European Commission

CASE STUDY

PRESERVED ANCHOVY IN THE EU

EUMOFA

European Market Observatory for Fisheries and Aquaculture Products

Maritimes Affairs and Fisheries

PRICE STRUCTURE IN THE SUPPLY CHAIN

FOCUS ON ITALY, SPAIN AND CROATIA

JUNE 2025

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Manuscript completed in June 2025.

Luxembourg: Publications Office of the European Union, 2025

PDF ISBN 978-92-68-23613-0 doi: 10.2771/9244446 KL-01-24-014-EN-N

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Summary

In 2023, the world's total anchovy catches amounted to 5.314.000 tonnes, all anchovy species included. The major producer was Peru, with 39% of the volumes, China with 12%, and Mexico with 10% (the latest having more than tripled its production since 2014). Catches of European anchovy[1] in particular reached 98.237 tonnes, 11% of the world's anchovy catches. Its main producer is Turkey (46.171 tonnes), followed by the EU fleet (16.700 tonnes) and Georgia (12.771 tonnes). Over the past 10 years (2014-2023), the total anchovy catches have decreased by 9%, reaching their lowest amount in 2023. In the meantime, EU anchovy catches only declined by 4%, mainly due to the decline in anchovy catches in France and Italy.

In 2023, Spain (44.830 tonnes) dominated the EU production with 46% of the total output. However, the sharpest increase in production over the last decade occurred in Croatia (+36%) which now represents 20% of EU production (13.840 tonnes). In contrast, Italy's catches decreased by 38%, reaching a production of 19.628 tonnes in 2023. The introduction of maximum levels of authorized catches in the Adriatic in 2022, and subsequent changes of volumes' allocation between Croatia and Italy[2] have contributed to reshaping the fishing capacity of these two member states. Greece and Portugal followed with 11.527 tonnes and 4.805 tonnes (after a significant rise of 481% since 2014) respectively, whereas France's production dropped by 45%, reaching 3.549 tonnes in 2023.

The EU apparent consumption[3] for anchovy amounted to 110.098 tonnes LWE[4] in 2023, mainly composed by prepared products.

In 2024, extra-EU imports reached 32.113 tonnes product weight (mainly from Morocco), consisting of prepared anchovies for 75% of import volumes. Extra-EU exports amounted to 26.257 tonnes product weight and were mainly destined for Albania, consisting of salted anchovies for 46% of volumes. There are also significant intra-EU flows between Member States (33.937 tonnes in 2024), Spain and Italy being both the main exporters and importers in value. The two biggest markets were Italy and Spain, accounting for 70% of the EU apparent consumption when combined (respectively 48.187 tonnes LWE and 28.699 tonnes LWE).

The present report focuses on Italy, Spain and Croatia:

- In 2023, Italy was the second EU producer of anchovy, with high exports (15.612 tonnes LWE) and imports (24.683 tonnes LWE, more than the national production). Characterized by a high apparent consumption at national level, partly fresh but mainly preserved, it values its preserve-making tradition. The price structure analysis covers glass jars of salted anchovy fillets in olive oil. Anchovy in oil is sold in large-scale retail, with an ex-factory price of 12,4 EUR/kg and a final price of 40 EUR/kg.
- Spain is the first EU producer and is mainly supplied by national production (44.830 tonnes LWE in 2023). To satisfy its demand, it is also the first importer (30.587 tonnes LWE in 2023). The following two detailed price structure analyses cover Spanish anchovy preserves:
    - Canned anchovy in vinegar (*Boquerón*) retailed in supermarkets (ex-factory price at 14,6 EUR/kg and final price at 30,30 EUR/kg);

[1] The present report covers European anchovy (*Engraulis encrasicolus)*, which may be indicated as "anchovy" in the report.

[2] In 2022, Italy's share in the maximum level of catches in GSAs 17 and 18 for small pelagic species amounted to 39% of the volume, the remaining 61% being attributed to Croatia. (Reg (UE) 2022/110). In 2025, 34% of the small pelagic species volume was attributed to Italy, 65% to Croatia, and 0.4% to Slovenia. (Reg 2025/219)

[3] Apparent consumption = production + imports – exports

[4] Live Weight Equivalent

  - Canned anchovy in olive oil (*Anchoa*) retailed in supermarkets (ex-factory price at 21,80 EUR/kg and final price at 44,9 EUR/kg).

- Croatia is the third biggest EU producer for anchovy, but second exporter which explains its low apparent consumption. It is almost entirely supplied by national catches (13.840 tonnes LWE in 2023) in the Adriatic. Exports reached 15.723 tonnes LWE in 2023, representing almost all its supply. The preserve industry produces small volumes of salted anchovies in oil. Two price structure analyses are detailed, both for preserved anchovies:
  - Salted anchovies in sunflower oil (ex-factory price at 18,78 EUR/kg and final price at 46,58 EUR/kg)
  - Salted anchovies in olive oil (ex-factory price at 29,70 EUR/kg and final price at 47,17 EUR/kg)

List of acronyms

APROMAR	Association of aquaculture enterprises of Spain
CN	Combined Nomenclature
EU	European Union (EU-27)
FAO	Food and Agriculture Organisation of the United Nations
HAPO	Hellenic Aquaculture Producers Organisation
HORECA	Hotel, Restaurant and Café
LWE	Live Weight Equivalent
MS	Member States
NEI	Not Elsewhere Included
OP	Organizzazione dei produttori (Producers organisation)
SME	Small and medium-sized enterprise
VAT	Value Added Tax

1 SCOPE AND CONTENT

1.1 Case study scope

Product	Origin	Characteristics	Market and price drivers	Focus MS
Anchovy	Fishery	The product is consumed fresh, frozen, prepared, dried and salted.	Availability of resource and seasonality Origin of the product, size, quality, presentation Input costs for processed products	Italy Spain Croatia

EUMOFA provides other relevant publications on the topics covered by this study, namely country profiles:

- Italy
- Spain
- Croatia

1.2 Content of the document

Following the methodology developed within EUMOFA and available on its website (http://www.eumofa.eu/price-structure), this document includes:

- A description of the product;
- An analysis of production and market trends at EU level;
- An analysis of the price structure along the supply chain in the Italy, Spain and Croatia.

2 DESCRIPTION OF THE PRODUCT AND MARKETS

2.1 Biological and commercial characteristics

The case study focuses on European anchovy.

Case study product

Name: European anchovy (*Engraulis encrasicolus*)

FAO 3-alpha code: ANE

Presentation: Fresh whole or in fillets.

Commercial sizes:

Minimum landing size is 9 cm in the Mediterranean and Portuguese coast and 12cm for the Atlantic and North Sea stock.[5]

Related codes in the product nomenclature (COMEXT/EUROSTAT)

Anchovy is distinguished in the Combined Nomenclature[6] (CN) from 2023 onwards for whole and other cuts:

- CN code 03 02 42 00 - Fresh or chilled anchovies "*Engraulis* spp."
- CN code 03 03 59 10 - Frozen anchovies "*Engraulis* spp."
- CN code 03 05 54 50 - Dried anchovies "*Engraulis* spp.", even salted but not smoked (excl. fillets and offal)
- CN code 03 05 63 00 - Anchovies "*Engraulis* spp.", salted or in brine only (excl. fillets and offal)
- CN code 16 04 20 40 - Prepared or preserved anchovies (excl. whole or in pieces)
- CN code 16 04 16 00 - Prepared or preserved anchovies, whole or in pieces (excl. minced)

Biological parameters

European anchovy (*Engraulis encrasicolus*) is mainly marine species, pelagic, coastland forming large schools, but recorded down to 400m depth off West Africa, and descending in winter to 100 to 150m depth in the Mediterranean Sea. European Anchovy is euryhaline, tolerating salinities of 5 to 41 °/oo and in some areas entering lagoons, estuaries or lakes, especially in the warmer months, during the spawning season. Anchovy feeds on planktonic organisms, cirripedes and molluscs larvae, and fish eggs and larvae. The spawning season lasts over an extended period from April to November with peaks usually in the warmest months, the limits of the spawning season dependent on temperature and thus more restricted in northern areas[7].

[5] https://fish-commercial-names.ec.europa.eu/fish-names/species/engraulis-encrasicolus_fr

[6] CN is a tool for designating goods and merchandise which was established to meet simultaneously the requirements both of the Common Customs Tariff and of the external trade statistics of the EU. The basic regulation is Council Regulation (EEC) n°2658/87; an updated version of the Annex I is published every year as a Commission regulation (latest version: Commission Implementing Regulation (EU) n°2016/1821).

[7] https://www.fao.org/fishery/en/aqspecies/2106/en

Table 1: Biological parameters of Anchovy

Parameter	Characteristics
Temperature	12-28°C
Habitat	Mainly oceanic, marine species, forming large schools. During spawning, anchovies live in enters lagoons, estuaries and lakes. Tend to move further north and into surface waters in summer, retreating and descending in winter. Anchovies can live at depths of up to 150m.
Sexual maturity	Anchovies are pelagic spawners with continuous gametogenesis, allowing for multiple spawning events (up to 30 times). Spawning activity generally peaks during the warmer months, classifying this species as a spring-summer spawner. The duration of the spawning season is temperature-dependent, with a more limited timeframe in northern regions due to cooler conditions.
Diet	Feed on planktonic organisms, in particular copepods and crustacean larvae
Grow-out	One year for the 20 gr
Distribution in the wild	Eastern Atlantic: from Norway to South Africa, also all of Mediterranean, Black and Azov seas, with stray individuals in Suez Canal and Gulf of Suez.

Source: FAO

2.2 World production

The global production of anchovy species amounted to 5,3 million tonnes in 2023, a decrease of 9% compared to 2014.

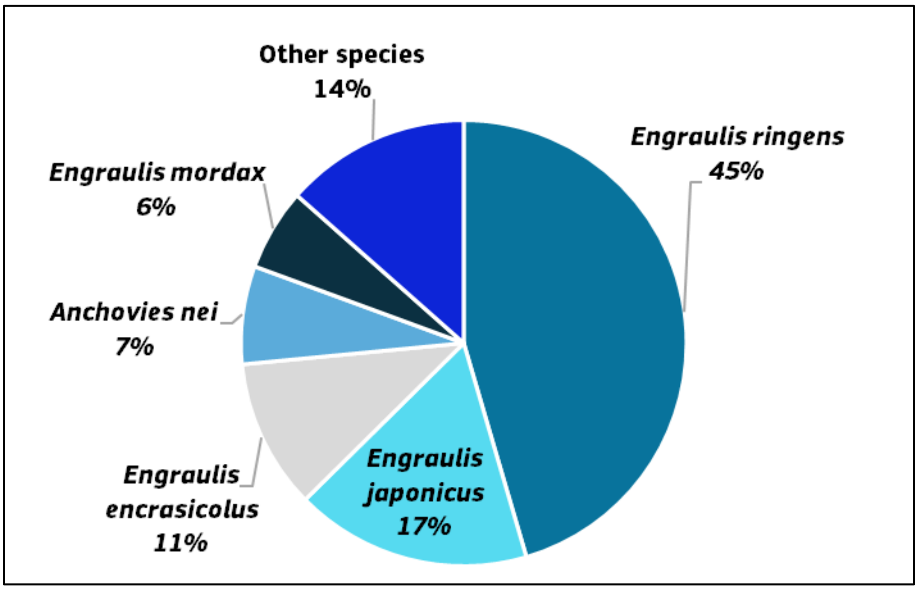
Table 2: Evolution of worldwide catches of anchovy between 2014 and 2023 (in 1.000 tonnes)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 23/14
Total	5.851	7.099	5.643	6.583	9.449	6.998	7.493	8.409	7.421	5.314	-9%

Source: FAO Fishstat

In 2023, *Engraulis ringens* accounted for 45% of the total anchovy production (2,4 million tonnes), with Peru being the main producer (85% of the total production). *Engraulis japonicus* contributed to 17% of the world catch, which is mainly caught by China (69%), followed by the Republic of Korea (18%) and Japan (13%). *Engraulis encrasicolus* accounted for 11% of the total anchovy, mainly caught by Turkey (47%), Georgia (13%), Ghana (11%) and the EU fleet (17%). The category "Anchovies nei" (not elsewhere included) represented 7% of global production, with Indonesia, Thailand and India as the main producers. *Engraulis mordax* anchovy accounted for 6% of the world catch and was almost exclusively caught by the Mexican fleet.

Figure 1: World catches of anchovy by species in 2023



Source: FAO Fishstat

Anchovy is primarily caught in the Southeast Pacific (46% of the catches) and to a lesser extent in the Northwest Pacific (17%), the Eastern Central Pacific (11%), the Mediterranean and Black Sea (8%), and the Western Central Pacific (8%). The remaining catches occurred in the Indian Ocean (5%) and in the Atlantic Ocean (5%). Total anchovy catches declined by 9% from 5,9 million tonnes in 2014 to 5,3 million tonnes in 2023. Peru was the leading producer in 2023, accounting for 39% of the global catches, followed by China with 12%, and Mexico with 10%. While anchovy production decreased in China (-32%), in Peru (-12%) and in Chile (-57%) over this period (2014-2023), it increased significantly in Mexico (377%), Turkey (184%) and in Indonesia (33%).

Table 3: World catches of anchovy (in 1.000 tonnes) 2014-2023

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 23/14
Peru	2.322	3.771	2.858	3.298	6.195	3.505	4.394	5.269	4.118	2.048	-12%
China	926	956	816	704	658	625	610	615	601	633	-32%
Mexico	113	115	29	128	33	192	192	360	403	537	377%
Chile	818	540	337	626	850	744	502	607	741	353	-57%
Türkiye	96	193	103	158	96	263	171	152	126	274	184%
Indonesia	199	207	192	293	165	261	185	198	207	265	33%
Others	1.376	1.317	1.308	1.378	1.451	1.408	1.438	1.209	1.225	1.204	-13%
Total	**5.851**	**7.099**	**5.643**	**6.583**	**9.449**	**6.998**	**7.493**	**8.409**	**7.421**	**5.314**	**-9%**

Source: FAO Fishstat

2.3 EU production

2.3.1 Evolution of catches at EU-27 level

In 2023, EU anchovy catches reached 98.237 tonnes, which are exclusively European anchovy (*Engraulis encrasicolus)*. Spain was the most important producer, accounting for 46% of the EU production. Other important Member States were Italy (accounting for 20% of the production), Croatia (14%) and Greece (12%).

Between 2014 and 2023, total EU anchovy catches have decreased by 4%, due to the catches decrease in Italy (-38%) over the same period. France also recorded an important decrease in its catches (- 45%). During the same period, other countries experienced a rise in their catches, with Portugal notably increasing its catches from 827 tonnes to 4.805 tonnes in ten years.

Table 4: EU anchovy catches (in tonnes) 2014-2023

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 23/14
ES	42.760	49.982	46.254	50.811	59.505	47.591	48.016	49.111	43.891	44.830	5%
IT	31.842	37.511	37.969	39.039	36.519	31.198	23.736	23.823	24.223	19.628	-38%
HR	10.142	12.797	8.239	10.883	13.264	7.996	9.784	11.627	13.919	13.840	36%
GR	9.847	13.515	11.562	13.033	13.208	15.278	11.276	7.322	12.818	11.527	17%
PT	827	2.617	7.108	9.144	8.347	9.273	6.040	10.079	3.608	4.805	481%
FR	6.442	5.699	3.659	4.473	4.343	3.068	1.232	832	1.160	3.549	-45%
Others	574	8.059	630	12.228	97	138	735	1.353	553	58	-90%
Total	**102.435**	**130.180**	**115.421**	**139.611**	**135.285**	**114.543**	**100.818**	**104.147**	**100.171**	**98.237**	**-4%**

Source: Eurostat

2.3.2 Import - Export

Extra-EU imports

In 2024, anchovy imports from third countries accounted for 32.113 tonnes for an overall value of 264 million. Imports consist mainly of prepared anchovies (91% of total imports value in 2024) and to a lesser extent of salted anchovies (7%).

In 2024, main exporters to the EU are Morocco (70% of the EU imports value), Albania (12%) and Peru (10%). These three countries exported almost exclusively prepared anchovies to EU. The same year, main importing Member States were Spain (40% of the imports value), Italy (39%) and France (14%).

Between 2015 and 2024, the import volume decreased by 2%, while the value increased by 32%.

Table 5: Extra-EU imports of anchovies (2024, tonnes net weight)

	Nominal Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% Value 2024
Prepared/Preserved	240.645	24.126	9,97	91%
Salted	17.765	6.207	2,86	7%
Frozen	5.017	1.605	3,13	2%
Dried	486	95	5,10	0%
Live/Fresh	143	79	1,81	0%
Total	**264.056**	**32.113**	**8,22**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Extra-EU exports

Anchovy exports to extra-EU countries amounted to 26.257 tonnes for an overall value of EUR 130 million in 2024. The anchovy is exported prepared/preserved and salted, representing respectively 54% and 30% of the exports value.

Albania was the first market for anchovy exports from the EU in 2024 (27% of the exports value). Anchovies are mainly exported salted to Albania (60% of the volume exported to Albania). Another main destination is the United States (12% of the exports value in 2024), mainly prepared/preserved anchovies are exported to this destination (84% of the value). The United Kingdom is the third most important destination for EU anchovy exports (10%), with 98% of the volume exported being prepared anchovies.

Main EU exporters were Italy (45% of the exports value in 2024) and Spain (42%). Italy exported mainly salted and prepared anchovies in volume (50% and 28% in volume) whereas Spain exported salted and frozen anchovies (43% and 30% in volume).

Between 2015 and 2024, exports volume has decreased by 10%, while the value increased by 22%.

Table 6: Extra-EU exports of anchovies (2024, tonnes net weight)

	Nominal Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% Value 2024
Prepared/Preserved	70.419	4.229	16,65	54%
Salted	38.869	12.111	3,21	30%
Frozen	9.161	5.192	1,76	7%
Live/Fresh	6.014	3.485	1,73	5%
Dried	5.559	1.240	4,48	4%
Total	**130.021**	**26.257**	**4,95**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Intra-EU trade flows

Intra-EU exchanges concern mainly fresh and prepared anchovies. In 2024, prepared anchovies accounted for 50% of the total value of anchovies traded within the EU, while fresh anchovies represented 32%. Prepared anchovies' exchanges amounted to 6.094 tonnes in 2024, whereas volumes of fresh anchovies reached 17.318 tonnes. Prices of prepared anchovies reached 12,95 EUR/kg while prices of fresh anchovy reached 2,90 EUR/kg in 2024.

Between 2015 and 2024, the volume of intra-EU exchanges increased by 4% and the value by 40%.

Table 7: Intra-EU exports of anchovies (2024, tonnes product weight)

	Nominal Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% Value 2024
Prepared/Preserved	78.919	6.094	12,95	50%
Live/Fresh	50.307	17.318	2,90	32%
Frozen	18.175	7.881	2,31	11%
Salted	9.763	2.445	3,99	6%
Dried	2.142	199	10,74	1%
Total	**159.305**	**33.937**	**4,69**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

In 2024, Spain was the main exporter to the other EU Member States, with 36% of intra-EU exports in value. Italy represented 20% of intra-EU exports, followed by Portugal (14%) and Croatia (12%). While Spain and Italy exported fresh and prepared anchovies, Croatia exported mainly frozen anchovies (54% of the exported volume). Portugal exported almost exclusively fresh anchovies (95% of the exported volume). In 2024, the main importers were Spain (34% of the value) and Italy (29%), and to a lesser extent Germany (8%), Greece (5%) and Croatia (5%). Spain imported mostly fresh (72% of the imported volume) and frozen anchovies (23%). Italian imports consisted of fresh anchovies as well (42% of the imported volume), and of salted anchovies (22%).

2.3.3 Apparent consumption by Member State

In 2023, the total supply of anchovies in the EU (production + imports) was estimated at 146.148 tonnes live weight equivalent (LWE). The supply came mainly from catches 67%, accounting for 98.229 tonnes LWE). Exports accounted for 36.050 tonnes LWE. Therefore, the consumption at the EU-27 level (production + imports - exports) was estimated at 110.098 tonnes LWE.

The main member states in terms of apparent consumption in 2023 were Spain (48.187 tonnes LWE, representing near half of the EU consumption), Italy (28.699 tonnes LWE), Greece (10.235 tonnes LWE), and France (10.222 tonnes LWE).

Table 8: Apparent consumption of anchovy in the main MS (2023, in tonnes of LWE) (in bold, the three MS with a focus in the present report)

	Production (catches)	Import	Supply (production + import)	Export	Apparent consumption (supply - export)
Spain	**44.830**	**30.587**	**75.417**	**27.230**	**48.187**
Italy	**19.628**	**24.683**	**44.311**	**15.612**	**28.699**
Greece	11.527	1.525	13.052	2.817	10.235
France	3.549	10.296	13.845	3.623	10.222
Germany	0	3.580	3.580	449	3.131
Netherlands	16	2.055	2.071	440	1.631
Belgium	0	2.567	2.567	1.578	989
Croatia	**13.840**	**2.497**	**16.337**	**15.723**	**614**
Austria	0	531	531	126	405
Romania	26	480	506	253	253
Czechia	0	260	260	72	188
Ireland	0	302	302	123	179
Sweden	1	287	288	128	160
Denmark	0	167	167	14	153
Poland	0	170	170	58	112
Slovenia	0	102	102	2	100
Cyprus	1	89	90	0	90
Slovakia	0	75	75	0	75
Malta	0	71	71	0	71
Luxembourg	0	74	74	8	66
Finland	0	53	53	0	53
Hungary	0	40	40	0	40
Lithuania	0	59	59	33	26
Latvia	0	21	21	5	16
Estonia	0	5	5	0	5
Portugal*	4.805	.215	5.020	5.604	-
Bulgaria*	6	101	107	1.118	-
EU 27	**98.229**	**47.919**	**146.148**	**36.050**	**110.098**

Source: EUMOFA elaboration of EUROSTAT and EUROSTAT-COMEXT data

* the calculation of the apparent consumption in Portugal and Bulgaria provides a result below 0; this result may be due to lacks in the data coverage or to the margin of error in the calculation of live weight equivalents (which are based on standard coefficients for each CN code).

3 THE ITALIAN MARKET

3.1 Structure of the supply chain

3.1.1 Production

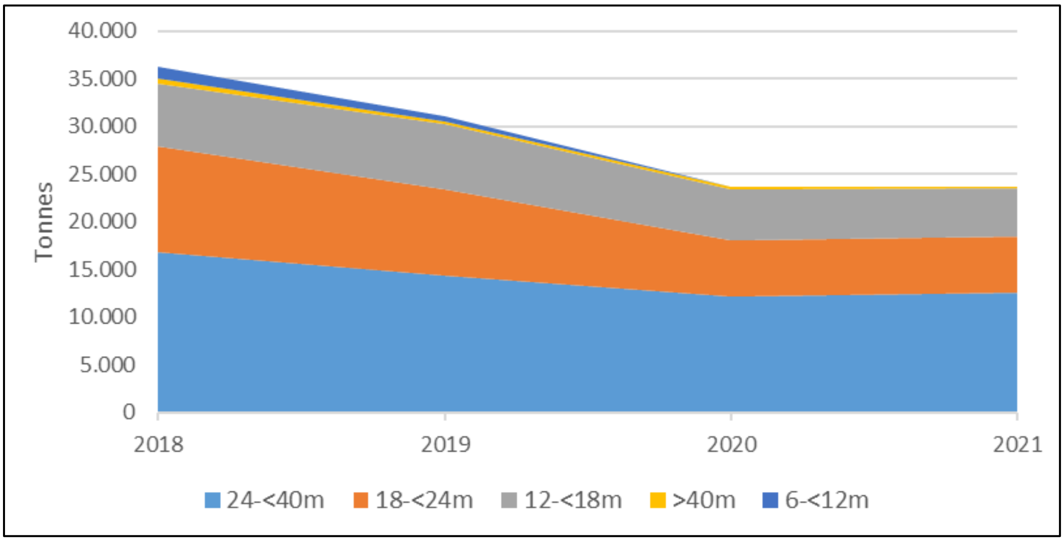
Characteristics of the fleet

Catches of European anchovy by the Italian fleet are essentially made by medium to large vessels. In 2021[8], more than half of the catches were made by vessels between 24 and 40 meters (12.635 tonnes, amounting to EUR 28 million). Vessels between 18 and 24 meters accounted for 25% of the landings in volume (amounting to EUR 27,3 million), followed by vessels between 12 and 18 meters (21% of the landed volume; EUR 17,8 million). The main fishing technique used by the Italian fleet to catch anchovy is pelagic trawler (57% of the landed volumes; 68% of the value), followed by purse seiners (33% of the volume; 23% of the value), and by demersal trawlers and/or demersal seiners to a smaller extent (10% of the volume; 9% of the value). In 2021, anchovies caught by purse seiners presented the lower prices (2,16 EUR/kg), while the ones caught via pelagic trawlers presented the highest prices (3,67 EUR/kg). Some vessels are using polyvalent passive gears, but they account for less than 1% of the landed volumes and result in high prices (3,43 EUR/kg in 2021).

According to interviews, pelagic trawlers are used predominantly in North Adriatic, where sea depth on the Italian half of the Adriatic is too small to allow fishing using purse seiners.

A particular fishing method *alla lampara* is traditionally used along the coast of Liguria, based on attracting the anchovies at night using lamps.

Figure 2: Evolution of Italian landings of European anchovy by vessel length (tonnes)



Source: STECF (2021, last year available)

The Italian fleet caught 19.627 tonnes of anchovy in 2023. Catches of anchovy were 19% lower than in 2022 and 38% lower than in 2014. Overall, anchovy catches have been increasing between 2014 and 2017 to reach 39.039 tonnes before gradually decreasing until 2023.

The decline in catches is in part explained by the diminution of the maximum level of catches attributed to Italy in the multiannual management plan (-30% in the volume of anchovies and sardines between

[8] Last year available on STECF

2022 and 2025 in Northern Adriatic - Reg (UE) 2022/110 and Reg 2025/219). It is also explained by the rising costs sustained by vessels, mainly for fuel (+28% since 2017) FedagriPesca).

Table 9: Anchovy production in Italy between 2014 and 2023 (tonnes)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 23/14
Catches	31.842	37.511	37.969	39.039	36.519	31.198	23.736	23.823	24.223	19.627	-38%

Source: Eurostat

3.1.2 Imports

Imports

Italy imported a total of 23.072 tonnes of anchovy in 2024, valued at EUR 143 million. Between 2020 and 2024, Italian anchovy imports increased by 61% in volume and by 72% in value. The average price increased by 7%, from 5,81 EUR/kg in 2020 to 6,19 EUR/kg in 2024.

According to interviews, preparing anchovies into preserves requires different steps: salting, curing in salt for two to three months, filleting and preserving in oil. Most of the salted anchovies are used to make preserves. As filleting, salting and preserving in oil is done entirely by hand, anchovy being a very delicate fish, labour costs represent an important share of the price of the anchovy jar (cf. table 19). As a way of reducing their production costs, an increasing number of Italian preserve industries import salted fillets, and prepared/ preserved anchovies from countries where labour costs are cheaper (mainly Morocco and Albania, cf. figure 4).

Prepared anchovy dominated imports in 2024, representing 74% of the total value (EUR 106 million, equivalent to 10.274 tonnes). The primary suppliers of prepared anchovy were Morocco (47% of the prepared imported volume), Albania (27%), and Tunisia (13%). The fresh fish used in these preserves is from all origins (Pacific, Atlantic, or Mediterranean). Salted anchovy accounted for 16% of the import value in 2024, with Morocco supplying 57% of the salted volume, followed by Spain[9] (24%) and Croatia (12%). Fresh anchovy accounted for 7% of the imported value in 2024, Spain and Croatia were the main suppliers (respectively 73% and 22% of the imported volume).

Morocco was Italy's main supplier of anchovy in 2024, with imported volumes significantly rising by 70% from 2020 to 2024. Three other countries increased their anchovy exports to Italy during this period: Spain (+134% in volume), Albania (+14%) and Croatia (+80%).

Table 10: Imports of anchovy to Italy in 2024 by preservation (volumes in tonnes product weight)

	Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% Value 2024
Prepared/Preserved	106.219	10.274	10,34	74,4%
Salted	22.798	6.593	3,46	16,0%
Live/Fresh	10.587	3.584	2,95	7,4%
Frozen	2.822	1.028	2,75	2,2%
Dried	403	1.593	0,25	0%
Total	**142.828**	**23.072**	**6,19**	**100%**

Source: EUROSTAT-COMEXT

[9] Cantabrian anchovy preserves stand out as a particular high-quality anchovy preserve due to the reputation of the Cantabrian anchovy, thought to be larger, more delicate, and less salted than common anchovy preserves.

Table 11: Evolution of imports volume (tonnes product weight), value (1.000 EUR) and price (EUR/kg) of anchovy to Italy between 2020 and 2024

	2020	2021	2022	2023	2024	Evolution 2020/2024
Volume (tonnes)	14.292	18.537	15.012	15.009	23.072	61%
Value (1.000 EUR)	83.005	102.142	117.411	115.121	142.828	72%
Price (EUR/kg)	5,81	5,51	7,82	7,67	6,19	7%

Source: EUROSTAT-COMEXT

Table 12: Evolution of Italian imports of anchovy by supplier (tonnes product weight, 2020-2024)

	2020	2021	2022	2023	2024	Evolution 2020/24
Morocco	5.022	6.770	4.332	4.209	8.520	70%
Spain	2.904	4.635	2.918	3.370	6.793	134%
Albania	2.517	2.591	2.389	2.682	2.882	14%
Croatia	1.097	1.558	3.198	2.477	1.977	80%
Tunisia	1.356	1.051	1.312	1.611	1.440	6%
Greece	113	125	104	190	655	481%
Peru	833	958	547	235	481	-42%
Portugal	166	453	21	42	124	-25%
Others	284	395	190	193	200	-30%
Total	**14.292**	**18.537**	**15.012**	**15.009**	**23.072**	61%

Source: EUROSTAT-COMEXT

Supply

In 2023, the supply of anchovy in Italy reached 44.311 tonnes (LWE), made up of 44% of catches and 56% of imports. Between 2014 and 2023, the share of Italian catches in the supply for anchovy decreased from 55% to 44%. This decline was due to a reduction in anchovy catches (from 31.842 tonnes in 2014 to 19.628 tonnes in 2023), and a decrease of imported volumes (-7% in LWE). Over the past decade, Italian supply of anchovy decreased by 24%.

Table 13: Contribution of imports and production to domestic supply of anchovy in Italy (tonnes LWE, 2014-2023)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 23/14
Catches	31.842	37.511	37.969	39.039	36.519	31.198	23.736	23.823	24.223	19.628	-38%
Imports	26.566	27.139	24.563	24.154	23.794	24.532	23.291	29.159	24.549	24.683	-7%
Total	**58.408**	**64.650**	**62.532**	**63.192**	**60.313**	**55.730**	**47.027**	**52.982**	**48.772**	**44.311**	-24%

Source: EUROSTAT-COMEXT

3.1.3 Exports

Italy exported a total of 13.654 tonnes of anchovy in 2024, valued at EUR 90 million. Between 2020 and 2024, exports of Italian anchovy increased by 54% in volume. During the same period, the value increased by 73%, while the price rose by 13%, from 5,87 EUR/kg in 2020 to 6,61 EUR/kg in 2024.

Prepared anchovy dominated exports in 2024, representing 58% of the total value (EUR 53 million, equivalent to 3.400 tonnes). The main destinations of prepared anchovy were the United States of America (14% of the prepared exported volume), Japan (11%), Australia (10%), Albania (8%), and Germany (8%). Exports of salted anchovy accounted for 18% of the exported value, the main destinations were Albania (55% of the exported volume) and Tunisia (3%). Fresh anchovy accounted for 17% of the export value in 2024, Germany and Spain were the primary destinations of Italian exports (accounting respectively for 27% and 26% of the exported volume). Exports of frozen anchovies only accounted for 1% of the exported value, mainly directed to the Albanian market (63% of the exported volume).

Albania was the main destination of Italian anchovy exports over the period (2020-2024) with a significant increase of the volume (+79%). Exports to Germany (the second destination in volume in 2023) remained stable between 2020 and 2024 (+2%). Exports to Tunisia significantly increased (+118% in volume), as well as exports to Spain (+83% in volume), to the United States (+102%) and to Croatia (+156%).

Table 14: Exports fresh and frozen anchovy from Italy in 2024 (volumes in tonnes product weight)

	Value (1.000 EUR)	Volumes (tonnes)	Price (EUR/kg)	% Value 2024
Prepared/Preserved	52.500	3.400	15,44	58%
Salted	15.986	4.096	3,90	18%
Live/Fresh	15.779	4.634	3,41	17%
Dried	5.474	1.213	4,51	6%
Frozen	560	312	1,80	1%
Total	**90.300**	**13.654**	**6,61**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 15: Evolution of Italian exports volume (tonnes product weight), value (1.000 EUR) and price (EUR/kg) of anchovy between 2020 and 2024

	2020	2021	2022	2023	2024	Evolution 2020/24
Volume (tonnes)	8.881	11.592	11.517	10.533	13.654	54%
Value (1.000 EUR)	52.168	66.265	70.990	78.994	90.300	73%
Price (EUR/kg)	5,87	5,72	6,16	7,50	6,61	13%

Source: Eurostat-Comext

Table 16: Evolution of Italian exports of anchovy by destination (tonnes product weight, 2020-2024)

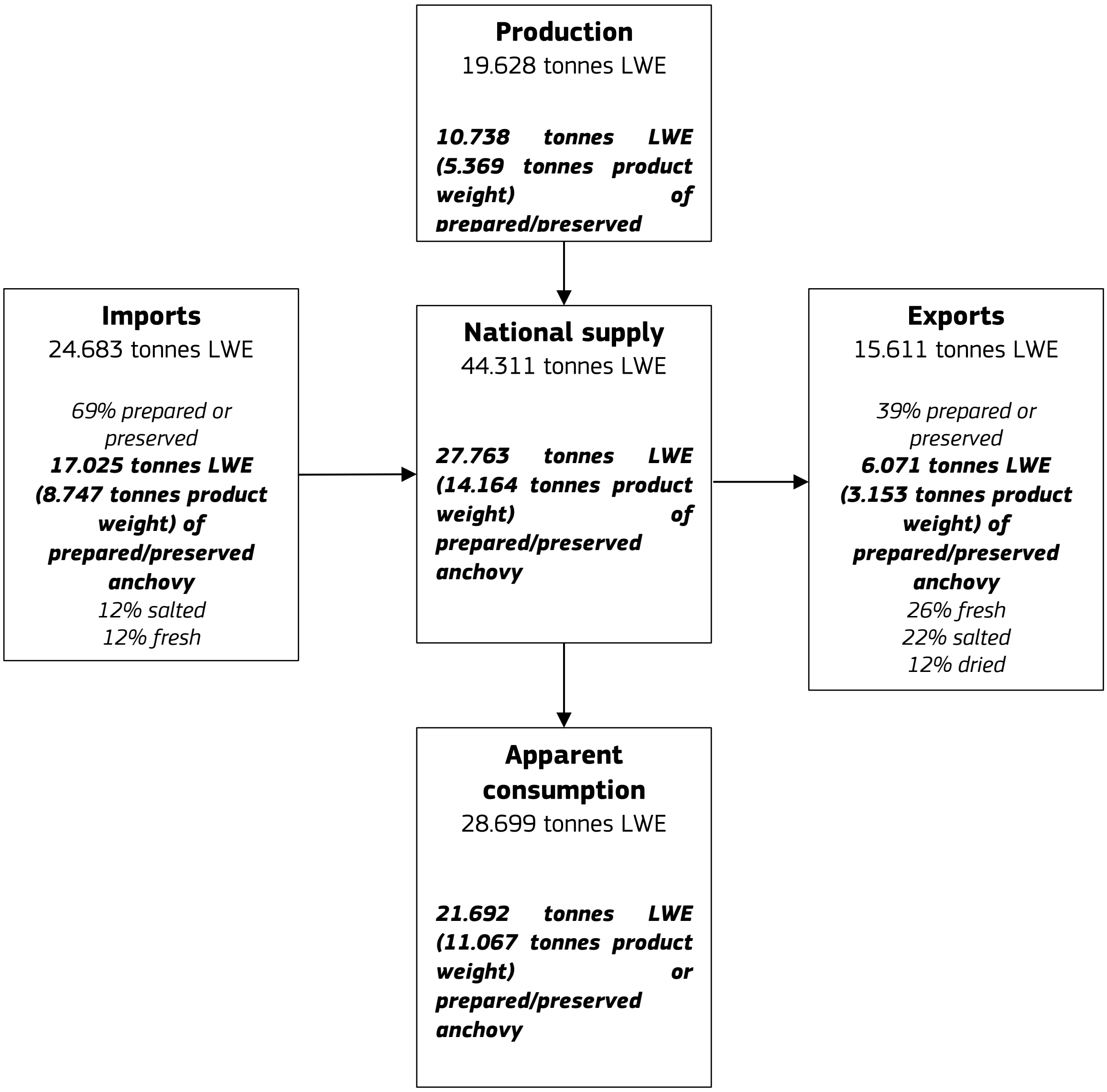
	2020	2021	2022	2023	2024	Evolution 2020/24
Albania	2.186	2.960	2.451	2.413	3.903	79%
Germany	1.506	1.727	1.497	1.707	1.534	2%
Tunisia	701	757	779	1.244	1.528	118%
Spain	755	1.468	1.951	987	1.385	83%
United States	497	400	599	483	1.004	102%
Croatia	317	548	677	271	811	156%
Netherlands	328	374	376	479	430	31%
France	294	605	583	452	410	40%
Japan	281	274	383	331	381	36%
Australia	327	338	294	305	339	4%
Others	1.688	2.142	1.927	1.861	1.928	14%
Total	**8.881**	**11.592**	**11.517**	**10.533**	**13.654**	**54%**

Source: EUROSTAT-COMEXT

3.1.4 Apparent consumption

In 2023, the Italian total supply of anchovy amounted to 44.311 tonnes (LWE), with 44% coming from national catches and 56% from imports. One third of this supply was exported (35%). The apparent consumption of anchovy in Italy was estimated at 28.699 tonnes LWE in 2023, which represented 65% of the national supply.

Figure 3: Supply balance for anchovy in Italy (2023, tonnes LWE)



Note: percentages provided in the figure are in LWE
Source: EUMOFA elaboration based on EUROSTAT data

3.2 Characteristics of the Italian market and consumption

Although fresh anchovy is an essential ingredient in many popular dishes in Italy (especially consumed with pasta sauce or fried), anchovy is mainly consumed as prepared/preserved. It can be estimated that a rough 80% of the catches is processed by the industry, in addition to the imported prepared anchovy. The biggest anchovy preserve industries (they are 3 or 4) are in the North, but nowadays they mostly produce in foreign countries (Albania, Morocco). The remaining industries are much smaller and, in the South, where labour costs are lower. Anchovies are particularly consumed in the most southern regions (Sicily, Campania).

Fresh anchovy is predominantly consumed in summer, along the Tyrrhenian Coast, in Sardinia and Romagna, whereas the consumption of prepared anchovy is stable, with slight peaks on the Christmas and Easter celebrations.

According to the calculation of apparent consumption from EUMOFA's data, anchovy national consumption is declining (-34,5% in tonnes LWE since 2017), mainly due to the decrease of the consumption of fresh anchovy. In contrast, prepared/preserved anchovy is experiencing a small increase in consumption.

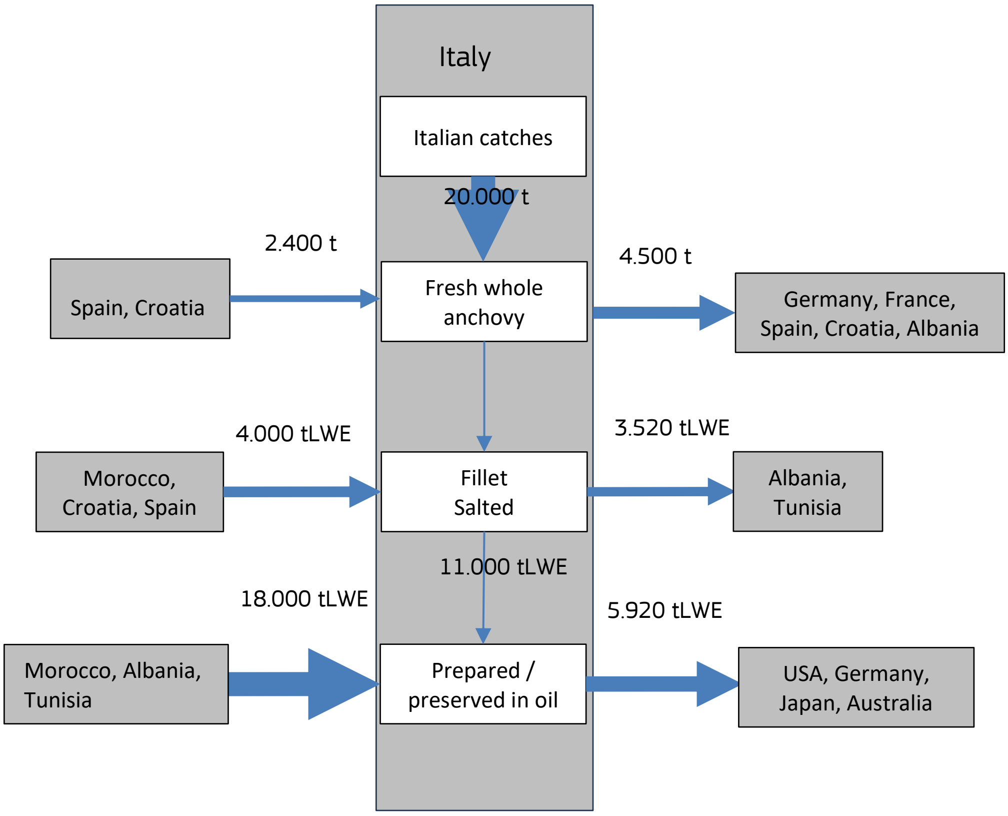
Based on national data (ISTAT), the production of prepared / preserved anchovy in Italy (excluding marinated and minced anchovy) is 5.369 tonnes product weight in 2023, amounting to 38% of the national supply and 49% of the apparent consumption: the apparent consumption thus relies mostly on imported prepared or preserved anchovy.

The predominant type of prepared/ preserved anchovy on the Italian market is the glass jar of anchovy fillets, salted and preserved in oil. Based on EUMOFA, prepared and preserved anchovies in oil represent 75% of the volume of anchovies consumed in Italy (in tonnes LWE).

Less consumed products are marinated anchovies, although their consumption is increasing in northern Italy because they are ready-to-eat and present a lower salt and fat content. Traditional products are salted anchovies, among which the PGI *Acciughe sotto sale del Mar Ligure* can be found, anchovy paste, and anchovy *colatura*, which was granted a PDO in 2020. There is no data available quantifying the volumes of these products.

According to interviews, some semi-prepared products, such as fresh gutted and headed anchovies, fresh filleted anchovies and salted anchovies, are also sold on the market as ready-to cook products or semi-prepared products in the preserving chain.

Figure 4: Supply balance for anchovy at each stage of the preservation process in Italy (2023, tonnes LWE)



Source: EUROSTAT/COMEXT

Because anchovy is such a delicate fish, filleting, salting and arranging the fillets in the jar are made entirely by hand. This requires an important labour force, and specific dexterity. To reduce labour costs, parts of the preparation process are often set in third countries (Albania, Tunisia…).

According to interviews, the Italian market for anchovy is segmented based on:

- **Fish size**: fresh fish wholesalers and retailers favour the biggest anchovy, as they are preferred by consumers. Preserve industries use smaller fish, as a way to reduce costs. However, this also depends on the geography of the targeted markets: in Southern Italy, the demand is higher for bigger fish (preserved or fresh), than in the North.
- **Fish quality (based on fish size, freshness, shape and brilliance)**: fish destined to transformation is usually of slightly lesser quality than fish consumed fresh.

3.3 Price transmission in the supply chain

3.3.1 First sale prices

First sales of European anchovy in Italy have decreased by 45% in volume between 2015 and 2024 (-22% in two years between 2022 and 2024), reaching 12.509 tonnes in 2024. The value of first sales decreased by 48% over the same period (-32% over the two last years) and amounted to EUR 20 million in 2024. Over the same period (2015-2024), the price of European anchovy first-sales remained stable, only decreasing by 5% between 20105 and 2024, according to EUMOFA data and PO Pilamare for landings in Porto Tolle.

It is to be noted that first-sale prices recorded in EUMOFA do not encompass all the landings, but only the volumes going through fish markets. A variable part of a port's landings can be sold under contract, and thus not be registered in the first-sale category.

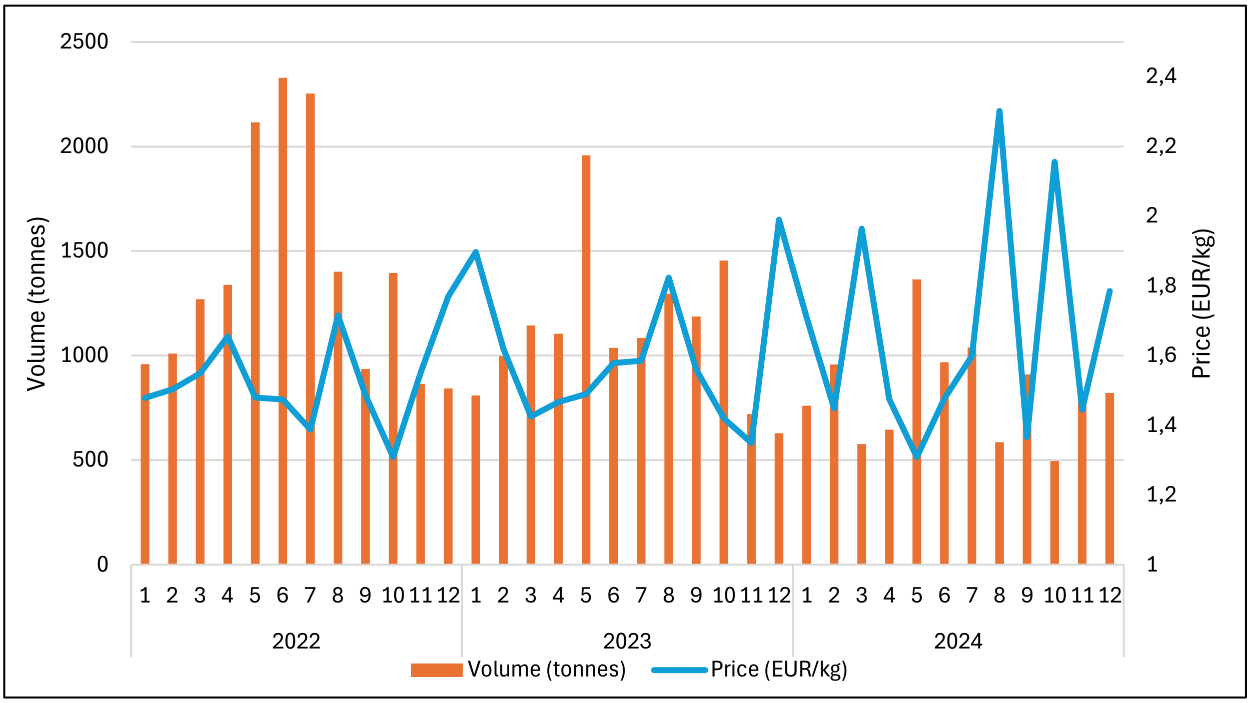
Table 14: First-sale prices for European anchovy in Italy (2015-2024)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Evolution 24/15
Average price (EUR/kg) – all ports	1,69	1,79	1,58	1,48	1,85	1,55	1,58	1,51	1,57	1,60	-5%

*Source: data transmitted by MASAF to EUMOFA for all ports except for Porto Tolle. For Porto Tolle, data was provided by PO Pilamare.**

*The prices recorded in EUMOFA for Porto Tolle are under revision: in the meantime, the prices for Porto Tolle were provided from the PO Pilamare, Porto Tolle's producers organisation, and encompass all local anchovy sales.

Figure 5: European anchovy monthly first-sale volumes and first-sale prices in Italian ports (except for Porto Tolle) between 2022 and 2024 (in tonnes net weight and EUR/kg)



Source: data transmitted by MASAF to EUMOFA

European anchovy first sale prices depend largely on the season but are also very variable on a day-to-day basis.

In 2024 the average first sale price of European anchovy in Italy was 1,60 EUR/kg. Fisheries targeting anchovy have a continuous activity all-yearlong with high seasonality, peaking in May, as well as in October. The October peak results from the increased catches in the Adriatic after the August fishing closure in this sea. First sales are the lowest in December and January (less than 1.000 tonnes). Prices of first sale follow an inverted trend with lower prices during the fishing season and higher prices around November and December, because purse seiners stop fishing in the coldest months. First sale prices of anchovy also differ according to the place of sales. According to interviews, Adriatic ports tend to offer anchovy prices that are lower than other Italian ports, because the anchovies are smaller. The fishing strategies also impact the prices of catches: some PO fish farther away from the coast and thus return later in the day than others. With their production being sold after the neighbouring ports, prices are tendentially lower.

In addition, prices are impacted by fishing methods: indeed, interviewees explained that ports boasting mainly purse seiners tend to have a higher first-sale price than ports with pelagic trawlers, because the volume collected is lower, and the catches better preserved.

First-sale prices are lower for fish destined to the industry and vary between 0,7 EUR/kg and 0,9 EUR/kg, due to the lower quality of this category of anchovy.

3.3.2 Ex-factory prices

Ex-factory prices for prepared/preserved anchovy were provided by Istat, for the category: prepared/preserved anchovy, excluding minced anchovy and prepared meals. This category does not include marinated anchovy but comprises mostly salted fillets in oil.

Ex-factory prices have increased by 20% between 2014 and 2023. According to stakeholders, this is due to the increasing price of all raw materials (glass jars, oil), and due to the continous increase in transportation costs, which isrequired in several transformation steps: to transport the refrigerated fish, often from the Adriatic to Sicily, or the semi-processed fish from Morocco or Albania, and to distribute the final preserves.

Table 15: Ex-factory prices (EUR/kg) for prepared/preserved anchovy in Italy (2014-2023)

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evol 23/14
Price (EUR/kg)	10,37	9,91	8,99	8,96	8,49	20,43	10,73	9,42	13,75	12,43	20%

Source: ISTAT (Italian institute for Statistics)

3.3.3 Import and export prices

Over the period surveyed (2020-2024), import prices of prepared/preserved anchovies from all main suppliers have increased except for Spain where prices are the highest and decreased from 20,61 EUR/kg in 2020 to 16,3 EUR/kg in 2024 (-21% over the period).

In 2024, import prices from the largest supplier, Morocco, were the lowest (8,76 EUR/kg) despite an increase of 37% since 2020.

Table 16: Prices of Italian imports of prepared/preserved anchovies between 2020 and 2024 by main suppliers (EUR/kg)

	2020	2021	2022	2023	2024	Evol 20/24
Morocco	6,38	6,34	6,88	8,60	8,76	37%
Albania	8,67	8,05	9,99	10,32	10,78	24%
Tunisia	8,63	9,31	8,89	9,86	11,39	32%
Spain	20,61	20,42	21,19	19,29	16,33	-21%
Total	**8,02**	**7,89**	**10,34**	**10,55**	**10,34**	**29%**

Source: EUMOFA elaboration based on EUROSTAT data

The export prices of prepared/preserved anchovies provided below show a significant increase over the period (2020-2020), regardless of the destination.

Between 2020 and 2024, export prices have particularly increased for Germany (+39%) in relation to the lower increase of the exported volume compared to the value +13% in volume and +57% in value). A similar trend is observable for Australia with prices increased by 33% over the period due to an increase of 35% in value and of 2% only in volume. Export prices of prepared/preserved anchovies to the United States of America and Japan have increased by 13% and 10% respectively, parallelly to the increasing exported volumes (+91% and +36%). Export prices to Albania increased by 11% in relation to the decrease of the exported volumes (-14%).

Table 20: Prices of Italian exports of prepared/preserved anchovy between 2020 and 2024 by main destination (EUR/kg)

	2020	2021	2022	2023	2024	Evol 20/24
United States	14,83	13,93	15,01	16,14	16,81	13%
Germany	11,41	11,55	13,86	14,84	15,85	39%
Japan	14,43	14,46	14,52	15,90	15,82	10%
Australia	11,55	11,10	11,98	14,53	15,34	33%
Albania	12,68	13,87	14,11	14,17	14,03	11%
Total	**12,59**	**12,80**	**13,48**	**14,95**	**15,44**	**23%**

Source: EUMOFA elaboration based on EUROSTAT data

3.3.4 Retail prices

Anchovy price highly differs based on the preservation (fresh or prepared/preserved). This chapter focusses on prepared/preserved anchovy, prepared and packed in Italy.

Several sources are available on retail prices for salted anchovy in oil:

- online shop retail prices (EUMOFA)
- a survey on a selection of online shops[10]
- a field survey on a selection of local retailers

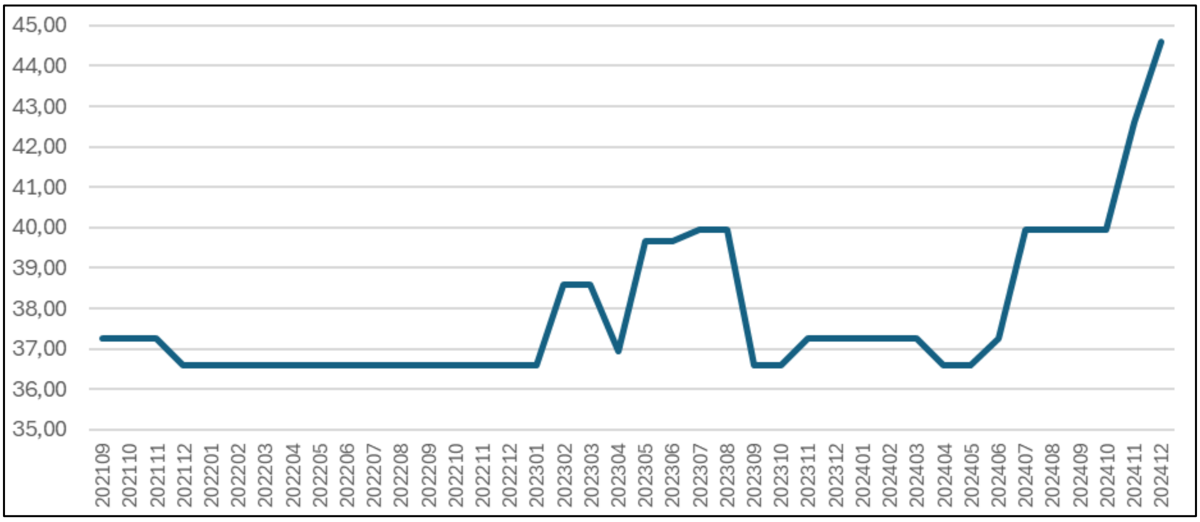
Table 21: Monitoring of prices in local and online retails in Italy (April 2025)

Detail of the product	Price (EUR/kg)
Salted anchovy fillets in sunflower and olive oil – 90g (Conad)	24,33
Salted anchovy fillets in olive oil - 90g (Conad)	53,22
Salted anchovy fillets in olive oil – 80g (median)	16,25
Salted anchovy fillets in sunflower oil – 140g (Coop Alleanza 3.0)	18,57
Salted anchovy fillets in olive oil – 100g (Coop Alleanza 3.0)	70,00
Salted anchovy fillets in olive oil – 90g (Oasi Tigre)	28,78
Salted anchovy fillets in olive oil – 156g (Oasi Tigre)	31,99

Source: Local and online shop retail prices

Online retail prices for anchovy fillets in olive oil (can containing 100-200g of anchovy) in Italy have increased by 20% between September 2021 and December 2024, from 37,27 EUR/kg (5,59 EUR/unit) to 44,60 EUR/kg (6,69 EUR/unit). Retail prices were stable over the period until January 2023 before peaking to 38,60 EUR/kg (5,79 EUR/unit) in February and March 2023 and peaking to 39 EUR/kg (5,99 EUR/unit) between May and August 2023. In the recent months, retail prices of anchovy fillets in olive oil increased strongly, reaching 44,60 EUR/kg.

Figure 6: Retail price for anchovy fillets in olive oil in Italy (2021-2024) (EUR/kg)



Source: EUMOFA - Online shop retail prices

[10] https://www.eumofa.eu/fr/online-shop-retail-prices

3.3.5 Price transmission

This section focuses on the supply chain of salted anchovies in olive oil and glass jars sold in supermarkets being the most consumed anchovy product in Italy. Anchovies are caught in the Adriatic, in other parts of the Mediterranean, or in the Atlantic and Pacific and imported. According to interviews, salted anchovies in olive oil and glass jars are the most common anchovy products sold in Italy.

Anchovies are most commonly sold under contract or in ports without any intermediaries between the producer organization and the industry. There is a high loss of weight due to filleting and salting: the yield is only about 25%. Prices refer to a final product made of salted fish fillets for 55% and olive oil for the remaining 45%.

The breakdown (percentage) between costs and margins is an update of the 2017 study on price structure for processed anchovies in Italy, on an industrial scale.[11] Prices have been updated based on public data, interviews and the survey of e-commerce websites and local shops.

Based on available data and interviews, the ex-factory price is estimated at 12,4 EUR/kg, which represents 31% of the final price. This ex-factory price includes 12% of olive oil costs, 7% of other ingredients, can, packaging and industrial costs, and 30% of labour costs. After including the transport and operating costs and margin of the retailer, the final price (including VAT) is estimated at 40 EUR/kg.

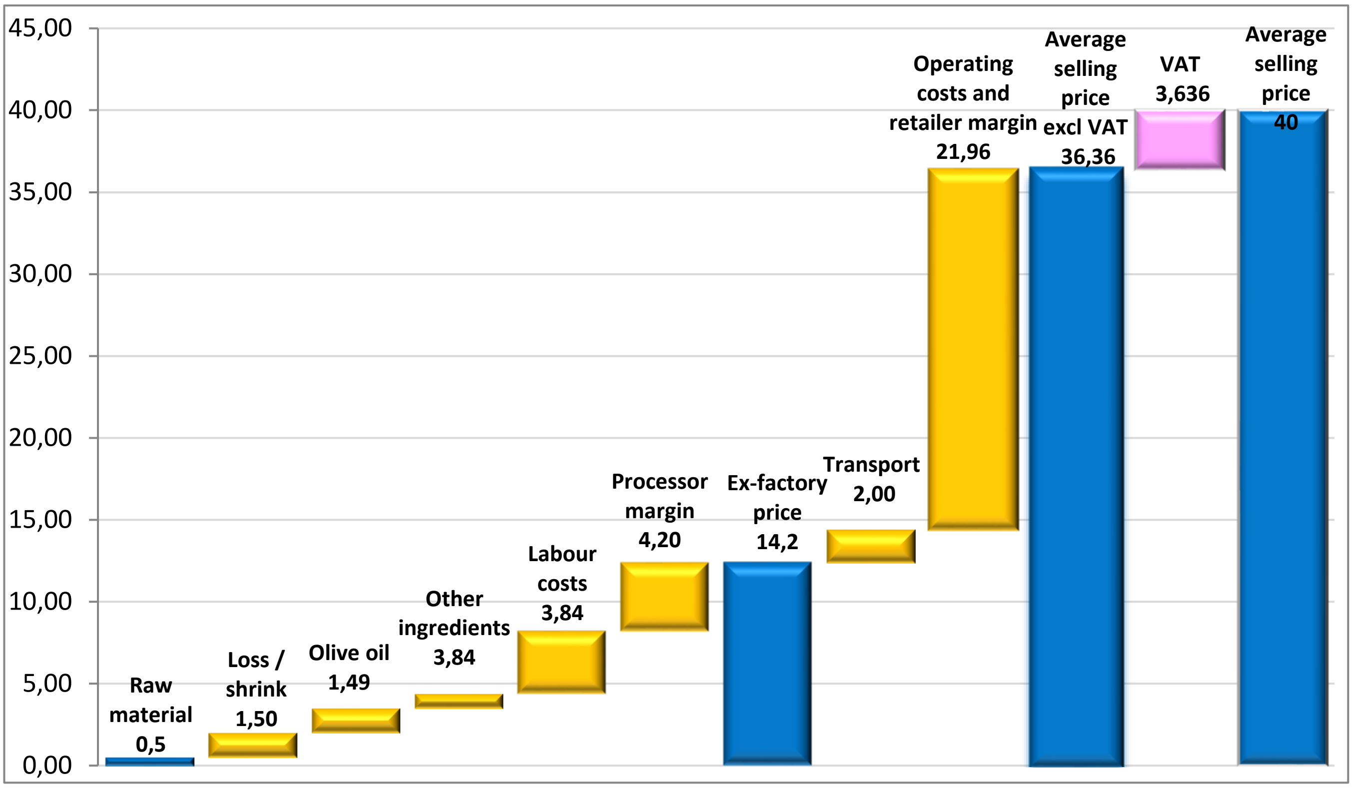
Table 22: Costs and margin for canned salted anchovies in oil and retailed by supermarkets in Italy (EUR/kg of final product, 2024)

	EUR/kg of final product	% of	% of	
2024	Average	retail price	wholesale price	Source
Raw material cost	0,5	4%	1%	Interviews
Loss / shrink	1,5	12%	4%	
Olive oil	1,49	12%	4%	Interviews
Salt, can, packaging and industrial costs	0,87	7%	2%	Interviews
Labour costs	3,72	31%	10%	Interviews
Processor margin	4,2	34%	11%	Calculations
Ex-factory price	**12,4**	100%	31%	ISTAT
Transport platform -> shop	2		5%	Interviews
Operating costs and retailer margin	21,96		55%	Interviews
Average selling price, exclusive of VAT	**36,36**		91%	Calculations
VAT (10%)	3,64		9%	
Average selling price	**40,00**		100%	Online data+on-site panel+EUMOFA

Source : Interviews, Istat, EUMOFA, on-site panel

[11] The report can be found at the link https://eumofa.eu/market-analysis#ptat

Figure 7: Costs and margins for canned salted anchovies in olive oil and retailed by supermarkets in Italy (EUR/kg, 2024)



Source: Interviews, EUMOFA, Istat, on-site panel

Legend: intermediate costs and margin in yellow product price in blue; VAT is in pink

4 THE SPANISH MARKET

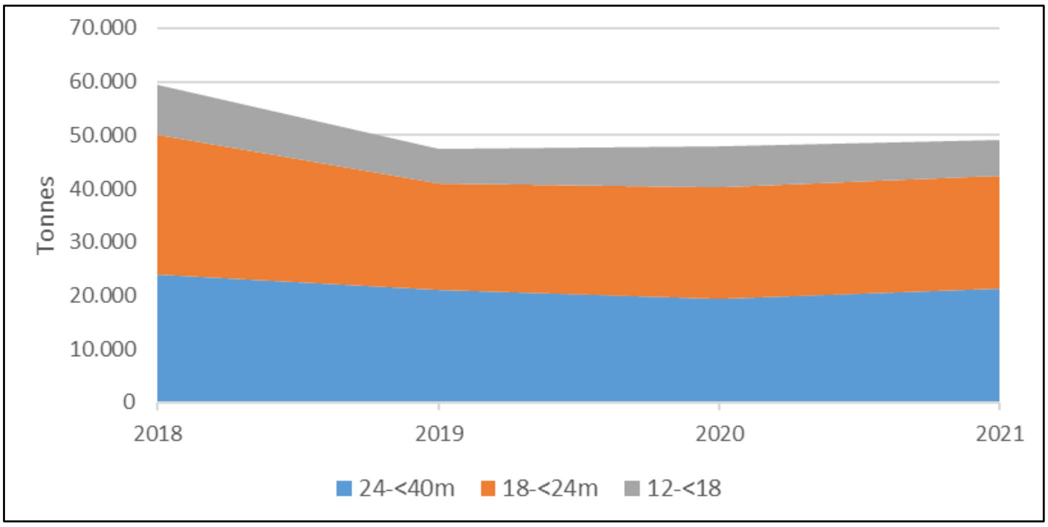
4.1 Structure of the supply chain

4.1.1 Production

Characteristics of the fleet

Catches of European anchovy by the Spanish fleet are essentially made by medium to large vessels: 43% of the landing volume was made by vessels ranging from 18 to 24 meters (amounting to EUR 36,7 million), 43% by vessels between 24 and 40 meters (amounting to EUR 34,5 million) and to a lesser extent by vessels between 12 and 18 meters (13% of the landings in volume). Almost all the volumes of European anchovy caught by the Spanish fleet were fished using purse seiners (98% of the landed volumes). Volumes caught by vessels using hooks accounted for 1% of the landings in 2021.

Figure 8: Evolution of Spanish landings of European anchovy by vessel length (tonnes)



Source: STECF (2021, last year available)

The Spanish fleet caught 44.830 tonnes of anchovy in 2023. Catches of anchovy were 2% higher than in 2022 and 5% higher than in 2014. Overall, anchovy catches increased between 2014 and 2018 to reach 59.505 tonnes before gradually decrease until 2023.

Table 23: Anchovy production in Spain between 2014 and 2023 (tonnes)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evol 23/14
Catches	42.760	49.982	46.254	50.811	59.505	47.591	48.016	49.111	43.891	44.830	5%

Source: Eurostat

4.1.2 Imports

Imports

Total imports of anchovy to Spain reached 21.457 tonnes in 2024, amounting to EUR 133 million. From 2020 to 2024, Spanish imports of anchovy increased by 25% in volume. Over the same period, the value increased by 60% while the price increased by 27%, from 4,87 EUR/kg in 2020 to 6,20 EUR/kg in 2024.

Morocco was the main supplier of anchovy to Spain in 2024, the volume imported increased by 54% between 2020 and 2024. Imports from Portugal were over the period (+5% in volume). In contrast, imports of anchovy from Peru declined by 18%. Imports from Italy increased by 23%, those from France by 53%, and imports from Croatian rose by 39%.

Prepared anchovy dominated imports in 2024, accounting for 79% of the total value (EUR 105 million, amounting to 10.286 tonnes). Main suppliers of prepared anchovy were Morocco (accounting for 83% of the prepared imported volume) and Peru (11%). Fresh anchovy, which represented 13% of the imports value in 2024, originated mainly from Portugal (73% of the salted imported volume), Italy (15%), and France (9%). Frozen imports accounted for 5% of the total value and originated mostly from Morocco (44% of the frozen volume) and Croatia (25%). Argentina and Morocco were the main suppliers of salted anchovy (respectively 44% and 39% of the frozen imported volume), which represented 3% of the import value in 2024.

Table 17: Evolution of imports of anchovy to Spain between 2020 and 2024 (volumes in tonnes product weight)

	2020	2021	2022	2023	2024	Evol 2020/24
Volume (tonnes)	17.116	22.502	18.281	21.088	21.457	25%
Value (1.000 EUR)	83.400	102.358	105.234	120.726	133.047	60%
Price (EUR/kg)	4,87	4,55	5,76	5,72	6,20	27%

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 18: Evolution of Spanish imports of anchovy by supplier (tonnes product weight, 2020-2024)

	2020	2021	2022	2023	2024	Evol 2020/24
Morocco	6.735	7.910	7.563	8.242	10.373	54%
Portugal	5.104	7.289	3.602	4.525	5.365	5%
Peru	1.616	1.886	1.434	1.186	1.331	-18%
Italy	971	1.331	1.324	994	1.198	23%
France	570	546	665	2.343	870	53%
Croatia	612	1.905	1.453	779	848	39%
Argentina	513	882	1.331	2.048	739	44%
Others	996	751	908	972	732	-26%
Total	**17.116**	**22.502**	**18.281**	**21.088**	**21.457**	**25%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 19: Imports of fresh and frozen anchovy to Spain in 2024 (volumes in tonnes product weight)

	Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% val. 2024
Prepared/Preserved	105.206	10.286	10,23	79%
Live/Fresh	17.004	6.974	2,44	13%
Salted	6.669	2.516	2,65	5%
Frozen	3.974	1.666	2,38	3%
Dried	194	14	13,65	0%
Total	**133.047**	**21.457**	**6,20**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Supply

In 2023, the supply of anchovy in Spain reached 75.417 tonnes in LWE, made up of 59% of catches and 41% of imports. Between 2014 and 2023, the share of Spanish catches in the supply for anchovy slightly increased (from 56% in 2014 to 59% in 2023). Over the past decade, Spanish supply of anchovy remained stable overall, but within this period, volumes have fluctuated, peaking in 2018 at 92.003 tonnes.

Table 20: Contribution of imports and production to domestic supply of anchovy in Spain (tonnes LWE, 2014-2023)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evol 23/14
Catches	42.760	49.982	46.254	50.811	59.505	47.591	48.016	49.111	43.891	44.830	5%
Imports	32.931	36.879	37.037	32.101	32.499	33.344	25.300	32.664	27.882	30.587	-7%
Total	**75.690**	**86.862**	**83.291**	**82.912**	**92.003**	**80.935**	**73.316**	**81.775**	**71.773**	**75.417**	**0%**

Source: EUROSTAT-COMEXT

4.1.3 Exports

Spain exported a total of 22.238 tonnes of anchovy in 2024, valued at EUR 112 million. Between 2020 and 2024, Spanish anchovy exports increased by 8% in volume, peaking at 25.050 tonnes in 2021. During the same period, the nominal value increased by 37%, while the price rose by 27%, from 3,97/kg in 2014 to 5,05 EUR/kg in 2024.

Prepared anchovy dominated exports in 2024, representing 57% of the total value (EUR 64 million, equivalent to 3.651 tonnes). The main destinations of prepared anchovy were Italy (23% of the prepared exported volume), United Kingdom (13%), United States (9%), France (7%), and the Netherlands (7%). Salted anchovy accounted for 18% of the export value in 2024 (6.952 tonnes), Morocco was the primary destination of these Spanish exports (41% of the exported volume), followed by Italy and Albania to a smaller extent (20% each). Exports of fresh anchovy accounted for 14% of the exported value (6.148 tonnes), the main destinations were Italy (51% of the exported volume) and Morocco (26%). Frozen anchovy accounted for 10% of the total value (5.302 tonnes), Turkey was the primary destination (34% of the volume), followed by Albania (24%) and Italy (21%).

Italy and Morocco were the main destinations of Spanish anchovy exports over the period (2020-2024) despite strong fluctuations, exports have increased respectively by 14% and 15% overall. Exports to Albania (the third destination in volume in 2024) have increased by 11% between 2020 and 2024. Exports to Turkey have strongly increased since 2020 (+180%). In contrast, exports to France decreased by 18%, and those to Croatia declined by 53% over the period.

Table 21: Exports of anchovy from Spain (2024, volumes in tonnes product weight)

	Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% val. 2024
Prepared/Preserved	63.923	3.651	17,51	57%
Salted	19.752	6.952	2,84	18%
Live/Fresh	16.053	6.148	2,61	14%
Frozen	10.668	5.302	2,01	10%
Dried	1.862	184	10,10	2%
Total	**112.259**	**22.238**	**5,05**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 29: Evolution of the Spanish exports volume (tonnes product weight), value (1.000 EUR) and price (EUR/kg) of anchovy between 2020 and 2024

	2020	2021	2022	2023	2024	Evol 20/24
Volume (tonnes)	20.653	25.050	19.926	21.564	22.238	8%
Value (1.000 EUR)	82.007	98.627	90.043	96.778	112.259	37%
Price (EUR/kg)	3,97	3,94	4,52	4,49	5,05	27%

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 30: Evolution of Spanish exports of anchovy by destination (tonnes product weight, 2020-2024)

	2020	2021	2022	2023	2024	Evol 20/24
Italy	5.662	6.643	3.506	3.882	6.464	14%
Morocco	4.193	6.209	7.768	9.833	4.837	15%
Albania	2.447	2.024	1.369	1.214	2.715	11%
Turkey	639	1.044	923	1.215	1.791	180%
Tunisia	813	1.825	446	563	894	10%
France	975	901	896	869	800	-18%
Croatia	1.670	2.326	1.650	613	780	-53%
Senegal		15	240	562	504	n.a.
United Kingdom	822	708	416	418	466	-43%
United States	262	481	387	304	377	44%
Others	3.170	2.873	2.326	2.091	2.609	-18%
Total	**20.653**	**25.050**	**19.926**	**21.564**	**22.238**	**8%**

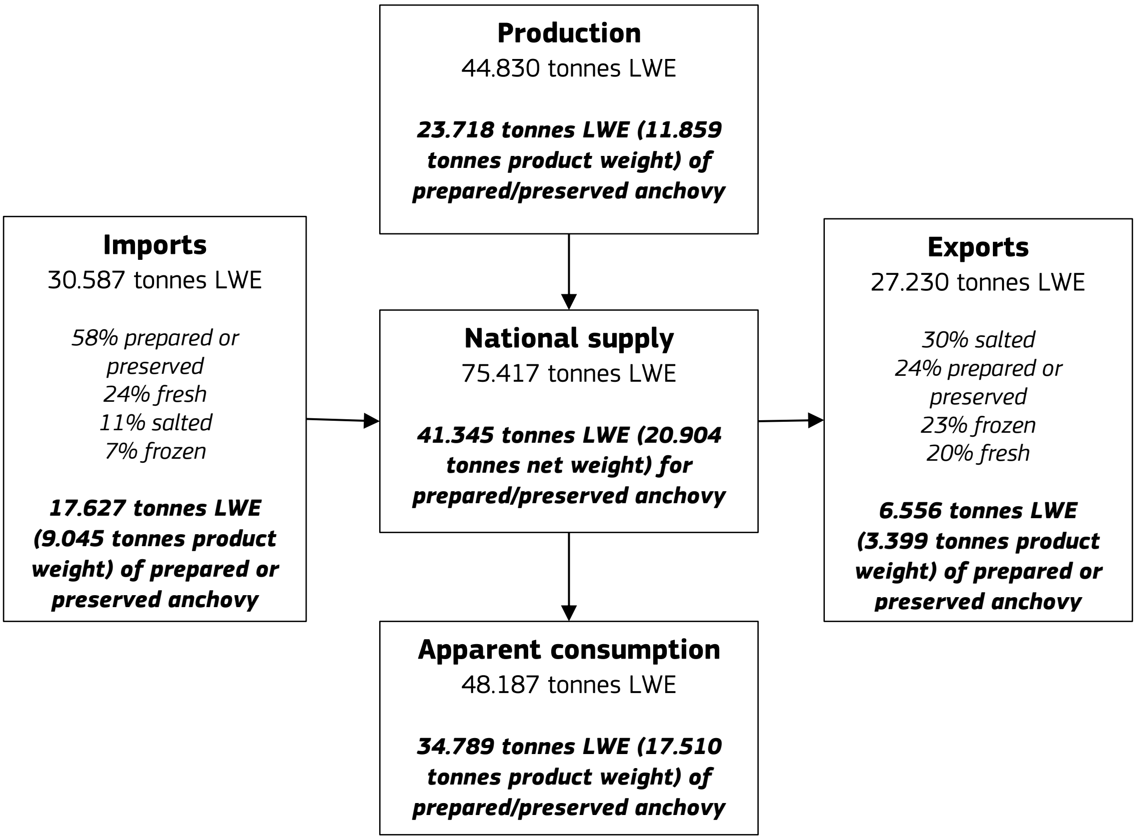
Source: EUROSTAT-COMEXT

Anchovy is primarily processed in the Spanish Autonomous Community of Cantabria, where around the 80% of Spanish Anchovy is processed.

4.1.4 Apparent consumption

The total supply of anchovy in Spain amounted to 75.383 tonnes LWE in 2023, of which 59% from national production (44.830 tonnes) and 41% from imports (30.553 tonnes LWE). Slightly more than one third (36%, amounting to 27.292 tonnes LWE) of this supply is exported, thus 64% can be estimated as apparent consumption, amounting to 48.092 tonnes LWE.

Figure 9: Supply balance for anchovy in Spain (2023, tonnes LWE)



Note: percentages provided in the figure are in LWE

Source: EUMOFA elaboration based on EUROSTAT

4.2 Characteristics of the Spanish market and consumption

4.2.1 Characteristics of the market

Almost all anchovy consumed in Spain is sold canned or fresh (in LWE canned anchovy represents 72% of the consumption of mackerel[12]). According to the information collected during field visits, the consumption trend favours canned products, as consumption habits are increasingly oriented towards ready-to-eat products. Therefore, the analysis will focus on canned anchovy.

Spanish designations differ according to the use of the product: the *anchoa* and the *boqueron* belong to the same fish species (*Engraulis encrasicolus*), also called *bocarte* on the Cantabrian coast. In general terms, in the northern and central regions of the Iberian Peninsula, this type of fish is referred to as *anchoa* or *bocarte*, while in the south it is more commonly called *boquerón*. However, the term *anchoa* is also widely used to refer to the processed product obtained by salting this fish, thus converting it into a preserved fish product.

The segmentation of the market for canned anchovy in Spain is mainly based on three criteria:

- The size of the anchovy
- The fishing season (spring (between April and May) is the best season to catch anchovies in Spain, with a highly appreciated flavour)
- The origin: the quality of the meat (especially, fat ratio) can differ significantly if the fish comes from national catches or imports.

The market of canned fish products is highly competitive in terms of quality-price ratio. It has increased since 2022 and the inflation crisis, with a rise of prices of input factors such as energy, cardboard, aluminium, oils.

According to the National Institute of Statistics[13], in 2022 seafood processing reached a total of 1.001.797 tonnes, with prepared or canned fish being the largest share of the total, (representing 41,5%), followed by frozen fish (19%) and frozen molluscs and other aquatic invertebrates, even dried or in brine (12%).

The total canned fish market in Spain reached 305.403 tonnes (+0,3% compared to 2022) and 1,74 million EUR (+7,8% compared to 2022). The canned fish market[14] is dominated by tuna, which accounts for almost 68% of volumes. According to ANFACO-CECOPESCA[15], semi-preserved anchovy is in the fourth place after tuna, sardines and mackerel, accounting for 4% of the total volume of canned and semi-preserved fish market and 6% of the value (12.008 tonnes and EUR 109 million in 2023).

[12] See paragraph on apparent consumption
[13] Instituto Nacional de Estadísticas: https://www.ine.es/. Last update for these data: year 2022.
[14] Including semi-preserved anchovy
[15] ANFACO is the National Association of Fish and Seafood Canning Manufacturers: https://anfaco.es/wp-content/uploads/2023/06/Presentacion-datos-2022-VF-28.06.2023.pdf

Table 31: Production of canned fishery and aquaculture products in Spain

	Volume (tonnes)			Value (1.000 EUR)		
	2022	**2023**	**Evolution 23/22**	**2022**	**2023**	**Evolution 23/22**
Canned fishery and aquaculture products						
Tuna	198.134	207.843	4,9%	922.476	1.054.380	14,3%
Sardine	19.903	17.216	-13,5%	101.180	100.027	-1,1%
Mackerel	12.650	10.110	-20,1%	63.499	50.551	-20,4%
White tuna	12.176	11.945	-1,9%	129.168	139.630	8,1%
Mussels	11.009	10.613	-3,6%	130.881	139.781	6,8%
Squids	4.665	4.614	-1,1%	35.735	35.557	-0,5%
Cockles	3.549	3.286	-7,4%	85.063	81.831	-3,8%
Clams	1.461	1.490	2,0%	16.353	17.137	4,8%
Other canned fish and shellfish	29.602	29.602	-2,0%	151.778	151.778	-2,6%
TOTAL	**293.149**	**294.344**	**0,4%**	**1.636.133**	**1.771.281**	**8,3%**
Semi-preserved anchovy[16]						
Anchovy	**12.253**	**12.008**	**-2,0%**	**108.824**	**109.151**	**0,3%**

Source: ANFACO-CECOPESCA

NB: ANFACO data of the production of canned/semi-preserved anchovy is different from other sources such as the Ministry of Agriculture (MAPA) and EUROSTAT – PRODCOM which provides consumption data (sold production). Differences are mostly due to stored volumes between production and sale.

Generally, canned anchovy is largely used by the processing industry to produce cans with different types of coating such as vegetable oil, olive oil, olive, pickled, tomato, etc. It has also largely used to produce semi-preserved anchovy.

At retail stage, anchovy (all types of products combined) is mainly sold in supermarkets and large stores. According to the Food Consumption Panel of the Ministry of Agriculture, fisheries and food at home consumption[17], in 2023, large retail outlets (supermarkets, hypermarkets, discounters) represented 83% of sales value and sales volume of anchovy (all types of products combines).

[16] Semi-preserved anchovies in salt are preparations made from anchovies which have undergone maturation for a minimum period of 2 to 3 months before being packaged in barrels, boxes or liquid-tight glass jars.

[17] https://www.mapa.gob.es/es/alimentacion/temas/consumo-tendencias/panel-de-consumo-alimentario/series-anuales/default.aspx

Figure 9: Sales channels breakdown (in volume, 2023)

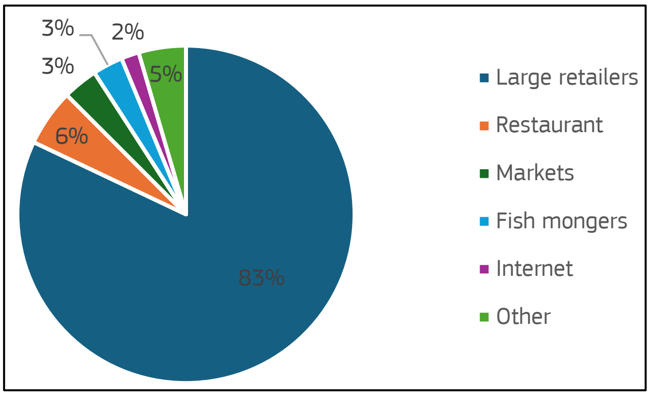
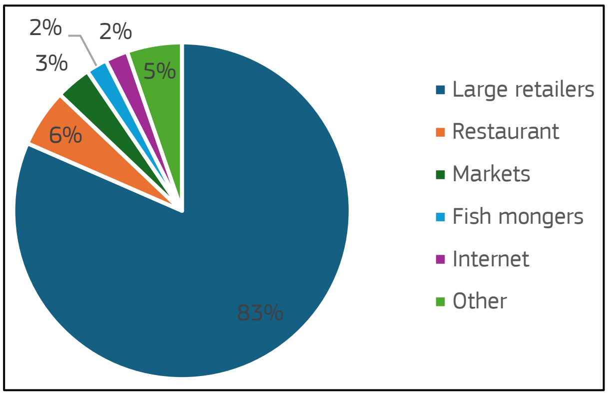


Figure 10: Sales channels breakdown (in value, 2023)



Source: MAPA, Food Consumption Panel

4.2.2 Consumption

In 2023, inflation strongly impacted the Spanish canned and seafood sector, with a new rise in industrial costs and a slowdown in the consumption, especially domestically.

According to the MAPA[18], the year 2023 ended on a negative note for the purchase of anchovies with a fall of 11,8% in the volume of anchovies purchased by Spanish households. The average price paid per kg increased by 14,1% and reached 26,2 EUR/kg at the end of 2023. This increase in price slightly offset the fall in consumption so the market value increased by 0,6% between 2022 and 2023.

In 2023, the average expenditure per person and per year was 1,87 EUR, which is 0,5% lower than 2022. Per capita consumption was 0,07 kg/person which is 12,8% lower than 2022[19].

The Spanish canning industry ended 2023 with a new drop in its activity levels, which placed its production below 300.000 tonnes for the first time for the last twenty years. The impact of inflation on canned food consumption is not limited to the Spanish market but has also impacted the rest of the EU market which is the main client of the Spanish canning industry[20].

According to interviews with producers, wholesalers and ANFACO, input prices increased by 10% with the 2023 inflation crisis.

As a general trend, in 2023, Spanish household consumption of fishing products decreased by 4% in volume and increased by 3% in value. Regarding the canned fish products, the total volume per capita decreased by -5,6% compared to 2022 and spending per capita increased by 1,4%[21].

The consumption of canned tuna is decreasing but continues being the main canned product consumed by the Spanish homes. Cockles, squid and anchovies are canned products with the most important decrease of the consumption volume between 2022 and 2023: -13,8% for cockles; -12,7% for squid and -11,4% for anchovy.

[18] https://servicio.mapama.gob.es/es/alimentacion/temas/consumo-tendencias/informe_2023_baja_tcm30-685878.pdf
[19] *ibidem*
[20] Alimarket – Informe 2024 del sector de conservas y semiconservas de pescado y marisco en España.
[21] Source: ANFACO-CECOPESCA

Table 32: Consumption of fishery and aquaculture canned products in Spanish houselholds

	2022		2023	
	Tonnes	1.000 EUR	Tonnes	1.000 EUR
Tuna	93.970	868.770	93.157	959.945
Mussels	11.996	120.587	11.698	130.332
Sardines	9.650	88.237	9.531	97.307
Anchovy	**3.829**	**87.639**	**3.393**	**88.411**
Cockles	2.983	69.447	2.572	63.985
Mackerel	5.663	54.646	5.610	59.721
Squid	4.630	39.925	4.039	37.083
Clams	1.323	15.001	1.359	16.240
Octopus	371	4.119	388	4.196
Other canned fish	35.841	418.917	34.495	445.594
TOTAL	170.256	1.767.288	166.242	1.902.814

Source: ANFACO-CECOPESCA

According to data provided by MAPA[22], the year 2023 closes on a negative note for the purchase of canned anchovies, with a decrease of 11,8% in the volume of canned anchovies purchased by Spanish households. The average price paid per kilo increased by 14.1 %, closing at 26.25 €/kilo, which slightly offset the fall in consumption and meant that the market value closed 0.6 % higher.

The average expenditure per person per year at the end of 2023 was 1,87 EUR, slightly 0.5% lower than the previous year. Per capita consumption was 0,07 kilos per person, 12.8% lower than the year before.

Table 33 – Consumption data of canned anchovy in 2023

	Household consumption	Evol. vs 2022
Volume (t)	3 332	-11,8%
Value (1000 EUR)	87 455	0,6%
Consumption per capita (kg)	0,07	-12,8%
Expense per capita (EUR)	1,87	-0,5%
% of the food market in volume	0,01	0,0%
% of the food market in value	0,11	0,0%
Average retail price (EUR/kg)	26,25	14,1%

Source: MAPA (Informe del consumo alimentario 2023)

[22] https://www.mapa.gob.es/es/alimentacion/temas/consumo-tendencias/panel-de-consumo-alimentario/ultimos-datos/default.aspx

4.3 Price transmission in the supply chain

4.3.1 First-sale prices

First sales of European anchovy in Spain remained relatively stable over the last decade. First sale volumes have slightly increased (+2%), reaching 49.930 tonnes in 2024 after peaking in 2018 at 54.336 tonnes. Since 2022, volumes of first sale have increased by 15% in Spanish ports. The value of first sales increased by 7% over the same period (+13% over the two last years) and amounted to EUR 91 million in 2024. Between 2015 and 2024, the price of European anchovy first-sales displayed a slight increase (+5%), reaching 1,83 EUR/kg in 2024 against 1,73 EUR/kg in 2015.

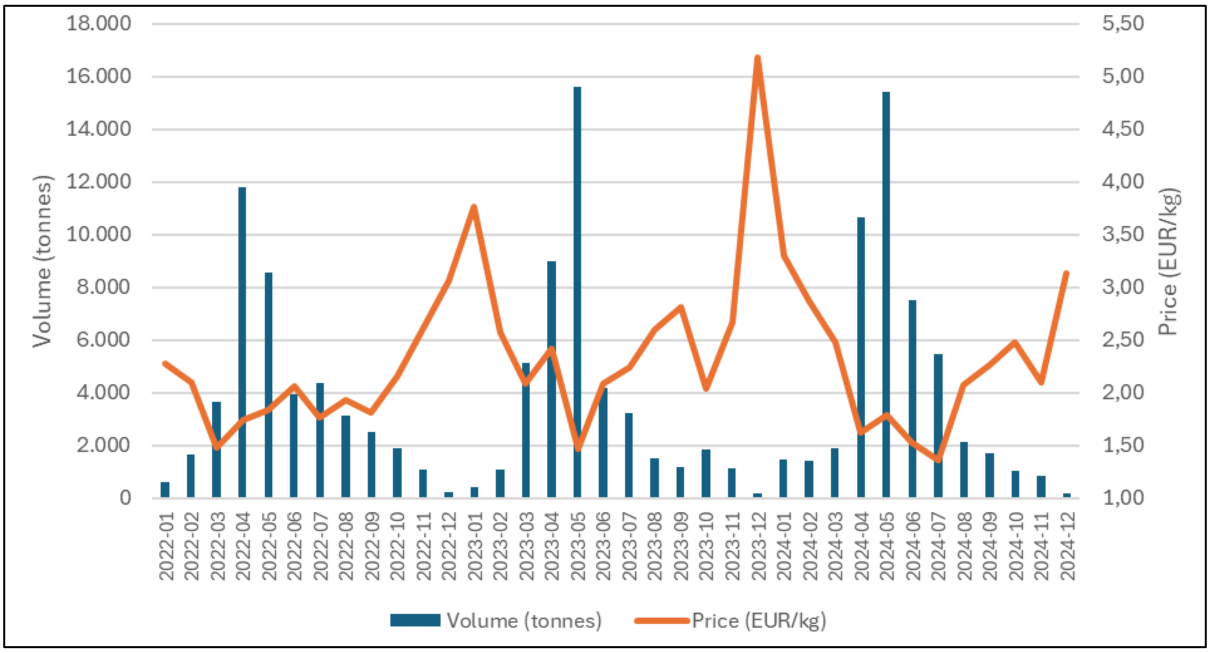
Table 34: First-sale prices for European anchovy in Spain (2015-2024)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Evolution 2024/15
Volume (tonnes)	48.985	53.146	47.747	54.336	47.311	48.449	49.660	43.580	44.536	49.930	2%
Nominal value (1.000 EUR)	84.907	94.919	82.677	81.638	81.765	72.057	83.915	80.896	90.986	91.196	7%
Price (EUR/kg)	1,73	1,79	1,73	1,50	1,73	1,49	1,69	1,86	2,04	1,83	5%

Source: data transmitted by MAPA to EUMOFA

In Spain, European anchovy first sale prices depend largely on the season according to EUMOFA data. Fisheries targeting anchovy have a continuous activity all-yearlong with a high seasonality, fisheries are more intense from March to June with a clear peak in the volumes caught in April and May (reaching almost 16.000 tonnes in May 2023 and May 2024). First sales are the lowest from November to February (less than 2.000 tonnes). Prices of first sale follow an inverted trend with lower prices at the beginning of the fishing season and highest prices reached around December and January.

Figure 11: European anchovy monthly first-sale volumes and first-sale prices in Spanish ports between 2022 and 2024 (in tonnes net weight and EUR/kg)



Source: data transmitted by MAPA to EUMOFA

4.3.2 Import and export prices

Import prices of prepared/preserved anchovies in Spain increased by 19% between 2020 and 2024. Main import countries are Morocco and Peru (93% of 2023 import value). Import prices from Morocco reached 9,84 EUR/kg in 2024, they increased by 9% over the period, while volumes imported increased at a higher rate (+63%). Import prices from Peru strongly increased between 2020 and 2025 (+55%) in relation to the small increased of volumes imported (+7% over the same period) but to the strong increase of the value (+65%), reaching 12,34 EUR/kg in 2024.

Table 22: Import price for prepared/preserved anchovy in Spain by main supplier (2020 to 2024)

	2020	2021	2022	2023	2024	Evol 2020/24
Morocco	9,01	8,85	9,18	9,71	9,84	9%
Peru	7,95	7,95	8,21	8,86	12,34	55%
Total	**8,55**	**7,90**	**8,61**	**9,59**	**10,23**	**19%**

Source: EUMOFA elaboration based on EUROSTAT-COMEXT data

The export price increased by 26% between 2020 and 2024. Export prices to the United Kingdom and to the United States increased the most over the period (+46% and +50% respectively) reaching 20,48 EUR/kg and 16,20 EUR/kg, in relation to the decrease of the volume exported to the UK (-42% in volume) and the greater increase rate of the value exported to the USA (+94% in value). Exports to France of prepared/preserved anchovies decrease in volumes but in a smaller extent (-9%), resulting in a slight increase in export prices (+23% since 2020), reaching 15,44 EUR/kg in 2024. Exports to Italy have increased since 2020 (+29%, first destination of Spanish exports, amounting to 823 tonnes). Export prices followed a similar trend, increasing by 27% over the period, reaching 18,34 EUR/kg in 2024.

Table 23: Export price for prepared/preserved anchovy in Spain by main destination (2020 to 2024)

	2020	2021	2022	2023	2024	Evol 2020/24
Italy	14,48	14,39	15,88	17,79	18,34	27%
United Kingdom	14,05	13,64	17,04	19,03	20,48	46%
United States	10,81	9,24	11,87	13,58	16,20	50%
France	12,58	10,16	12,79	13,70	15,44	23%
Total	**13,90**	**12,83**	**14,58**	**16,33**	**17,51**	**26%**

Source: EUMOFA elaboration based on EUROSTAT-COMEXT data

4.3.3 Ex-factory prices

Data published by MAPA in the framework of the fishery statistics (products of the fish processing industries) [23], gives separate data on the industry of canned fish. The following table presents the ex-factory prices of prepared and preserved anchovy.

These data are coherent with data collected through interviews for the two main canned anchovy products on which we will develop a transmission price analysis: canned anchovy in vinegar or pickled and other canned anchovy (mainly in olive oil).

According to the type of product, prices differ from 10,5 EUR/kg for dried, salted, in brine and smoked anchovies to 21,8 EUR/kg for other canned anchovy, in 2023.

[23] Estadísticas pesqueras: Productos de las Industrias de procesado de pescado

Table 24: Ex-factory prices for prepared-preserved anchovy in Spain

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Dried, salted, in brine and smoked										
Volume (t)	1 474	2 023	1 702	1 944	1 958	2 123	1 416	2 418	3 533	1 556
Value (1000 EUR)	18 948	20 488	22 034	23 790	22 906	18 801	12 645	18 322	19 629	16 385
Price (EUR/kg)	**12,9**	**10,1**	**12,9**	**12,2**	**11,7**	**8,9**	**8,9**	**7,6**	**5,6**	**10,5**
Canned or prepared										
In vinegar or pickled										
Volume (t)	6 931	2 167	2 485	2 328	2 253	2 439	2 330	3 587	3 237	3 332
Value (1000 EUR)	46 241	21 811	24 076	23 740	23 386	24 745	25 865	38 401	40 604	48 721
Price (EUR/kg)	**6,7**	**10,1**	**9,7**	**10,2**	**10,4**	**10,1**	**11,1**	**10,7**	**12,5**	**14,6**
Other canned anchovy (oils…)										
Volume (t)	265 050	8 229	8 639	8 792	8 921	8 953	7 667	9 150	8 082	7 646
Value (1000 EUR)	1 452 807	101 404	110 162	108 494	109 423	111 425	113 204	134 792	130 833	166 971
Price (EUR/kg)	**5,5**	**12,3**	**12,8**	**12,3**	**12,3**	**12,4**	**14,8**	**14,7**	**16,2**	**21,8**

Source: MAPA

4.3.4 Retail prices

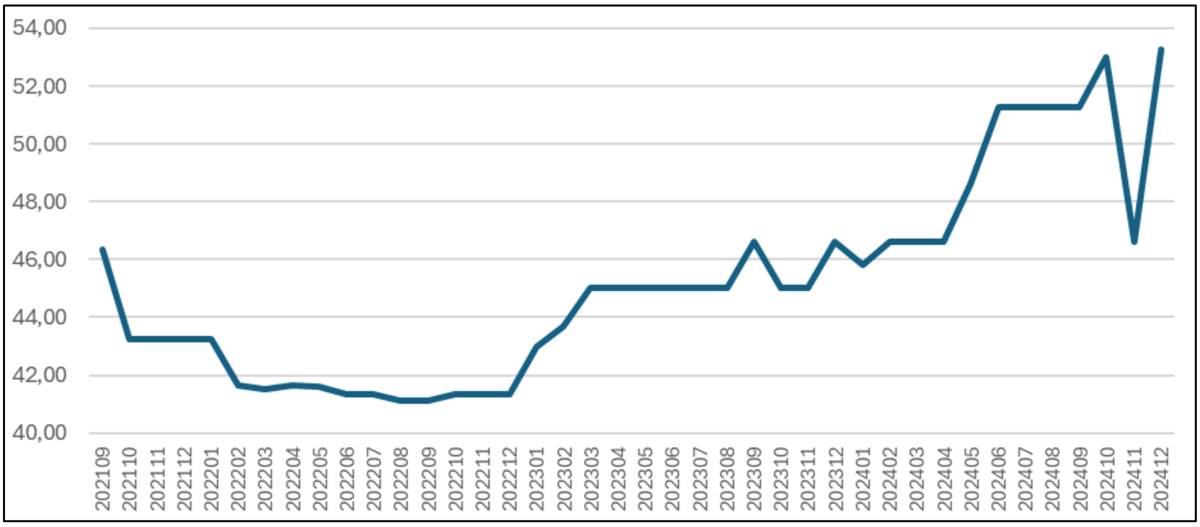
Online retail prices in Spain are available on EUMOFA for anchovy fillets in olive oil (cans of 100-200 g)[24]. Since September 2021, prices have increased by 15%, from 46,33 EUR/kg (6,95 EUR/unit) to 53,27 EUR/kg (7,99 EUR/unit) in December 2024. Over this period, prices have first declined and remained stable at 41,33 EUR/kg in December 2022 before increasing again to 45 EUR/kg and stabilising until April 2024. Prices strongly increased over the last months (+14% between April and December 2024) reaching 53,27 EUR/kg in December 2024, despite a low price in November 2024.

For the year 2023 only, on which the price transmission analysis will be based, the average retail price was 44,90 EUR/kg.

As a general comment, these retail prices are higher than prices given by producers and wholesalers interviewed, due to the type of canned product considered: canned anchovy in olive oil is more expensive than canned anchovy in vinegar (*Boquerón*).

[24] https://www.eumofa.eu/fr/online-shop-retail-prices

Figure 12: Retail price for anchovy fillets in olive oil in Spain (2021-2024) (EUR/kg)



Source: EUMOFA - Online shop retail prices

The following table presents at-home consumption data, based on the observatory of food prices from MAPA[25]. The average price calculated here is 25,94 EUR/kg in 2023.

This price is usually different from prices observed in stores as this is an average based on total spending for a panel of consumers. Moreover, these data include all types of prepared and preserved anchovies. Based on producers and wholesalers' interviews, these data generally underestimate the average price.

Table 25: Retail price of anchovy in Spain (EUR/kg)

	2018	2019	2020	2021	2022	2023	Evol. 23/18
Prepared or preserved anchovy	19,98	20,61	21,49	21,77	23,00	25,94	30%

Source: MAPA

To obtain retail prices of canned anchovies in vinegar (*boquerones*), on which a second price transmission analysis will be done, a survey of several online shops of large-scale retailers has been conducted in March 2025. It provides an average price of 30,3 EUR/kg.

[25] https://www.mapa.gob.es/es/alimentacion/temas/consumo-tendencias/panel-de-consumo-alimentario/series-anuales/default.aspx

Table 26 – Monitoring of prices in online shops in Spain (March 2025)

Detail on the product	Price (EUR/kg)
Boquerón in vinegar (265g) - Carrefour	21,32
Boquerón in vinegar (200g) - Mas	27,45
Boquerón in vinegar (125g) - El Corte Inglès	39,30
Boquerón in vinegar MSC (80g) - Dia	29,88
Boquerón in vinegar (50g) - Eroski	39,80
Boquerón filets in vinegar and vegetal oil (100g) - Al Campo	26,00
Boquerón in vinegar extra large (850g) – Mercado salado	28,17

Source: Online shop retail prices - EUMOFA

4.3.5 Price transmission

Two price transmission analyses are provided, they cover the two main prepared Spanish products from anchovy sold in supermarkets:

- Canned anchovy (*boquerón*) in vinegar,
- Canned anchovy (*anchoa*) in olive oil.

<u>Canned anchovy (*Boquéron*) in vinegar retailed in supermarkets (can of 75 g)</u>

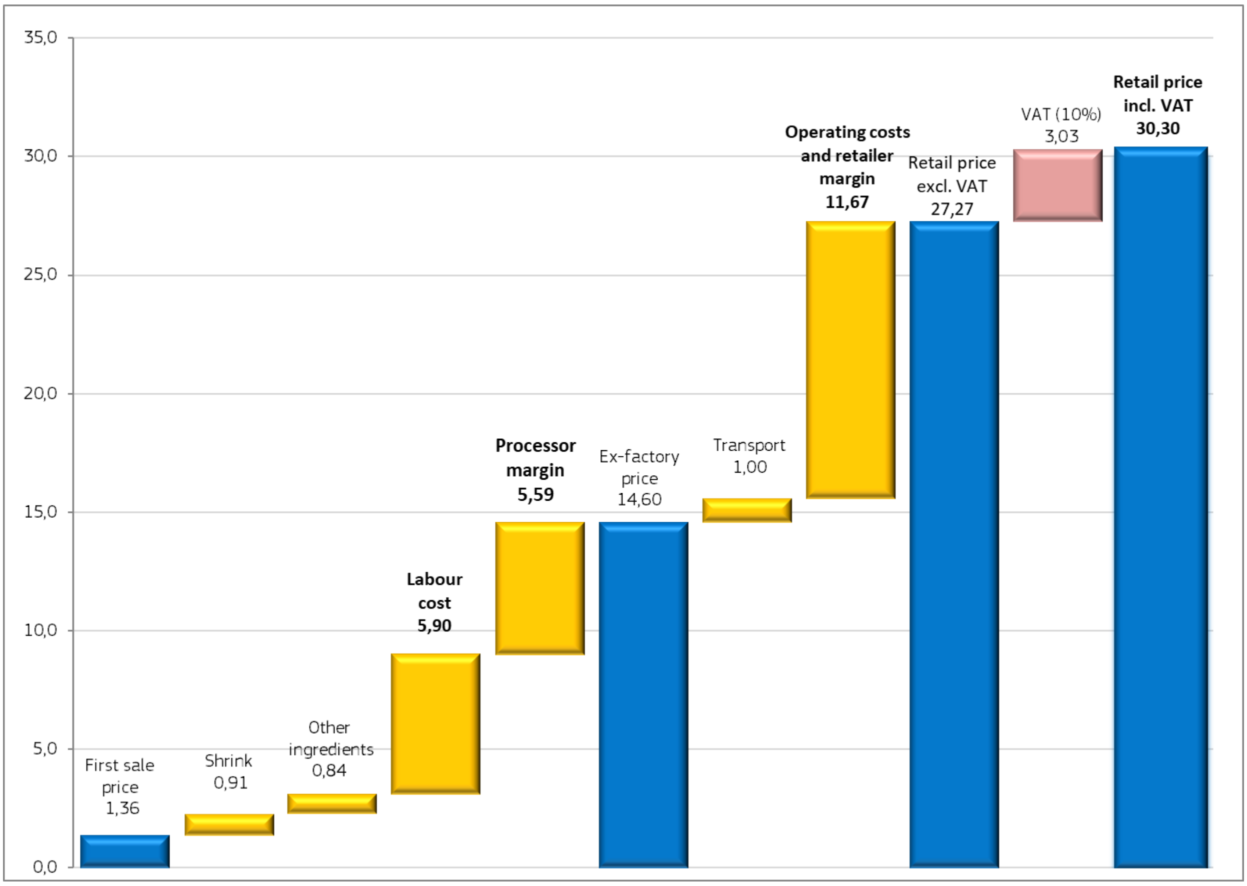
The first analysis covers canned anchovies (*boquerones*) in vinegar, of Spanish origin, sold in supermarkets. Together with the canned anchovies (*anchoa*) in olive oil, they are the most common anchovy products sold in Spain. Based on available data and interviews, the ex-factory price is estimated at 14,60 EUR/kg, which represents 48% of the final price. This ex-factory price includes 40% of labour costs, 6% of loss and shrink and 6% of other ingredients, can, packaging and industrial costs. The final price (including VAT) is estimated at 30,30 EUR/kg; including the transport and the operating costs and margin of the retailer. These prices are based on interviews with stakeholders, statistical data and a survey of online shops.

Table 40: Costs and margin for canned anchovies in vinegar (*Boquerones*) and retailed by supermarkets in Spain (EUR/kg of final product, 2023)

	€/kg of final product	% of	% of	
2023	Average	wholesale price	retail price	Source
Raw material	**1,36**	9%	6%	Eurostat
Loss / shrink (40%)	0,91	6%	3%	Interviews
Other ingredients (vinegar, salt), can, packaging and industrial costs	0,84	6%	3%	Interviews
Labour costs	5,90	40%	20%	Interviews
Processor margin	5,59	38%	17%	Interviews
Ex-factory price	**14,60**	100%	48%	MAPA*
Transport platform -> shop	1,00		3%	Interviews
Operating costs and retailer margin	11,67		39%	Interviews
Average selling price, exclusive of VAT	**27,27**		90%	NA
VAT (10%)	3,03		10%	NA
Average selling price	**30,30**		100%	Online data

Source: EUMOFA survey (last year available for MAPA dataset = 2023)*

Figure 13: Costs and margins for canned anchovies in vinegar (*Boquerones*) and retailed by supermarkets in Spain (EUR/kg of final product, 2023)



Source: EUMOFA survey

Legend: intermediate costs and margin in yellow; product price in blue; VAT is in pink

<u>Canned anchovy in olive oil retailed in supermarkets (can of 75 g)</u>

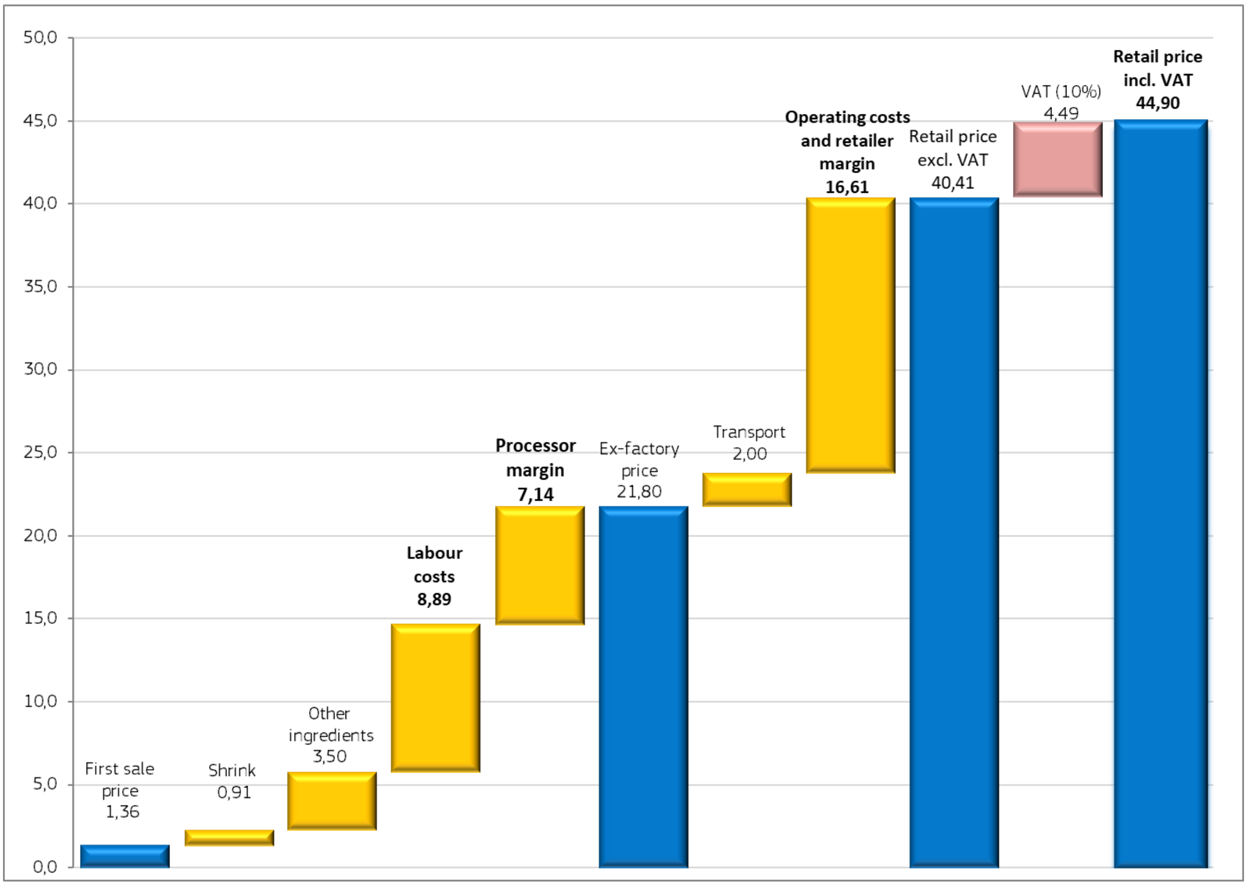
The second analysis covers canned anchovies (*anchoa*) in olive oil, of Spanish origin, sold in supermarkets. Together with the canned anchovies (*boquerones*) in vinegar, they are the most common anchovy products sold in Spain. Based on available data and interviews, the ex-factory price is estimated at 21,80 EUR/kg, which represents 49% of the final price. This ex-factory price includes 41% of labour costs, 4% of loss and shrink and 16% of other ingredients, can, packaging and industrial costs. The final price (including VAT) is estimated at 44,90 EUR/kg; including the transport and the operating costs and margin of the retailer. These prices are based on interviews with stakeholders, statistical data and a survey of online shops.

Table 41: Costs and margin for canned anchovies in olive oil (*Anchoa*) and retailed by supermarkets in Spain (EUR/kg of final product, 2023)

	€/kg of final product	% of	% of	
2023	Average	wholesale price	retail price	Source
Raw material	**1,36**	6%	4%	Eurostat
Loss / shrink (40%)	0,91	4%	2%	Interviews
Other ingredients (oil, salt), can, packaging and industrial costs	3,50	16%	8%	Interviews
Labour costs	8,89	41%	20%	Interviews
Processor margin	7,14	33%	15%	Interviews
Ex-factory price	**21,80**	100%	49%	MAPA*
Transport platform -> shop	2,00		4%	Interviews
Operating costs and retailer margin	16,61		37%	Interviews
Average selling price, exclusive of VAT	**40,41**		90%	NA
VAT (10%)	4,49		10%	NA
Average selling price	**44,90**		100%	EUMOFA

Source: EUMOFA survey (last year available for MAPA dataset = 2023)*

Figure 14: Costs and margin for canned anchovies in olive oil (Anchoa) and retailed by supermarkets in Spain (EUR/kg of final product, 2023)



Source: EUMOFA survey

Legend: intermediate costs and margin in yellow; product price in blue; VAT is in pink

5 THE CROATIAN MARKET

5.1 Structure of the supply chain

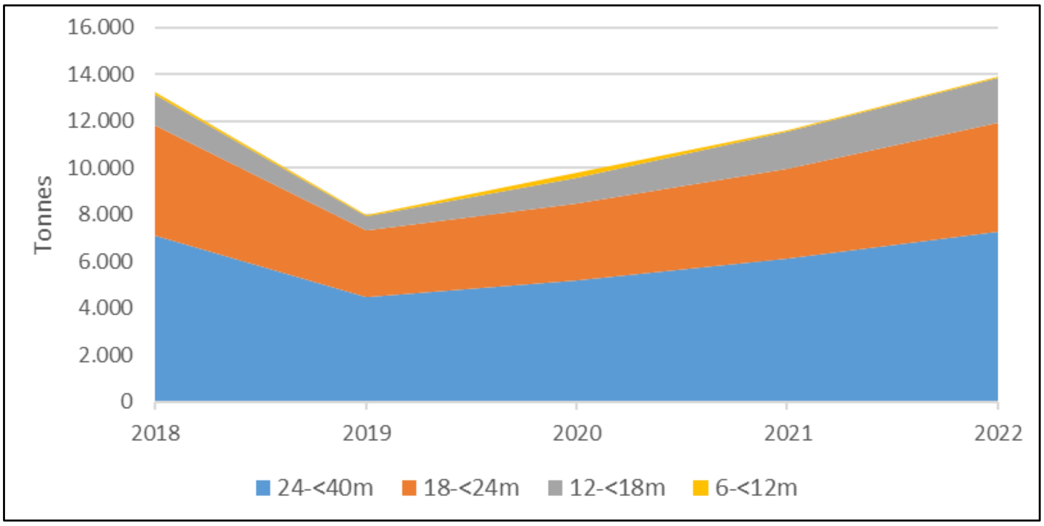
5.1.1 Production

Characteristics of the fleet

According to interviews, small pelagic species (sardine and anchovy as most important) targeted in purse seine fisheries dominate the overall catch structure in Croatia (77% of total volume and 37% of total value of fish products landed in 2023).

Catches of European anchovy by the Croatian fleet were mainly made by large vessels from 24 to 40 meters (accounting for 52% of Croatian landings of anchovy in volume in 2022), followed by vessels between 18 and 24 meters (33% of the landings in volume), and to a lesser extent by vessels ranging from 12 to 18 meters (14% of the volume). European anchovy was caught almost exclusively by purse seiners.

Figure 15: Evolution of Croatian landings of European anchovy by vessel length (tonnes)



Source: -STECF (2022, last year available)

According to Eurostat data, the Croatian fleet caught 13.840 tonnes of anchovy in 2023. Catches of anchovy were stable compared to 2022 but 36% higher than in 2014. Overall, anchovy catches showed an increasing trend between 2014 and 2023, with annual fluctuations. According to interviews, the evolution of anchovy catches is linked to the reduction in number of purse seine vessels, stock fluctuations, and various regional and national management plans at the level of the Adriatic Sea that have been implemented over the observed period.

Since October 2013, the exploitation of anchovy (and sardine) has been regulated under the GFCM multiannual management plan for small pelagic stocks in geographical subareas GSA 17-18. Amendments to this plan, along with emergency measures implemented under its framework, were adopted in 2014, 2015, 2016, and 2018. A new GFCM management plan was introduced in 2021, mandating compliance for all vessels actively engaged in anchovy and sardine fishing within GSA 17-18. At the EU level, Regulation (EU) No 2023/2124 imposes a fishing activity limit of 20 days per month, with a total maximum of 180 fishing days per year. At national level, the legal framework maintains an annual limit of 144 fishing days for vessels targeting anchovies[26]. There are also spatial and temporal closures implemented in this fishery, targeting the spawning period[27].

Table 42: Anchovy production in Croatia between 2014 and 2023 (tonnes)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 14/23
Catches	10.142	12.797	8.239	10.883	13.264	7.996	9.784	11.627	13.919	13.840	36%

Source: Eurostat

5.1.2 Imports

Imports

Croatia imported a total of 1.937 tonnes of anchovy in 2024, valued at EUR 4,8 million. Between 2020 and 2024, Croatian imports of anchovy decreased in volume by 19%, though a peak at 4.435 tonnes was reached in 2021. During the same period, the nominal value remained stable, while the nominal price increased by 24% overall, from 2,01 EUR/kg in 2020 to 2,49 EUR/kg in 2024.

Fresh anchovy dominated imports in 2024, representing 36% of the total value (EUR 1,7 million, equivalent to 945 tonnes). Italy was the main supplier of fresh anchovy (61% of imported volume), followed by Spain (39%). Frozen anchovy accounted for 26% of the import value in 2024, Spain and Italy were the main suppliers (respectively 52% and 21% of the imported volume). Prepared and prepared anchovy imports accounted for 25% of the total value in 2024, originating almost exclusively from Spain (53% of the imported volume) and Italy (34%). Salted anchovy accounted for 12% of the imported value, originating exclusively from Spain.

Table 43: Imports of Anchovy to Croatia in 2024 (volumes in tonnes product weight)

	Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% Value 2024
Live/Fresh	1.737	945	1,84	36%
Frozen	1.263	744	1,70	26%
Prepared/Preserved	1.227	112	10,94	25%
Salted	580	134	4,32	12%
Dried	14	2	6,61	0%
Total	**4.820**	**1.937**	**2,49**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

[26] https://narodne-novine.nn.hr/clanci/sluzbeni/2022_02_23_291.html
[27] National fishing fleet report on the balance between fishing capacity and fishing opportunities in 2023, Ministry of Agriculture, forestry and fisheries, Directorate of Fisheries, 2024.

Table 44: Evolution of imports of anchovy to Croatia between 2020 and 2024 (volume in tonnes product weight)

	2020	2021	2022	2023	2024	Evolution 20/24
Volume (tonnes)	2.404	4.435	2.780	2.219	1.937	-19%
Value (1.000 EUR)	4.834	10.816	7.112	5.566	4.820	-0,3%
Price (EUR/kg)	2,01	2,44	2,56	2,51	2,49	24%

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 27: Evolution of Croatian imports of anchovy by supplier (tonnes product weight, 2020-2024)

	2020	2021	2022	2023	2024	Evolution 20/24
Spain	1.708	2.756	1.707	806	950	-44%
Italy	233	969	766	903	766	228%
United States	n.d.	n.d.	n.d.	n.d.	96	n.a.
Morocco	n.d.	n.d.	n.d.	n.d.	48	n.a.
France	n.d.	40	n.d.	21	42	n.a.
Romania	0	n.d.	n.d.	n.d.	20	n.a.
Albania	7	159	130	9	11	57%
Others	456	511	177	479	4	-99%
Total	**2.404**	**4.435**	**2.780**	**2.219**	**1.937**	**-19%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Supply

In 2023, the supply of anchovy in Croatia reached 16.337 tonnes LWE, made up of 85% of catches and 15% of imports. Between 2014 and 2023, the share of Croatian catches in the supply for anchovy decreased from 92% to 85%. This decline was due to a sharp increase in anchovy imports (from 920 tonnes in 2014 to 2.497 tonnes LWE in 2023). Over the past decade, Croatian supply of anchovy increased by 48%.

Table 28: Contribution of imports and production to domestic supply of anchovy in Croatia (tonnes LWE, 2014-2023)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Evolution 23/14
Catches	10.142	12.797	8.239	10.883	13.264	7.996	9.784	11.627	13.919	13.840	36%
Imports	920	991	1.399	1.654	697	644	2.734	5.161	3.278	2.497	171%
Total	**11.062**	**13.788**	**9.638**	**12.538**	**13.962**	**8.640**	**12.518**	**16.788**	**17.197**	**16.337**	**48%**

Source: EUROSTAT-COMEXT

5.1.3 Exports

Croatia exported a total of 10.617 tonnes of anchovy in 2024, valued at EUR 31 million. Between 2020 and 2024, Croatian exports of anchovy increased by 15% in volume, reaching over 13.000 tonnes in 2021, 2022 and 2023. During the same period, the nominal value increased by 23%, while the nominal price rose by 7%, from 2,73 EUR/kg in 2020 to 2,92 EUR/kg in 2024.

Salted anchovy dominated exports in 2024, representing 37% of the total value (EUR 11,5 million, equivalent to 3.083 tonnes). The main destinations of salted anchovy were Albania (75% of the prepared exported volume) and Italy to a smaller extent (21%). Frozen anchovy accounted for 26% of the export value in 2024 (4.395 tonnes), Greece was the primary destination of frozen exports (representing 28% of the exported volume), followed by Albania (24%), Spain (22%) and Bulgaria to a smaller extent (13%). Exports of prepared and preserved anchovy accounted for 24% of the exported value (1.114 tonnes), the main destinations were Italy (74% of the exported volume) and Spain (22%). Fresh anchovy accounted for 12% of the total export value (1.997 tonnes), Albania and Italy were the primary destinations for fresh anchovy (53% and 47% of the volume respectively).

Table 29: Exports of anchovy from Croatia in 2024 by preservation (volumes in tonnes product weight)

	Value (1.000 EUR)	Volume (tonnes)	Price (EUR/kg)	% Value 2024
Salted	11.555	3.083	3,75	37%
Frozen	8.003	4.395	1,82	26%
Prepared/Preserved	7.412	1.114	6,66	24%
Live/Fresh	3.849	1.997	1,93	12%
Dried	202	29	7,02	1%
Total	**31.021**	**10.617**	**2,92**	**100%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Table 30: Evolution of croatian exports of anchovy between 2020 and 2024 (volumes in tonnes product weight)

	2020	2021	2022	2023	2024	Evolution 20/24
Volume (tonnes)	7.929	9.253	13.004	13.276	13.046	62%
Value (1.000EUR)	20.180	25.272	31.859	36.140	35.502	99%
Price (EUR/kg)	2,55	2,73	2,45	2,72	2,72	23%

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

Albania was the main destination of Croatian anchovy exports over the period (2020-2024), exports have increased by 10% to this destination, and by 15% overall. Exports to Italy (the second destination in volume in 2024) increased by 51% between 2020 and 2024 while exports to Spain have increased by 19% over the same period. Exports to Greece and Bulgaria have strongly increased over the period (+159% and +115% respectively) while exports to Bosnia Herzegovina drastically declined, from being the third destination to only 1 tonne exported.

Table 31: Evolution of Croatian exports of anchovy by destination (tonnes product weight, 2020-2024)

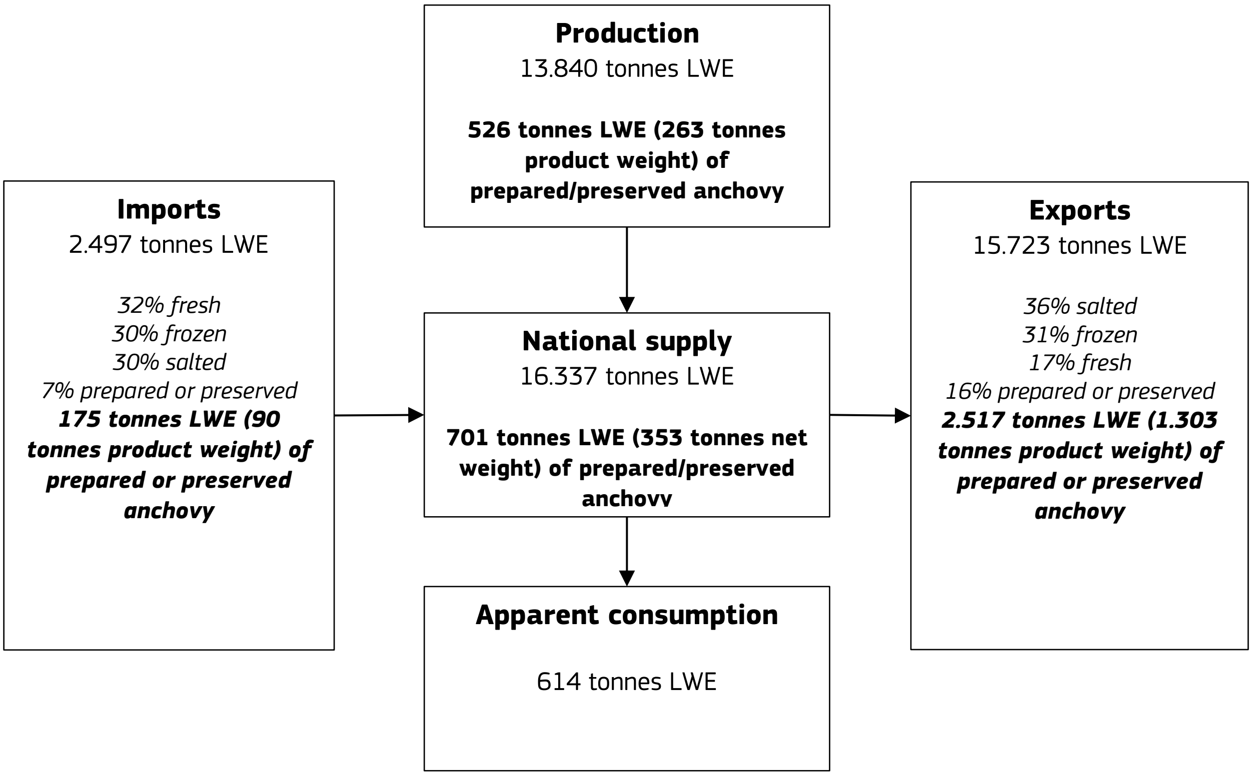
	2020	2021	2022	2023	2024	Evolution 20/24
Albania	4.031	4.781	5.200	4.585	4.444	10%
Italy	1.856	2.623	2.566	3.309	2.807	51%
Greece	504	1.020	826	1.456	1.305	159%
Spain	1.033	2.217	1.669	2.133	1.229	19%
Bulgaria	257	554	563	638	552	115%
Bosnia and Herzegovina	1.472	1.702	1.960	708	1	-100%
Others	101	108	491	238	280	177%
Total	**9.253**	**13.004**	**13.275**	**13.067**	**10.617**	**15%**

Source: EUMOFA elaboration of EUROSTAT-COMEXT data

5.1.4 Apparent consumption

In 2023, the total supply of anchovy in Croatia amounted to 16.337 tonnes in LWE, 85% from national production and 15% from imports. Almost all the national supply was exported (96%, amounting to 15.704 tonnes LWE), thus, 4% can be estimated as apparent consumption, amounting to 632 tonnes LWE for the national market.

Figure 16: Supply balance for anchovy in Croatia (2023, tonnes LWE)



Note: percentages provided in the figure are in LWE
Source: EUMOFA elaboration based on EUROSTAT data

It is worth noting the discrepancies between the supply of prepared/preserved anchovies and the exports of these products. People interviewed confirmed the reason behind higher exports compared to the annual supply (catches + imports). Namely, the majority of exports were prepared/preserved anchovies, these products take several months to be ready for the market. Therefore, all exported volumes do not originate from the same year, explaining the lag between the supply and the exports.

5.2 Characteristics of the Croatian market and consumption

5.2.1 Characteristics of the market

Consumption of anchovies in Croatia mainly consists of preserved anchovies, originating mostly from national catches. The market segmentation on the Croatian market for anchovy is based on:

- **The type of presentation (whole or fillet)**, the product is often retailed whole gutted but may also be retailed filleted (there is no data is available on the share of whole compared to fillet). Regardless of the final presentation, anchovies are first placed in brine (a mixture of water and salt) to extract blood from the fish. They are then decapitated and gutted by employees before being placed in round tins, layering fish and salt alternatively, for the curing phase that lasts 4 months or more (up to twelve months). When fish is sold whole gutted, the product undergoes a final quality control, additional cleaning and further salting before being sealed and ready for market distribution. When the fish is sold filleted, the filleting is done manually by employees after two to three months of the curing process before packaging into oil.
- **The type of preservation (salted, marinated in oil, other preservation methods) and the length of maturation**
- **The colour of the fish:** for marinated anchovies, the whiter the colour, the higher the class, and therefore, the price
- **The size of the fish,** "pecatura" in Croatian, designating the number of fish per kilogram.
- **The quality of the fish** visually assessed – intact or ruptures entrails, depends on how the anchovy was shocked, catches, stores, among other factors such as air and sea temperature as well.

The breakdown of sales for Croatian anchovy is (based on interviews with stakeholders):

- 60% in large-scale retail (the share of imported products is assessed to be higher in large-scale retail);
- 40% in HORECA.

Among the surveyed companies and based on researched available online sources, there are no anchovy products with international certification yet. However, at national level, anchovy products can be certified by national brand label such as "Produced in Croatia" or "Fish from Croatia - Eat what is worth eating" by Croatian Chamber of Commerce.

5.2.2 Consumption

Anchovy products are seasonal, mostly consumed in summer (during the fishery season) by tourists in HORECA and during the Easter and Christmas period. EUMOFA data concerning household consumption of anchovy are not available for Croatia.

5.3 Price transmission in the supply chain

5.3.1 Landing prices

First-sale prices of anchovy are not available for Croatia on EUMOFA. Thus, the analysis is based on the landing prices (available until 2022) which result in prices coherent with data collected during the interviews.

Landings of European anchovy in Croatia have increased by 51% in volume over the last decade, since 2018 they have fluctuated, reaching their lowest volume in 2019 (7.993 tonnes) before steadily increasing to reach 13.912 tonnes in 2022. The value of landings followed a similar trend, increasing by 13% since 2018, amounting to EUR 13 million in 2022. Since 2018, the price of European anchovy landings fluctuated stable, with an overall increase of 8%, reaching 0,94 EUR/kg in 2022.

Table 50: Landing prices of anchovy in Croatia between 2018 and 2022 (tonnes net weight)

	2018	2019	2020	2021	2022*	Evolution 18/22
Volume (tonnes)	13.251	7.993	9.781	11.621	13.912	51%
Nominal value (1.000 EUR)	11.481	7.255	8.737	10.344	13.039	53%
Price (EUR/kg)	0,87	0,91	0,89	0,89	0,94	1%

Source: EUMOFA elaboration based on EUROSTAT data

**Latest year available*

5.3.2 Import and export prices

The main trade flow in terms of volume for anchovy to Croatia is the import of fresh anchovy (945 tonnes in 2024, peaking at 1.746 tonnes in 2021). The price was 1,84 EUR/kg in 2024 (+0,37 EUR/kg compared to 2020), this price is on an upward trend since 2020 (1,47 EUR/kg). Italy and Spain are the only suppliers of fresh anchovy, accounting for 61% and 39% of the volume respectively. Fresh imports from Italy increased by 349% in volume and by 445% in value since 2020, thus the price increased by 21% in price, reaching 1,59 EUR/kg in 2024. Fresh imports from Spain fluctuated significantly over the same period, decreasing overall by 53%, and peaking at 1.054 tonnes in 2021. The value of fresh imports from Spain decreased by 31% since 2020. The price increased by 49%, reaching 2,22 EUR/kg in 2024. Imports of salted anchovy decreased by 85% in volume since 2020 but increased by 12% in value. The price increased by 51% over the period, reaching 4,32 EUR/kg in 2024. Spain was the exclusive supplier in 2024. Bosnia Herzegovina used to be by far the main supplier but imports from this origin were null in 2024 (they reached 447 tonnes in 2023).

Import prices are the highest for prepared/preserved anchovy, reaching 10,84 EUR/kg in 2024 with an overall increase of 11% since 2020. The main suppliers were Spain and Italy, import prices from Italy slightly increased since 2020, reaching 13,11 EUR/kg in 2024, while they increased by 24% for imports from Spain, reaching 8,89 EUR/kg. However, the volumes imported remain limited with few tonnes each year (around 100 tonnes, except for 2021 and 2022).

Table 51: Import prices of anchovy products in Croatia

		2020	2021	2022	2023	2024	Evolution 2020/24
Fresh anchovies	Volume (tonnes)	921	1.746	1.392	801	945	3%
	Price (EUR/kg)	1,47	1,64	1,50	1,71	1,84	25%
Salted	Volume (tonnes)	897	1.529	771	571	134	-85%
	Price (EUR/kg)	2,85	3,09	3,29	3,54	4,32	51%
Prepared/preserved	Volume (tonnes)	26	216	200	90	112	328%
	Price (EUR/kg)	9,84	8,70	9,22	9,89	10,94	11%

Source: EUMOFA elaboration based on EUROSTAT data

In terms of exports, the main trade flow for anchovy from Croatia is the export of salted anchovy (11,6 million EUR in 2024). The main destinations for salted anchovies are Albania and Italy. Prices are slightly lower for exports to Albania, reaching respectively 3,69 EUR/kg for Albania and 4,02 EUR/kg for Italy in 2024. Volumes exported follow opposite trends with exports to Italy increasing by 103% in volume since 2020 and decreasing by 34% to Albania. Over the same period export prices slightly decreased for Italy (-5%) and increased for Albania (+15%).

Export prices of prepared/preserved anchovy are significantly higher than those of salted anchovy, reaching 6,66 EUR/kg in 2024. The main destination is Italy (822 tonnes in 2024) and Spain to a lesser extent (240 tonnes). Export prices to Italy increased by 18% between 2020 and 2024, reaching 6,30 EUR/kg in 2024. Export prices to Spain remained stable over the same period, reaching 7,59 EUR/kg in 2024, though volumes exported significantly increased (+285%).

Table 52: Croatian export prices of anchovy products to Italy and Albania

		2020	2021	2022	2023	2024	Evolution 2020/24
Salted exports to Italy	Volume (tonnes)	322	450	483	856	654	103%
	Price (EUR/kg)	4,22	4,21	4,36	3,84	4,02	-5%
Prepared/preserved exports to Italy	Volume (tonnes)	667	994	890	1.053	822	23%
	Price (EUR/kg)	5,33	5,18	5,77	5,88	6,30	18%
Salted exports to Albania	Volume (tonnes)	3.539	3.992	3.570	2.736	2.322	-34%
	Price (EUR/kg)	3,22	3,11	3,33	3,39	3,69	15%

Source: EUMOFA elaboration based on EUROSTAT-COMEXT data

5.3.3 Retail prices

Retail prices of anchovy products in Croatia were gathered by an expert (online price survey realised in March 2025).

Anchovy prices highly differ depending on the preservation method (salted, marinated, or frozen) and the ingredients used (type of oil). Retail prices for salted anchovies in extra virgin olive oil range between 41,58 EUR/kg and 46,58 EUR/kg while salted anchovies in sunflower oil range between 35,75 EUR/kg and 61,20 EUR/kg depending on the producer and the retailer. Whole frozen anchovies are available in one retailer, for a price of 3,69 EUR/kg.

Table 53: Prices of anchovy products in Croatian online supermarkets in March 2025

Product	Producer	Retailer	Volume net/drained	Price (EUR/unit) including VAT 25%)	Price (EUR/kg)
Salted anchovies in extra virgin olive oil	Pelagos	Konzum	120/70 g	4,99	41,58
Salted anchovies in extra virgin olive oil	Pelagos	Gligora	120/70 g	5,59	46,58
Salted anchovies in sunflower oil	Pelagos	Konzum	120/70 g	4,39	36,58
Salted anchovies in sunflower oil	Pelagos	Gligora	120/70 g	5,69	47,42
Salted anchovies in sunflower oil	Pelagos	Tommy	120/70 g	4,29	35,75
Salted anchovies in sunflower oil	Pelagos	Konzum	200/130 g	9,69	48,45
Salted anchovies in sunflower oil	Pelagos	Gligora	200/130 g	11,09	55,45
Salted anchovies in sunflower oil	Pelagos	Konzum	320/180 g	11,49	35,91
Salted anchovies in sunflower oil	Arbasol	Konzum	100/55 g	5,49	54,90
Salted anchovies in sunflower oil	Arbacommerce d.o.o.	Tommy	75 g	4,59	61,20
Salted anchovies in sunflower oil	Arbacommerce d.o.o.	Tommy	160 g	9,69	60,56
Salted anchovies in olive oil	Adriaticon d.o.o.	Tommy	212g	8,99	42,41
Adriatic anchovy – whole, frozen	Adria Mare	Konzum	1 kg	3,69	3,69

Source: country expert (online price quotes)

5.3.4 Price transmission

Two price transmission analyses are provided, they cover the two main prepared Croatian products from anchovy sold in supermarkets

- Salted anchovies in extra virgin olive oil (120/70 g)
- Salted anchovies in sunflower oil (160 g).

Processing accounts approximately for two thirds of the final costs. Processing costs include:

- Cans, packaging and industrial costs: 0,50 - 0,70 EUR/unit
- Cost of labour: starting as of minimum 7,00 EUR/hour with an average rate of 4kg of canned products/hour.

Salted anchovies in extra virgin olive oil retailed in Croatian supermarkets (120 g)

The first analysis covers salted anchovies in extra virgin olive oil (120/70 g) sold in Croatian supermarkets. It is the most common packaging size sold in retail. Based on available data and interviews, the raw material price is estimated between 0,50 EUR/kg and 1,70 EUR/kg. Retail price for salted anchovies in extra virgin olive oil (120/70 g) sold in supermarkets, is 46,58 EUR/kg. These prices are based on interviews with stakeholders and a survey of online shops.

Some processing companies have their own fishing fleet and processing plants. They proceed to primary processing including cleaning, salting and filleting of anchovies prior to marinate them with olive oil.

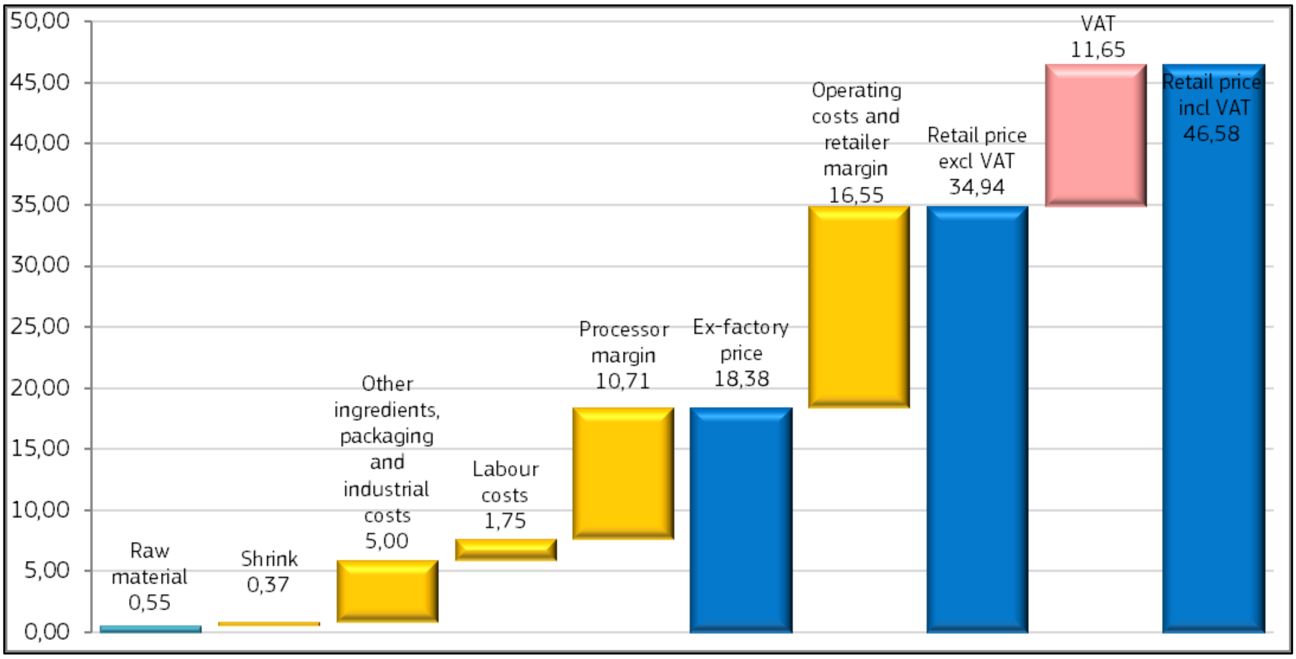
Table 54: Costs and margin for salted anchovies in olive oil, retailed in supermarkets in Croatia (EUR/kg of final product, 2024)

2024	EUR/kg of final product Average	% of retail price	Source
Raw material*	**0,55**	**1%**	Eurostat & interviews
Loss / shrink	0,37	1%	Interviews
Other ingredients (oil, salt), can, packaging and industrial costs	5,00	11%	Interviews
Labour costs	1,75	4%	Interviews
Processor margin	10,71	23%	Interviews
Ex-factory price	**18,38**	**39%**	Calculation
Operating costs and retailer margin	16,55	36%	Interviews
Average selling price, exclusive of VAT	**34,94**	**75%**	Calculation
VAT (25%)	11,65	25%	Country expert
Average selling price	**46,58**	**100%**	Country expert

Source: elaboration based on interviews and EUMOFA data

**first-sale prices of anchovies are not available for Croatia, price based on landings 2022 data (latest available)*

Figure 17: Costs and margins for salted anchovies in olive oil, retailed in supermarkets in Croatia (EUR/kg of final product, 2024)



Source: elaboration based on interviews and EUMOFA data

Legend: intermediate costs and margin in yellow product price in blue; VAT is in pink

Salted anchovies in sunflower oil retailed in Croatian specialised gift shops (212 g)

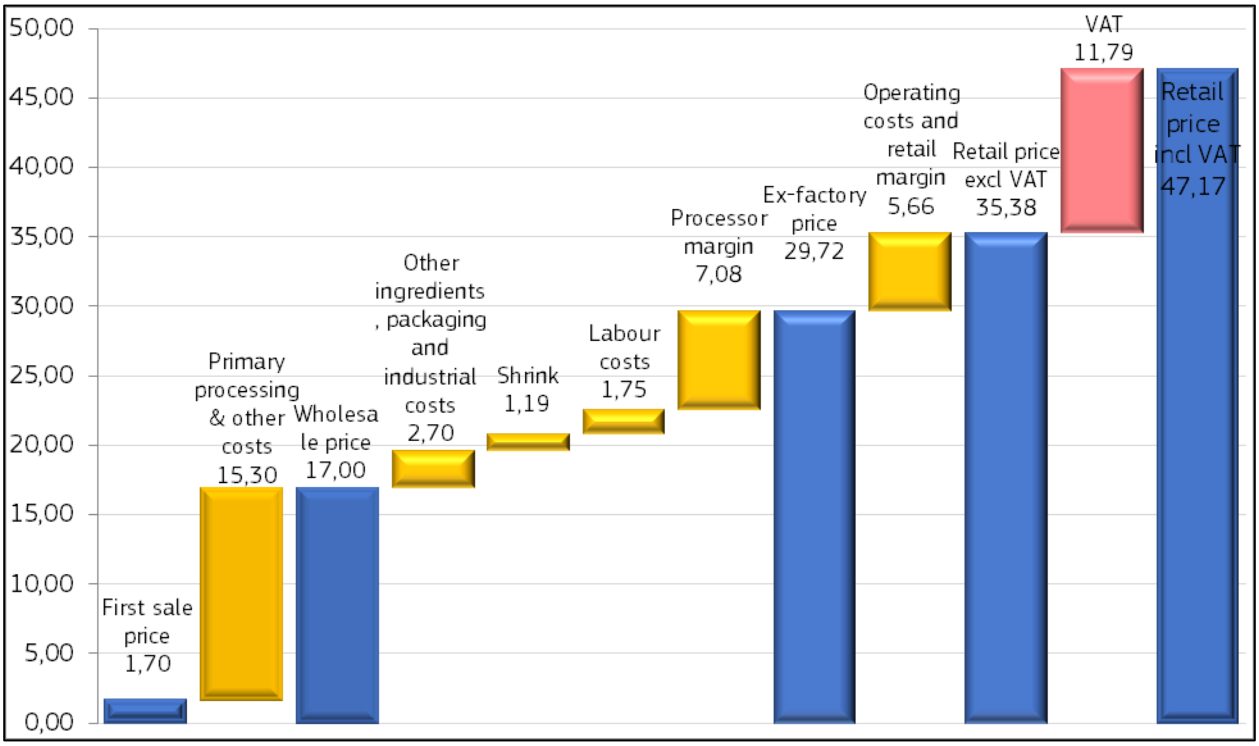
The second analysis covers premium salted anchovies in sunflower oil (212 g) sold in the producer own channels or in specialised gift shops. This analysis is based on an interview with a small producer. This product is considered premium due to its high-quality anchovies and processing. Based on interviews, the raw material to a wholesaler by the processor consists of already cleaned, salted and filleted anchovies (primary processing), for a price estimated at 17,00 EUR/kg. Value is then added to the product with marinade and seasoning. Retail price for salted anchovies in sunflowers oil (212 g) sold in specialised shops, is 47,17 EUR/kg. This price is based on a field survey by a country expert.

Table 32: Costs and margin for premium salted anchovies in sunflower oil, retailed in specialised gift shops in Croatia (EUR/kg of final product, 2024)

2024	EUR/kg of final product Average	% of retail price	Source
Raw material	**1,70**	4%	Interview
First processing (cleaning, salting and filleting) & other costs	**15,30**	32%	Calculation
Wholesale price	**17**	36%	Interviews
Other ingredients (oil, salt), packaging and industrial costs	2,70	6%	Interviews
Shrink	1,19	3%	Interviews
Labour costs	1,75	4%	Interviews
Processor margin	7,08	15%	Interviews
Ex-factory price	**29,72**	63%	Calculation
Transport, operating costs and retailer margin	5,66	12%	Calculation
Average selling price, exclusive of VAT	**35,38**	75%	Calculation
VAT (25%)	11,79	25%	Country expert
Average selling price	**47,17**	100%	Country expert

Source: elaboration based on interviews and EUMOFA data

Figure 18: Costs and margins for premium salted anchovies in sunflower oil, retailed in specialised gift shops in Croatia (EUR/kg, 2024)



Source: elaboration based on interviews and EUMOFA data

Legend: intermediate costs and margin in yellow; product price in blue; VAT is in pink

6 CONCLUSION: COMPARISON OF THE PRICE TRANSMISSION FOR ANCHOVY IN ITALY, SPAIN AND CROATIA

The present report proposes five price transmission analyses in three MS (Italy, Spain and Croatia). Among the five analyses conducted, all analyses cover preserved anchovy of national origin retailed in national supermarkets. As follows:

- 80 g of salted anchovies in olive oil retailed in Italy (origin of the fish: Italy), in 2024,
- 75 g of canned anchovy in vinegar retailed in Spain (origin of the fish: Spain), in 2023,
- 75 g of canned anchovy in olive oil retailed in Spain (origin of the fish: Spain), in 2023,
- 70 g salted anchovies in extra virgin olive oil retailed in Croatia (origin of the fish: Croatia), in 2024,
- 160 g salted anchovies in sunflower oil retailed in Croatia (origin of the fish: Croatia), in 2024.

The present section provides a summary of the price transmission analysis; more details are provided in each specific section covering each MS. In particular, details are provided on the range of prices observed at each level of the value chain, as high price variations may be observed based on the fish size, the geographical origin, the presentation type (glass jars or tin cans) and the preservation method (in olive oil or vinegar).

A table summarising the main data is can be found on the following page.

Raw material price

Industries tend as much as possible to buy fresh anchovy directly from ports, to avoid intermediary costs from wholesalers. The price of this fish is usually lower than the median first-sale price (the difference can be as much as -0,9 EUR/kg), as fish directed to the industry is of lesser quality than fish sold fresh.

Ex-factory prices

Although exchanges of semi-processed anchovy are common between MS, each of the five products monitored is made exclusively in the state in which the fish was caught. Possible price reductions can be observed for similar products for which one or more steps of the preservation process were made in a third country (notably Albania for the salting and filleting stages).

Among the five products monitored, the ex-factory price ranges between 12,4 EUR/kg and 22 EUR/kg for almost all cases. There is one exception for high-quality anchovy jars with premium fish and an additional seasoned marinade done by a second processor with a higher ex-farm price at 29,72 EUR/kg (Croatia).It is the lowest in Italy, where the vast majority of preserve industries is situated in the South of the country, where labour costs are tendentially lower than in the North.

The differences between the final products are justified by the greater cost of fish material in Spain, where anchovy jars contain 2/3 fish, whereas Italian usually contain only half fish.

In addition, Italian salted fillets are more salted than Spanish ones, contributing to a greater material shrink (70% total loss and shrink in Italian preserves compared to 40% in Spanish ones), according to stakeholders. This is explained by habits: canned anchovy is a semi-preserve, meaning that its shelf-life is shorter than preserves. In Spain, canned anchovies are commonly stored refrigerated, whereas in Italy, the habit is to store them under ambient temperature. Thus, additional salt is used in the processing and final jar in order to extend the shelf-life of the product in ambient temperature. This salt causes the fish to shrink more than in the Spanish processes.

Distribution costs and margin

Distribution costs and margin range between 16 and 22 EUR/kg in all three countries. Distribution costs and margin tend to be high for such expensive products.

They are the highest in Italy: however it varies greatly according to the branding strategy of the processor and the retailer for otherwise comparable products.

An exception is made for specialised shops in Croatia, where distribution costs and margin are lower because part of the sales are *in loco,* in the factory, thus skipping on transport costs and many fixed costs.

Retail price

Even though fresh anchovy is an affordable product in Spain, Italy and Croatia, preserved anchovy is an expensive product in all three MS. Prices vary greatly according to the sales strategy of the processor and retailer, the place of sale, and the specificities of each product (quality of the fish, type of oil, packaging). They range between 30 and 70 EUR/kg. Comparison of the three MS is difficult, because the place of the different stages of transformation is not always indicated on the packaging.

The Italian market is mostly supplied by imports of preserved anchovy, because the volumes of catches has dropped in the recent years, and labour costs are lower in surrounding countries. Prices are thus highly dependent on prices in the Mediterranean Basin. A part of the remaining preserve industry exports their products farther away (Germany, United Kingdom, United States), to preserve a higher added value. The mean final retail price is 40 EUR/kg, raising sharply since the beginning of 2024.

The Spanish market is equally supplied by national production of processed/ preserved anchovy, and imports. Accordingly, the Spanish market is highly impacted by the prices on the Mediterranean Basin level (from Morocco and Tunisia mostly).

In Croatia, the market for preserved anchovy is small and the production is oriented toward export. Final price for Croatian preserves retailed in Croatia is 47 EUR/kg according to the present analysis. However, it is to be noted that the volume of such national product is very small compared to the Italian and Spanish preserves.

General overview

The following table provides an overview of the price transmission for each case analysed in Italy, Spain and Croatia.

Table 33: Synthesis of the price structure analysis in Italy, Spain and Croatia (EUR/kg, 2023 for Spain, 2024 for Italy and Croatia)

Market	Italy (2024)	Spain (2023)		Croatia (2024)	
Origin	Italy	Spain	Spain	Croatia	Croatia
Size	In jars with olive oil	Canned in vinegar	Canned in olive oil	In jars with olive oil	In jars with sunflower oil
Sales channel:	Retail	Retail	Retail	Retail	Specialised shop
Anchovy price excluding losses	0,5	1,36	1,36	0,55	1,70
Loss / shrink cost	1,5	0,91	0,91	0,37	
Anchovy price: ex-factory price	12,4	14,60	21,80	18,78	29,72
Distribution costs and margin	21,96	11,67	16,61	16,16	5,66
Retail price excl. VAT	36,36	27,27	40,41	34,94	35,38
Retail price incl. VAT	40,00	30,30	44,90	46,58	47,17

Source: EUMOFA

7 STAKEHOLDERS INTERVIEWED

- Spain
  - FEDEPESCA
  - AEMPM (Asociación de Empresarios Mayoristas de Pescados de Madrid)
  - ANFACO-CECOPESCA
  - One wholesale company
  - One processing company (canning)
- Italy
  - Confocooperative Fedagripesca
  - Osservatorio socio-economico della pesca e dell'acquacoltura – Veneto Region
  - One producer organization (OP San Marco)
  - Chioggia Fish market operators
  - One wholesale company
  - Two processing companies (salted and in oil, and marinated anchovies)
- Croatia
  - One producer organization (Omega 3)
  - One fishery Cooperative
  - One processor
  - One processor/retailer

KL-01-24-014-EN-N

EUMOFA

European Market Observatory for Fisheries and Aquaculture Products

www.eumofa.eu

Publications Office of the European Union

ISBN 978-92-68-23613-0

doi:10.2771/9244446