604**	**458.906**	**618.866**	**633.882**	**509.409**	**557.724**

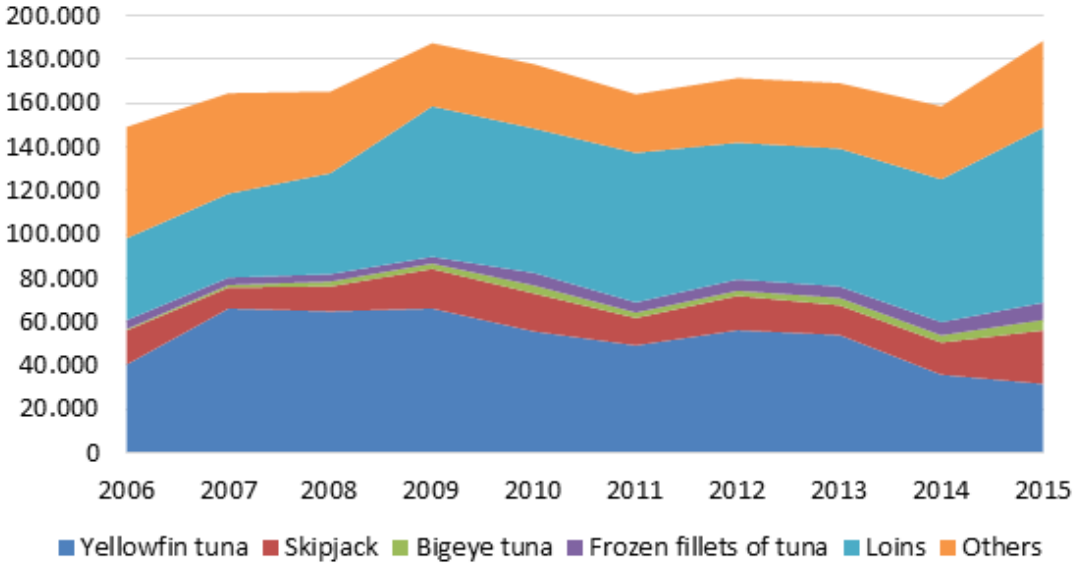
Sources:
Elaboration from COMEXT: Frozen whole tuna (yellowfin tuna: 03034212, 03034218, 03034232, 03034238, 03034252, 03034258, 03034242, 03034248 – skipjack or stripe-bellied bonito: 03034311, 03034313, 03034319, 03034310 – bigeye tuna: 03034411, 03034413, 03034419, 03034410); Frozen fillets of tuna (03042045, 03042945, 03048700); Prepared or preserved tuna (Loins: 16041416, 16041426, 16041436, 16041931, 16041446 – Others: 16041411, 16041421, 16041418, 16041428, 16041431, 16041438, 16041441, 16041448, 16041439, 16042070).

An increasing share of loins in imports:

As illustrated in figure 7, the share of prepared and preserved tuna in the Spanish imports fluctuated between 2006 and 2015 but increased by 4,1% between 2006 and 2015 reaching 63,5% of the total imports in 2015.

Within the prepared and preserved products imported, loins are the main ones and their share increased over the period from 45% in 2006 to 70% in 2015, whereas the share of canned tuna decreased from 55% to 30%.

Figure 7 – Spanish imports of frozen whole tuna (yellowfin tuna, skipjack and bigeye tuna), frozen fillets of tuna, and prepared or preserved tuna (loins and others) - volume in tonnes



Suppliers of raw material and canned tuna are mainly extra-EU countries:

Frozen tuna, whole and fillets

Excluding France, the frozen whole tuna imported by Spain comes mainly from third countries: 59% of the volume imported in 2015 was from Guatemala, Brazil, Curacao, Panama, Korea and Mauritius.

Frozen fillets of tuna are less significant in the global imports but also come mainly from third countries: 72% of the volume imported in 2015 was from Mexico, Ecuador and Vietnam.

Figure 8 – Spanish intra and extra-EU imports of frozen tuna by origin (whole on the left side and fillets on the right side) in 2015 – in volume

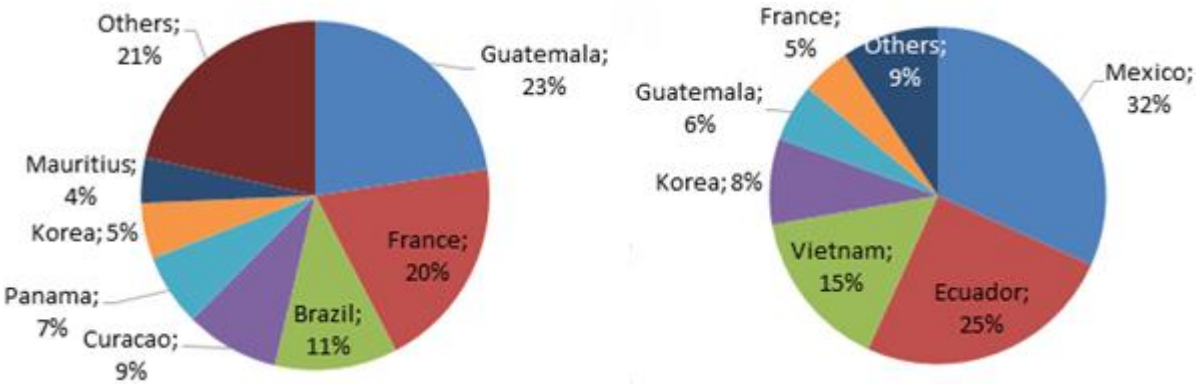


Table 7 – Spanish intra and extra-EU imports of frozen whole tuna by origin (tonnes)

Origin	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Guatemala	11.954	11.388	9.703	7.762	7.853	5.759	6.567	9.266	8.875	13.751
France	10.410	11.210	19.094	16.938	4.920	9.392	12.855	12.452	7.723	12.031
Brazil	405	1.326	64	1.031	3.453	3.564	5.074	2.388	1.177	6.929
Curacao	0	0	0	0	0	0	0	4.145	5.491	5.305
Panama	0	0	0	12.639	7.987	818	156	244	100	4.078
Korea	9.623	11.561	2.921	2.709	7.594	9.651	8.756	2.162	5.989	3.146
Mauritius	0	0	0	0	0	0	0	322	25	2.562
Others	24.157	41.312	46.498	45.517	44.782	34.974	40.737	39.918	24.379	13.072
TOTAL	**56.549**	**76.796**	**78.280**	**86.597**	**76.589**	**64.158**	**74.144**	**70.898**	**53.757**	**60.874**

Table 8 – Spanish intra and extra-EU imports of frozen fillets of tuna by origin (tonnes)

Origin	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Mexico	0	0	0	0	0	50	208	1.185	1.346	2.491
Ecuador	97	0	0	0	848	1.211	1.547	1.117	1.274	1.967
Vietnam	177	1.147	747	895	1.133	1.216	1.585	1.349	1.531	1.211
Korea	0	33	69	141	364	275	246	302	538	648
Guatemala	0	0	0	0	0	0	2	7	188	432
France	1.652	62	60	26	33	38	299	145	28	368
Others	2.152	2.106	2.551	2.054	3.378	1.900	1.351	1.139	1.140	732
TOTAL	**4.077**	**3.349**	**3.428**	**3.116**	**5.756**	**4.690**	**5.239**	**5.245**	**6.045**	**7.849**

Source:
Elaboration from COMEXT

Prepared or preserved tuna

79% of the prepared and preserved tuna (loins + canned tuna) imported in 2015 came from third countries (Ecuador, Mauritius, China, Guinea, Papua New Guinea, Salvador and Guatemala). The remaining 21% of prepared and preserved tuna imported came from intra-EU.

Spanish imports of loins are mainly from Ecuador (38%), China (11%) and Papua New Guinea (10%). Canned tuna are mainly imported from Ecuador (58%), Mauritius (15%) and Salvador (5%).

Figure 9 – Spanish imports of prepared or preserved tuna by origin in 2015 – in volume

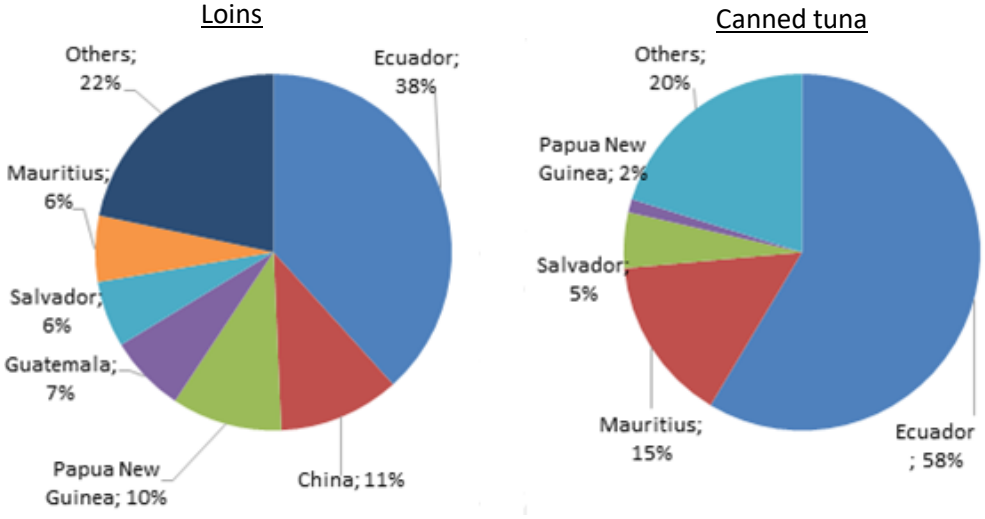


Table 9 – Spanish imports of prepared or preserved tuna by origin (tonnes)

	2006		2007		2008		2009		2010		2011		2012		2013		2014		2015	
	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna	Loins	Canned tuna
Ecuador	16.063	33.537	13.156	30.374	22.368	26.807	28.734	21.858	25.681	19.531	21.425	17.682	21.398	19.976	21.533	20.165	17.490	22.319	30.654	23.050
Mauritius	4.353	6.075	3.084	4.667	2.052	3.383	5.485	2.252	7.602	3.901	9.636	3.895	8.969	4.497	4.840	4.765	5.290	5.254	5.170	5.897
China		0		52	1.334	330	1.869	517	2.845	428	3.351	730	1.809	33	4.981	152	7.229	218	8.478	97
Papua New Guinea		48	172	169	192	220	509	0	1.747	14	4.488	313	6.561	357	8.736	548	6.831	233	7.766	472
Salvador	10.945	20	14.753	164	12.362	1.465	13.063	1.763	7.587	2.002	5.828	2.311	6.072	2.250	6.886	2.275	6.438	2.323	4.823	1.962
Guatemala	2.226	4.242		6.201	1.468	1.214	5.736	114	8.659	147	6.479	25	9.112	226	7.056	196	5.324	187	5.877	153
Others	3.908	7.075		11.679	6.386	3.949	13.529	2.371	11.995	3.446	17.219	1.881	8.658	2.248	9.089	1.885	16.751	2.937	17.353	8.086
TOTAL	37.495	50.998	38.493	53.307	46.161	37.368	68.925	28.874	66.115	29.468	68.425	26.837	62.574	29.587	63.121	29.985	65.352	33.471	80.121	39.716

Source:
Elaboration from COMEXT

2.2.2 An important canning industry

Canned tuna is the key product of the Spanish canned fish and seafood industry: it represents 69% in volume and 51% in value in 2015 (see table 11). The main species following tuna are sardine, mackerel and mussel.

Table 10 – Spanish production of canned fish and seafood

	Volume (tonnes)			Value (1000 EUR)		
	2014	2015	Evol. 2015 vs. 2014	2014	2015	Evol. 2015 vs. 2014
Tuna (excluding white tuna)	220.825	223.033	1,0%	771.410	766.781	-0,6%
Sardine	25.264	24.784	-1,9%	100.660	102.170	1,5%
Mackerel	15.801	15.264	-3,4%	67.442	66.160	-1,9%
Mussels	13.344	13.557	1,6%	106.619	107.898	1,2%
White tuna	13.855	12.871	-7,1%	121.074	119.258	-1,5%
Squids	6.422	6.570	2,3%	30.566	31.086	1,7%
Cockles	5.060	5.313	5,0%	79.326	84.482	6,5%
Tuna with vegetables	2.061	2.086	1,2%	11.860	11.955	0,8%
Clams	1.195	1.246	4,3%	12.891	13.407	4,0%
Octopus	981	989	0,8%	9.091	9.546	5,0%
Other	25.488	27.378	7,4%	93.580	97.802	4,5%
TOTAL	**330.296**	**333.091**	0,8%	**1.404.519**	**1.410.545**	0,4%

Source:
ANFACO - CECOPESCA

As shown in table 12, 45% of the production of canned tuna is exported, mainly to EU (especially Italy).

In Spain, the canning industry is concentrated in the Autonomous Community of Galicia. Galicia gathers around 60 fish canning companies. All of them have a production of canned tuna but there is no company specializing only on this product. The industry is rather concentrated with less than 10 companies making 80% of the market.

Fishery and fish canning industry are an important economic activity of Galicia, with a weight of 3% in the regional GDP. Moreover, 12.000 direct jobs are linked to this industry. Employment is mainly composed by skilled workers but with no specific academic formation. More than 80% of these employees are women. According to the people met during the field survey, the employment rate remain stable in Galicia which it seems to be related to the efforts provided by the sector to be competitive and maintain its processing activity in Spain and EU in order to preserve its social dimension.

To face the market volatility and remain competitive at the world level, the tuna sector, under the ANFACO and the research center CYTMA is adopting two strategies:

- Development of an **internationalisation strategy** among the whole canned fish supply chain: to foster the marketing of the products and to ensure the raw material security. This internationalisation strategy is based on three pillars: exports, investments in other MS or third-countries, cooperation and partnerships. In France and Italy, strategies are more oriented through the relocation of its companies, Spain chose the internationalization of its companies to maintain its activity on the national territory.
- **Innovation** through investments and development of new technologies by the CYTMA (research centre)[1].

In 2015 canned tuna represented 64% of total Spanish exports of canned fish (excluding tuna loins).

Table 11 – Spanish exports of prepared and canned fish products

	Volume (tonnes)			Value (1.000 EUR)		
	2014	2015	Evol. 2015 vs. 2014	2014	2015	Evol. 2015 vs. 2014
Tuna (all species)	93.009	98.991	6,4%	440.223	440.726	0,1%
Cuttlefish, squids	14.162	13.460	-5,0%	33.029	37.231	12,7%
Loins of tuna	7.225	6.533	-9,6%	33.880	30.279	-10,6%
Surimi	5.509	5.899	7,1%	14.762	15.951	8,1%
Anchovies in brine	4.139	5.339	29,0%	9.245	11.817	27,8%
Other	33.099	37.912	14,5%	153.583	183.964	19,8%
TOTAL	**157.143**	**168.134**	7,0%	**684.722**	**719.968**	5,1%

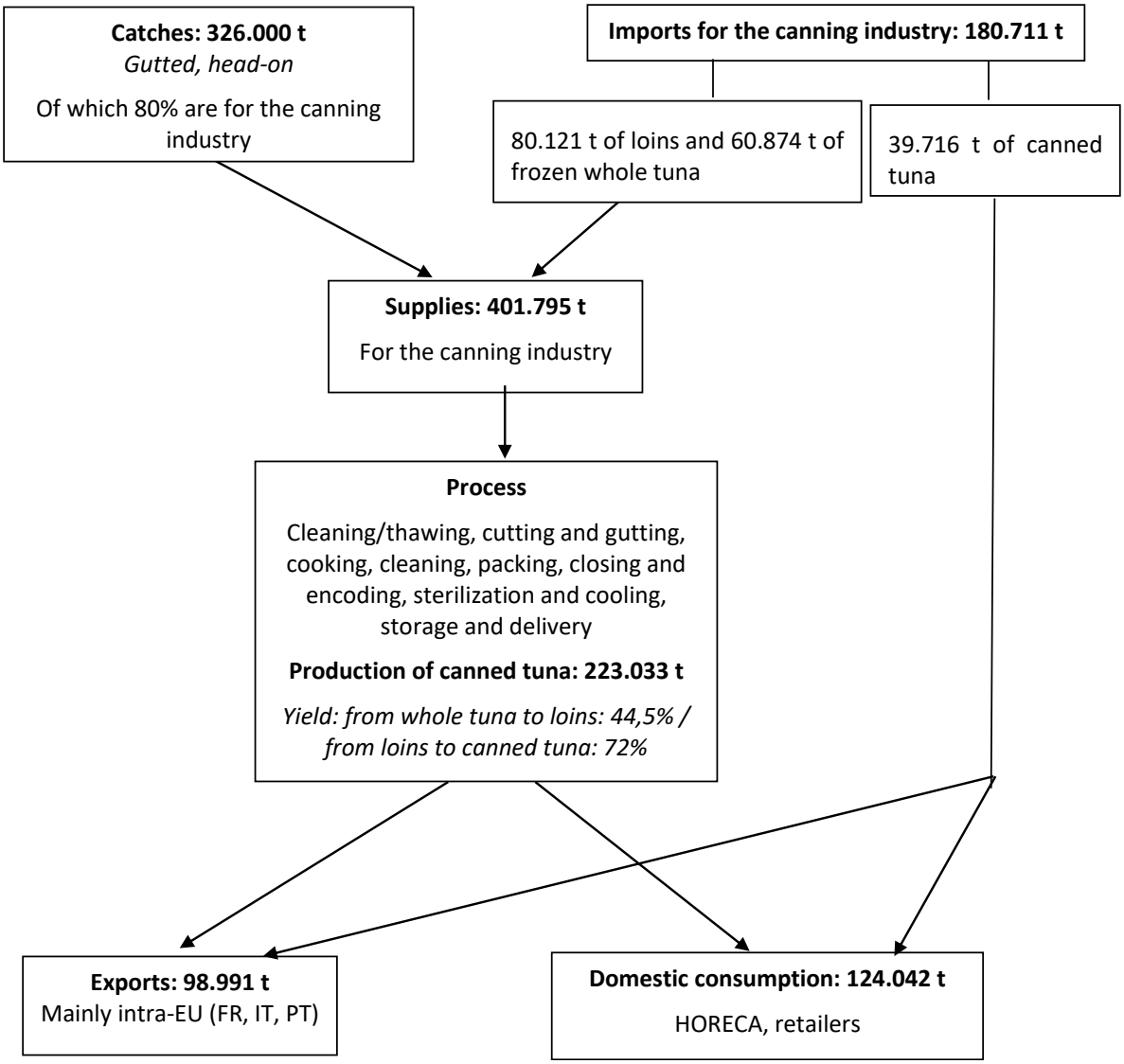
Source:
ANFACO - CECOPESCA

[1] CYTMA (Centro de Tecnologías Avanzadas de Investigación para la Industria Marina y Alimentaria):

2.2.3 Structure of the supply chain

Figure 10 gives an overview of the structure of the Spanish market.

Figure 10 – The Spanish supply chain for canned tuna (2015, volume in tonnes)



Source:
EUMOFA based on FAO (catches), COMEXT (imports), MAPAMA (production of canned tuna), ANFACO/CECOPESCA (exports)
Supplies = 80%*catches + imports of loins and frozen whole tuna for the canning industry.
Domestic consumption = production of canned tuna - exports

The market for canned tuna is characterized by a large variety of products and large scale retailers have the main market share.

The raw material selection is based on the law of supply and demand. It is essential for the canned tuna market to strike a balance between different kinds of raw materials like whole tuna or tuna loins. As price of the raw material is a key competitive factor; the possible use of two kind of supplies enables Spanish stakeholders to choose the most competitive one according to the market situation. For that reason, the raw material selection is the main driver to remain competitive towards the products from third countries.

2.2.4 Consumption

2.2.4.1 Consumption of fish and canned fish

The domestic consumption of fish in Spain for the year 2015 dropped by 2,4% compared with 2014. The global value remain stable (+0,3%) as a consequence of the increase of the average price (+2,7%) to 7,76 EUR/kg. Households dedicated 13,38% of their food and drink expenditure to fish (fresh fish, frozen fish, seafood and canned fish); and realised an average expenditure of 201 EUR per head to buy fish.

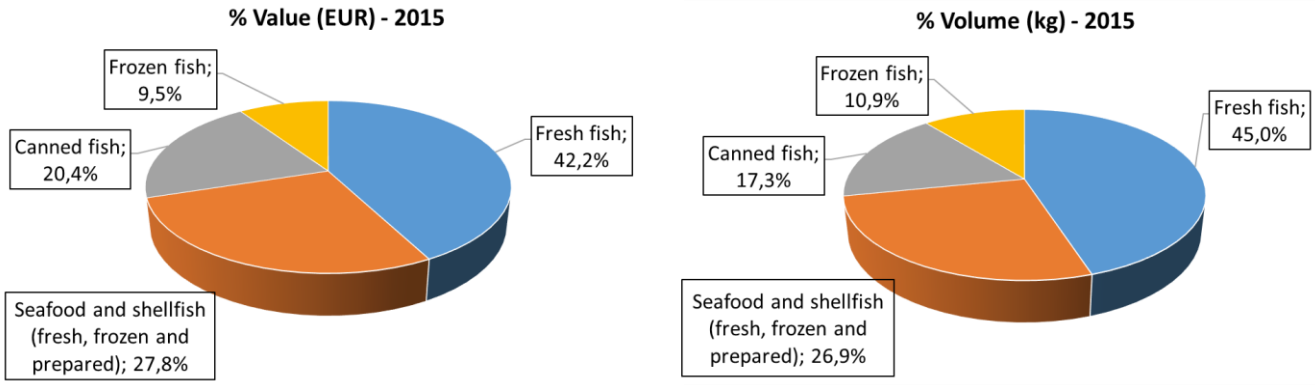
Table 12 – Fish consumption in 2015

	Total fish 2015	Evol. 2015 vs 2014
Volume (tonnes)	1.155.168	-2,4%
Value (1000 EUR)	8.968.600	+0,3%
Consumption / head (kg)	25,9	-1,9%
Expenditure / head (EUR)	201	+0,8%
Market share (value)	13,38%	-0,08%
Average price (EUR/kg)	7,76	+2,7%

Source:
MAPAMA (Informe del consumo de alimentación en España 2015).
"Fish" includes: fresh fish, frozen fish, seafood, canned fish.

Consumption volume and value remain relatively stable along the year but increase during the Christmas period.

Figure 11 – Share of the consumption by type of fish



Source:
MAPAMA (Informe del consume de alimentación en España 2015).
"Fish" includes fresh fish, frozen fish, seafood, canned fish.

In 2015, canned fish represented 17,3% of the volume and 20,4% of the value dedicated to fish in Spanish households. The main category of fish consumed is fresh fish with 45% of the volume and 42% of the value of the households' expenditures.

Table 13 – Consumption per head (kg/person - 2015)

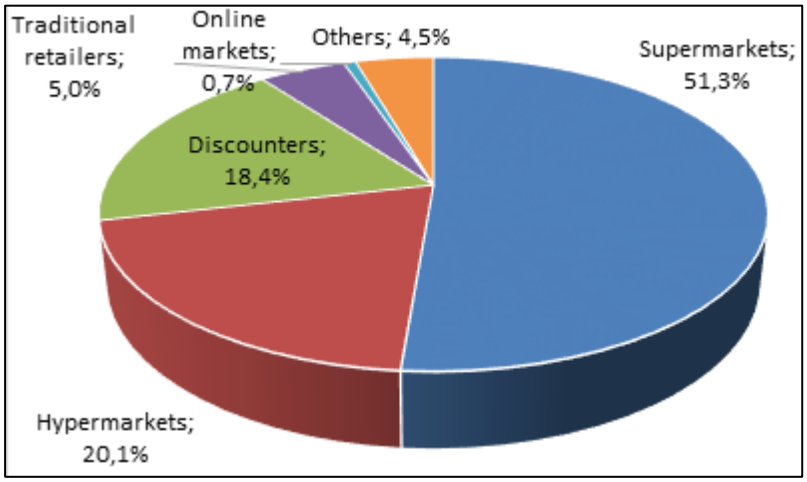
Total fish	Fresh fish	Seafood and shellfish	Canned fish	Frozen fish
25,9	11,6	6,9	4,5	2,8

Source:
MAPAMA (Informe del consumo de alimentación en España 2015).

The average consumption of fish per person in 2015 was 25,9 kg which is 1,9% less than in 2014. Canned fish represented 17,3% of this volume with an average of 4,5kg consumed per head.

The main consumers of canned fish are retired people (21,7%) and families with children of middle age (17,1%).

Figure 12 – Consumption of canned fish by distribution channel (2015)



Source:
MAPAMA (Informe del consume de alimentación en España 2015).

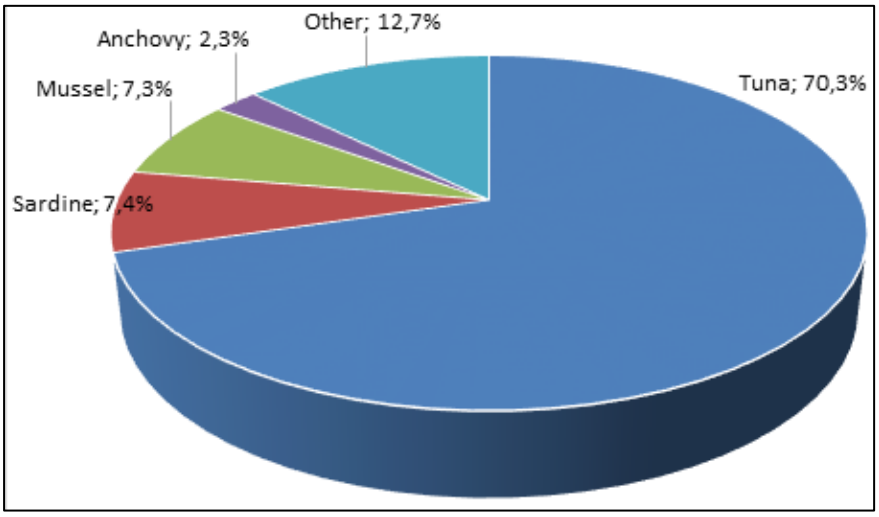
Canned fish are mainly sold in large-scale retail outlets, which represent 90% of total canned fish sales. The evolution compared with 2014 shows an increase by 4% of the supermarkets to the detriment of hypermarkets (-2,9%). Discounters have also increased their share of sales by 3% since 2014.

2.2.4.2 Consumption of canned tuna

Within the canned fish products consumed in Spain, tuna is obviously the main species with more than 70% in volumes in 2015 (+3% compared to 2014).

Following tuna, the main species are sardine, mussel and anchovy.

Figure 13 – Consumption of canned fish products in Spain in 2015 – in volume



Source: NIELSEN (Análisis de mercado y tendencias de consumo – Vigo 7-8 Sept. 2015)

Nine Spanish households out of ten buy 5 kg of canned tuna each year for an average expenditure of 38,6 EUR[2].

MAPAMA food consumption surveys show a decrease of the average consumption price in the last years.

Table 14 – Household consumption of canned tuna

	Volume (t)	Value (1000 EUR)	Average price (EUR/kg)	Consumption per head
2009	94.654	600.729	6,35	2,11
2010	100.645	619.220	6,15	2,20
2011	103.038	683.270	6,63	2,25
2012	99.689	717.987	7,20	2,16
2013	101.103	787.210	7,79	2,23
2014	103.973	781.561	7,52	2,32
2015	103.951	747.391	7,19	2,33

Source: MAPAMA

[2] Source: Kantar Worldpanel – Conservas de atún.

2.3 The Italian market

The Italian market for canned tuna is the second largest in the EU after the Spanish one (135.034 tonnes in 2015). The Italian tuna canning industry is also the second-largest in the EU after Spain. The apparent market follows a slightly increasing trend between 2008 and 2015 (+1%).

The Italian market is highly dependent on imports with 64% of the market provided by imports in 2015.

Table 15 – The Italian market for canned tuna (tonnes)

	2008	2009	2010	2011	2012	2013	2014	2015
Production	63.990	61.088	64.281	59.429	66.476	64.184	63.648	71.799
Imports	84.162	83.530	80.268	87.519	85.257	83.467	97.861	85.810
Exports	14.513	14.176	13.708	14.970	17.056	18.156	20.645	22.575
Apparent market	**133.639**	**130.442**	**130.841**	**131.978**	**134.677**	**129.495**	**140.864**	**135.034**

Sources:
PRODCOM – Prepared or preserved tuna, skipjack and Atlantic bonito, whole or in pieces (excluding minced products and prepared meals and dishes (Code: 10202540).
COMEXT – Codes of heading 1604 (prepared or preserved fish) related to tuna (excluding loins).
Apparent domestic market for each Member State is calculated in tonnes as follows: production – export + import.

2.4 The French market

The French market for canned tuna ranks third in EU after Spain and Italy with 116.563 tonnes in 2015, which is 6% less than in 2008. As in Spain and Italy, the French market for canned tuna is mostly dependent on imports (87% of the apparent market is covered by imports of canned products). The domestic production of canned tuna has dramatically decreased over the period.

Table 16 – The French market for canned tuna (tonnes)

	2008	2009	2010	2011	2012	2013	2014	2015
Production	37.643	35.595	22.675	21.200	18.392	18.292	19.519	19.928
Imports	100.731	101.398	95.133	105.787	97.585	107.225	110.132	101.380
Exports	14.421	13.293	6.896	7.412	5.283	6.087	4.962	4.745
Apparent market	**123.953**	**123.700**	**110.912**	**119.575**	**110.694**	**119.429**	**124.689**	**116.563**

Sources:
PRODCOM – Prepared or preserved tuna, skipjack and Atlantic bonito, whole or in pieces (excluding minced products and prepared meals and dishes (Code: 10202540).
COMEXT – Codes of heading 1604 (prepared or preserved fish) related to tuna (excluding loins).
Apparent domestic market for each Member State is calculated in tonnes as follows: production – export + import.

2.5 Key drivers of the market

Price is the main key driver of the market, as well as the growing importance of promotions. The interviews made pointed out that large retailers attract consumers in their supermarkets with strong promotions on their products as canned tuna is a widely-consumed product. According to them, because of these strategies of promotions, the canned tuna is more and more seen as a commodity product and a low-price product.

To face this situation, the ANFACO developed a strong strategy of Research and Development to increase the value added of their products and build on the healthy properties of the canned tuna consumption (nutritional properties and natural source of omega-3).

3. PRICES ALONG THE SUPPLY CHAIN

This chapter analyses available price data (from other EUMOFA modules) and price trends at different levels of the canned tuna supply chain in Spain, with the objective to set the framework for price structure analysis.

We have to stress at this stage of the report that it has not been possible to collect detailed data on costs and prices.

3.1 Price of raw material

The raw material prices fluctuate significantly according to the origin and the type:

- the average price of the frozen whole tuna imported is 1,53 EUR/kg in 2015 with an important gap from one species to another (from 1,33 EUR/kg for skipjack to 1,71 EUR/kg for yellowfin tuna);
- the average price of loins is 3,74 EUR/kg in 2015.

As illustrated in table 18, prices of frozen whole tuna varied from 0,86 EUR/kg (for skipjack in 2006) to 2,37 EUR/kg (for yellowfin tuna in 2013) over the last decade. The prices of imported loins are more fluctuant (from 2,97 EUR/kg to 5,10 EUR/kg).

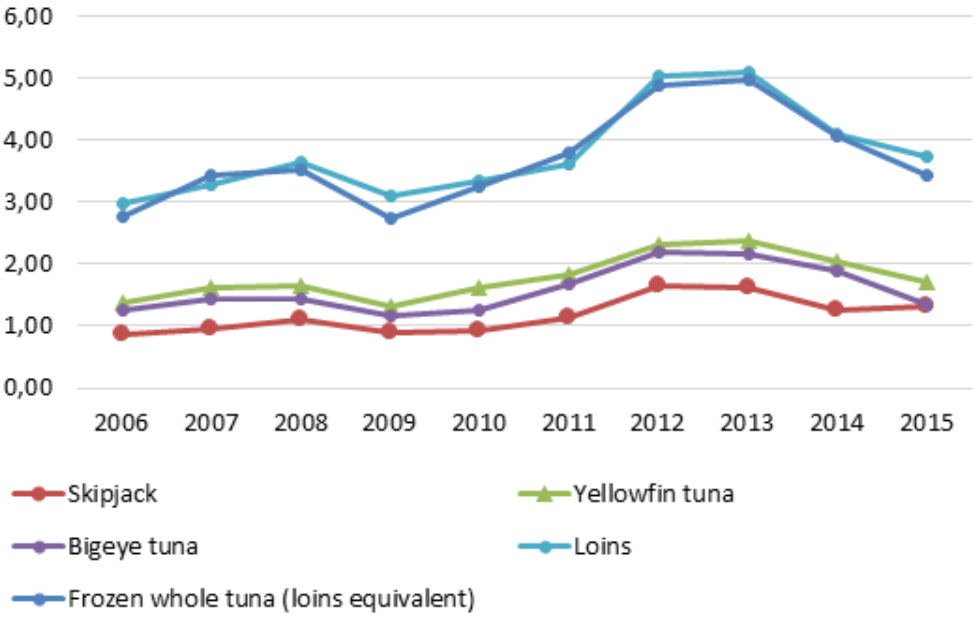
In both cases (frozen whole tuna and loins), a significant rise of the prices can be noticed in 2012 with a maintenance of high prices in 2013, due to a decrease in available volumes.

The price of frozen whole tuna in loins equivalent is marginally below the loins price but follows the same fluctuations.

Table 17 – Average unit prices of imported tuna in Spain (EUR/kg)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Frozen whole tuna	1,23	1,53	1,57	1,22	1,44	1,70	2,17	2,22	1,81	1,53
Yellowfin tuna	*1,37*	*1,62*	*1,65*	*1,31*	*1,62*	*1,84*	*2,32*	*2,37*	*2,03*	*1,71*
Skipjack	*0,86*	*0,97*	*1,10*	*0,89*	*0,92*	*1,12*	*1,66*	*1,61*	*1,26*	*1,33*
Bigeye tuna	*1,25*	*1,42*	*1,45*	*1,16*	*1,26*	*1,68*	*2,18*	*2,15*	*1,88*	*1,35*
Loins	2,97	3,28	3,64	3,11	3,33	3,62	5,04	5,10	4,09	3,74
Frozen whole tuna (loins equivalent)	2,76	3,44	3,52	2,73	3,24	3,81	4,88	4,98	4,07	3,43
Average price	**2,19**	**2,33**	**2,55**	**2,19**	**2,44**	**2,80**	**3,61**	**3,75**	**3,21**	**2,96**

Figure 14 – Price evolution of imported tuna (frozen whole by species and loins - EUR/kg)



Source:
Elaboration from COMEXT

The raw material price represents 65 to 70% of the final price[3].

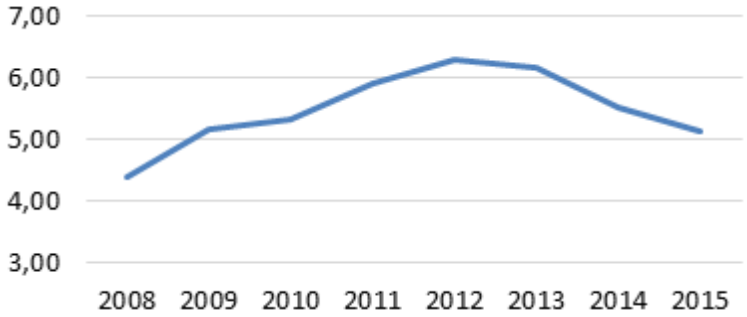
3.2 Ex-factory prices

Due to the stakeholders' refusals, it has not been possible to collect any detailed data on processor's costs and margins.

Nevertheless, PRODCOM provides data on ex-factory prices for prepared and preserved tuna: the evolution between 2008 and 2015 shows an increasing trend until 2012 (from 4,39 EUR/kg until 6,28 EUR/kg) and since then, the price decreased (5,13 EUR/kg in 2015).

Due to the importance of the raw material in the total cost of production, the ex-factory price curve follows the same trend as the curve of frozen tuna prices.

Figure 15 – Ex-factory prices of prepared or preserved tuna (EUR/kg)



Source:
Elaboration from PRODCOM

[3] Source : ANFACO-CECOPESCA

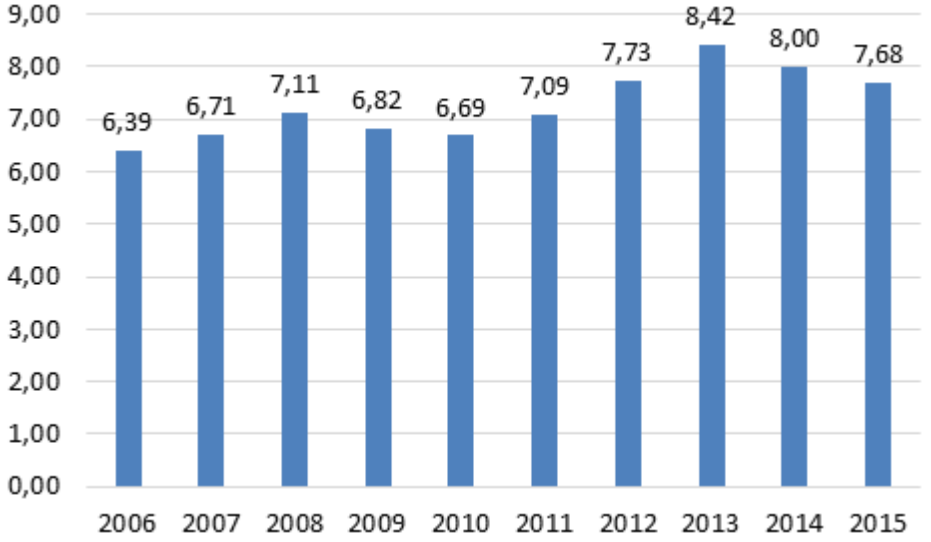
3.3 Retail prices

The average retail price of canned tuna increased by 20% between 2006 and 2015. This growth is almost the same as the increase of the consumer price index over the same period (+18,2%).

As illustrated in figure 16, prices increased significantly in 2012 and 2013 (+9% each year). This increase is due to the growth of the raw material prices those years, as can be seen in table 18.

Since 2013, the retail prices are decreasing (-5% in 2014 and -4% in 2015) to reach an average of 7,68 EUR/kg (without VAT) in 2015.

Figure 16 – Evolution of retail prices of canned tuna (EUR/kg – without VAT)



Source:
Grupo Conservas Garavilla – NIELSEN

The MAPAMA gives a national average retail price of 7,19 EUR/kg for canned tuna, including VAT.

According to the national association of canned fish products, retailers' own-brands represent 60% of the market and have a significant impact on final prices.

Table 18 – Average price of canned tuna by distribution channel (EUR/Kg – 2015)

All Spain	Traditional retailers	Online markets	Hypermarkets	Supermarkets	Discounters
7,19	7,70	8,28	7,48	7,14	6,84

Source:
MAPAMA (panel del consumo alimentario 2015).

4. Price structure analysis

The price structure for canned tuna in Spain has been analyzed with data collected in November 2016. Nevertheless, processor's costs and margins as well as retailer's costs and margins remain unknown for confidential matters. Table 20 is based on the price of the raw material imported, provided by COMEXT for 2015, the ex-factory price provided by PRODCOM and the average retail price for ordinary canned tuna provided by MAPAMA for 2015.

Table 19 – Price structure for canned tuna in Spain

	EUR/kg
Retail price	**7,19**
VAT	*0,65*
Retail price (without VAT)	**6,54**
Retailer cost+margin	NA
Ex factory price	**5,13**
Processor's margin	NA
Processing costs	NA
Labor costs	NA
Raw material price	**2,96**

Source: COMEXT (raw material price), PRODCOM (ex-factory price), MAPAMA (retail price)

5. ANNEXES

5.1 Persons met

ANFACO-CECOPESCA:

- Juan VIEITES – General Secretary
- José Carlos CASTRO NEILA – Assistant General Secretary
- Marta AYMERICH – In charge of trade and relations with EU

"Canned tuna in Spain" is published by the Directorate-General for Maritime Affairs and Fisheries of the European Commission.

Editor: European Commission, Directorate-General for Maritime Affairs and Fisheries, Director-General.

KL-02-17-265-EN-N

ISBN: 978-92-79-66602-5
DOI: 10.2771/44647

FOR MORE INFORMATION AND COMMENTS:
Directorate-General for Maritime Affairs and
Fisheries B-1049 Brussels
Tel: +32 229-50101
E-mail: contact-us@eumofa.eu

EUMOFA

European Market Observatory for Fisheries and Aquaculture Products

www.eumofa.eu