

TROUT, SEABASS AND SEABREAM VALUE CHAINS. AN OVERVIEW OF SOUTH EUROPE

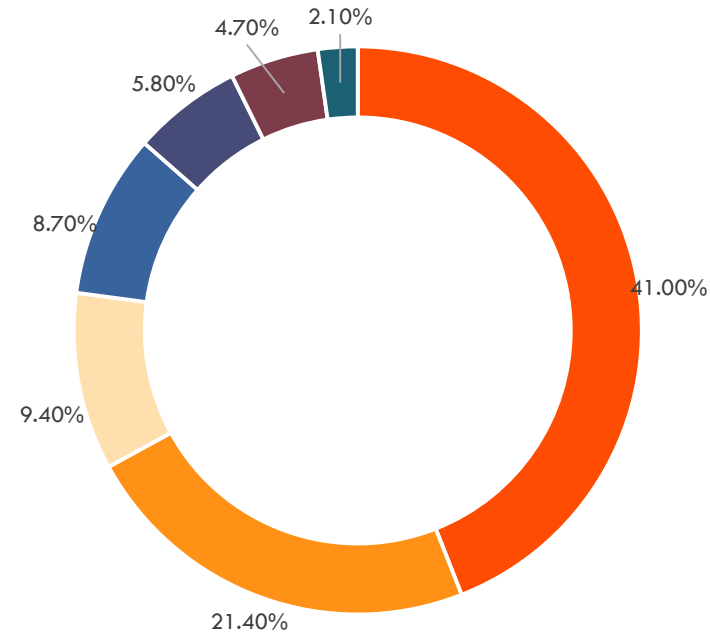
Cristina Mora, José L. Santiago, Giovanni Sogari, Paul S. Valle,
Dimitar Taskov (Ref. n.0532)

Overview



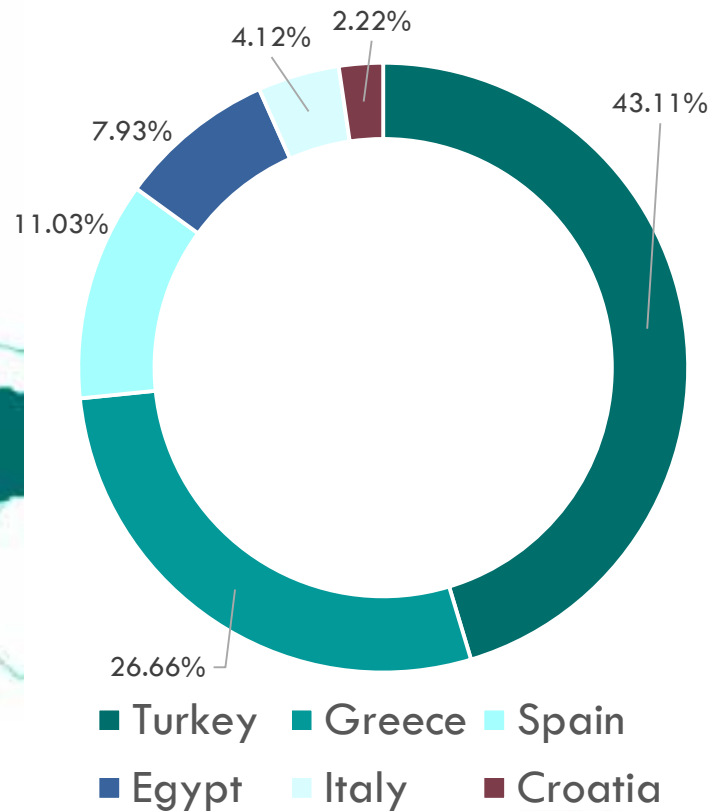
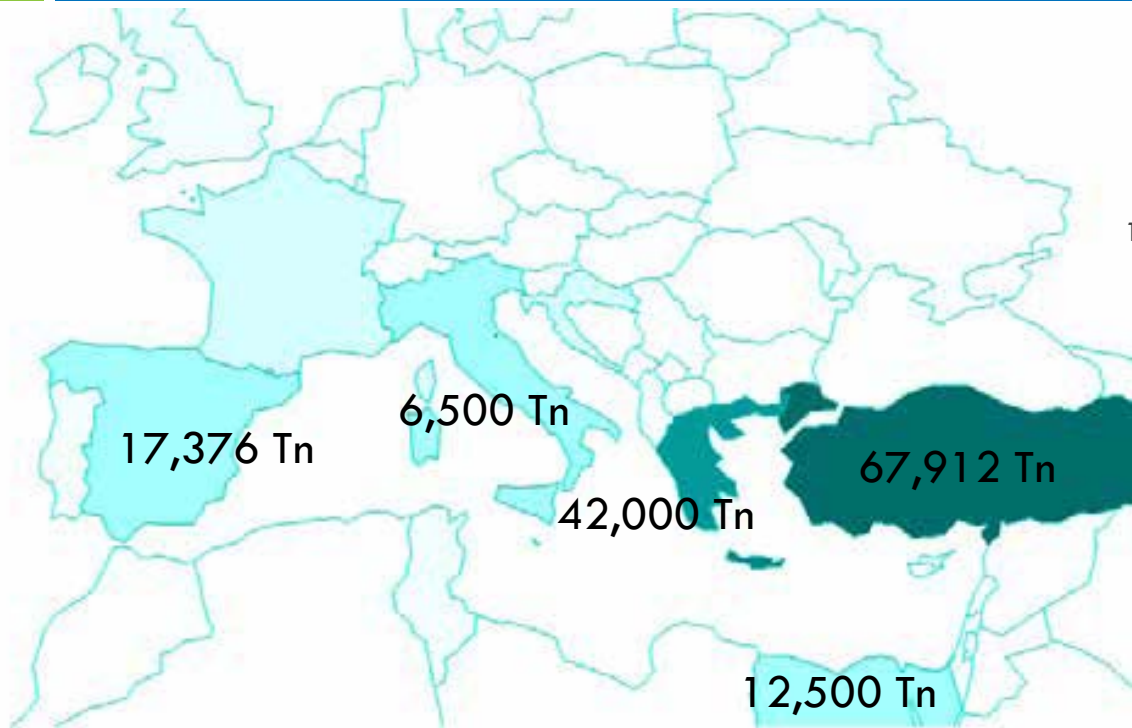
- Farmed fish products in Europe are mainly addressed to the market of live and fresh fish but the market are changing also in more “traditional” consumption country, like Italy
- Only for the trout sector, due to their vertical integration, is it common to process/transform the fish, offering a wider range of products to final consumers: smoked products, hamburgers, skewers, etc.
- For the seabass and seabream production, the larger share of the production is originated from few large businesses. In Spain their production is carried out by a consolidated sector with only a few firms and only one with an income higher than 100.000 €, 13 firms among 10.000 and 50.000 € and the rest obtaining lower profits.
- In Italy there seems to be a low probability of seeing new big companies entering in the aquaculture sector of seabream, seabass and trout. It seems not to be attractive (from a profitability point of view) and requires significant investments. In Spain there is a similar situation for the trout production. Greece situation is “under observation”.
- Export non EU countries are focusing on low segment of the market but the increasing demand for more processed fish and “low price” will advantage non EU competitors.
- The presentation will focus on final market segmentation that explain my previous reflections

Seabream overview in the Mediterranean context

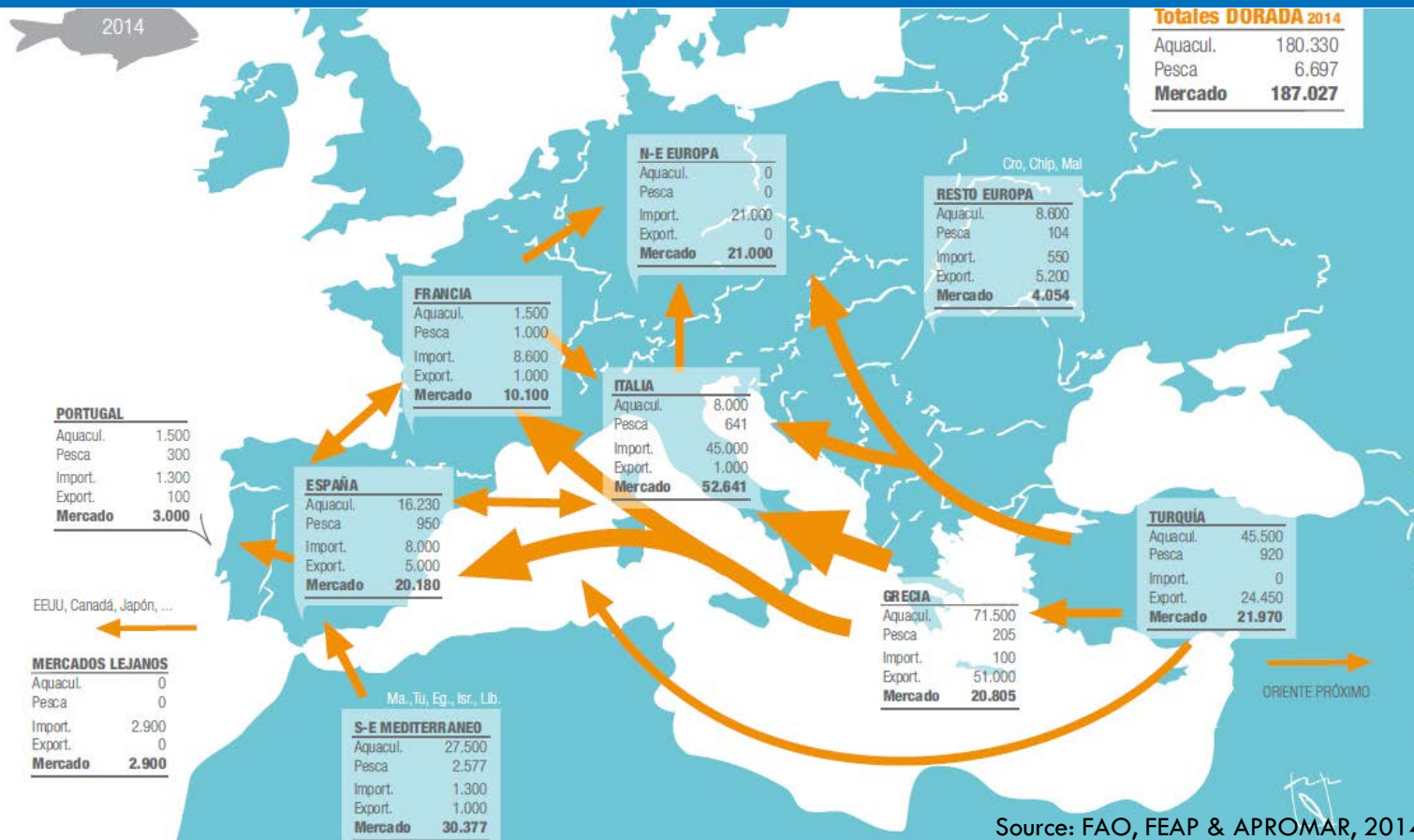


■ Greece ■ Turkey ■ Spain ■ Egypt
■ Tunisia ■ Italy ■ Croatia

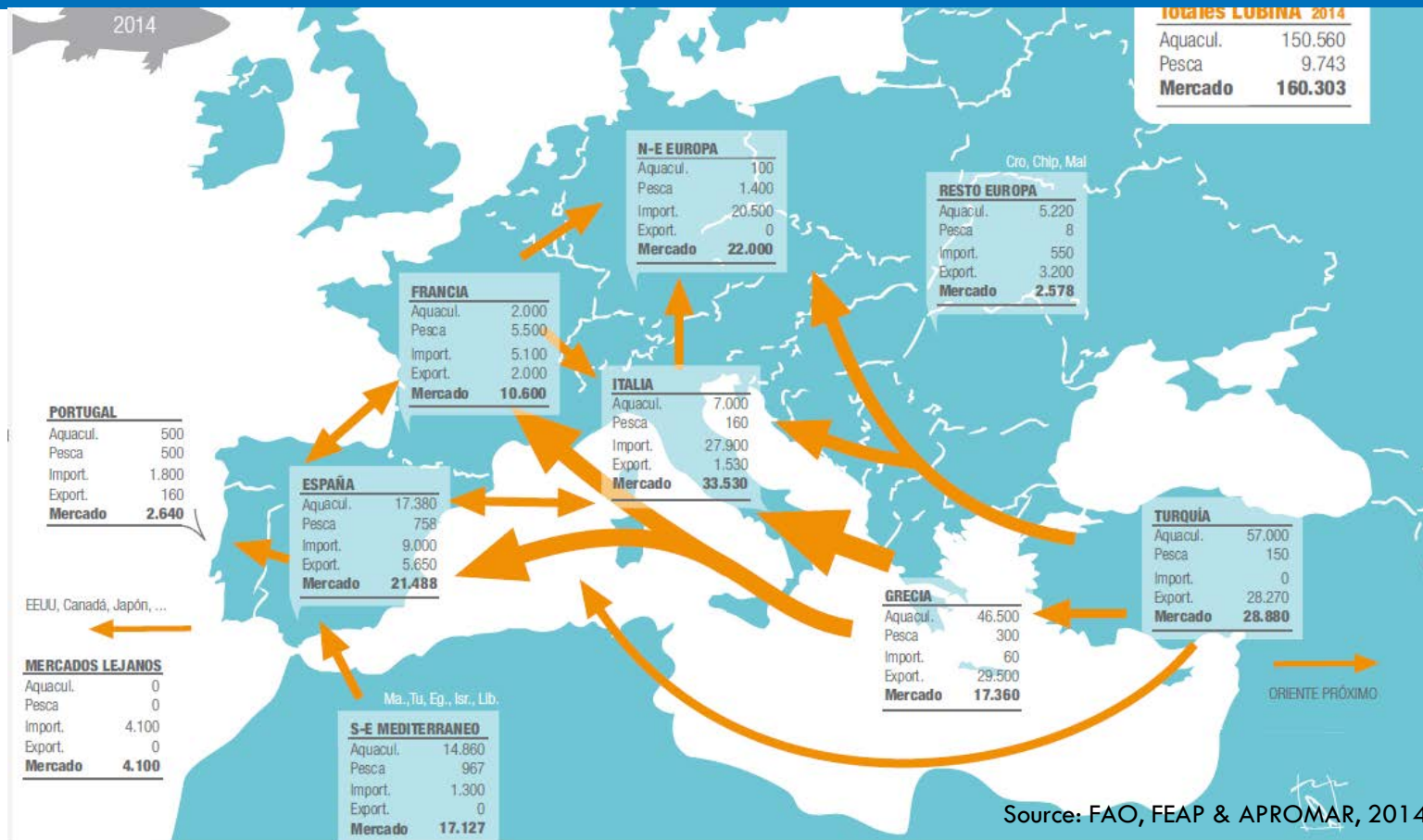
Seabass overview in the Mediterranean context



Seabream overview



Seabass overview

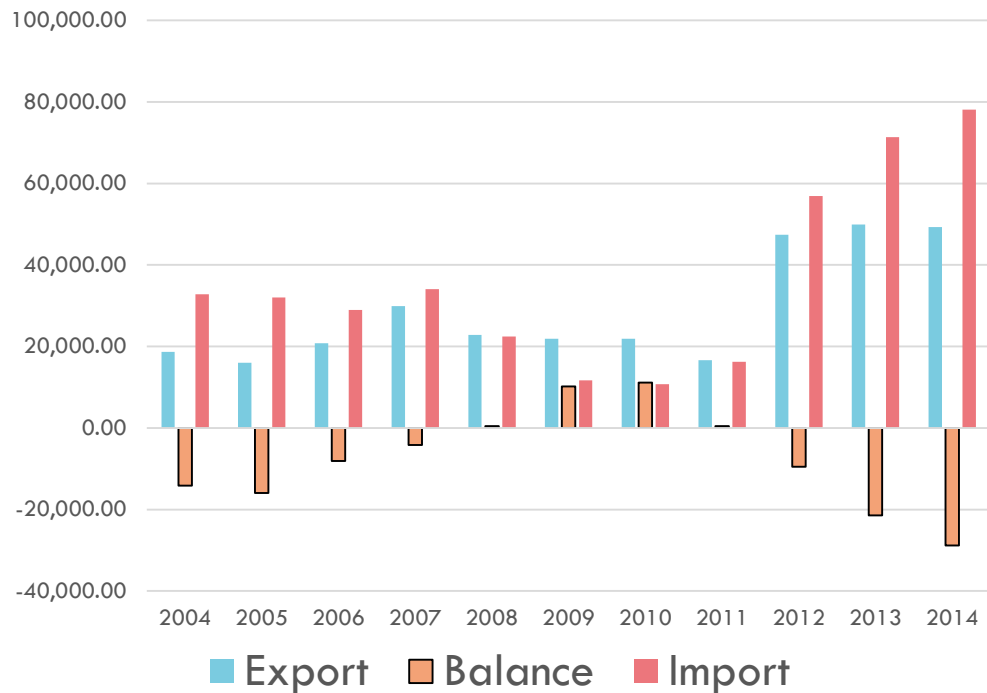


Source: FAO, FEAP & APROMAR, 2014

Trout production in volume (tons) and value

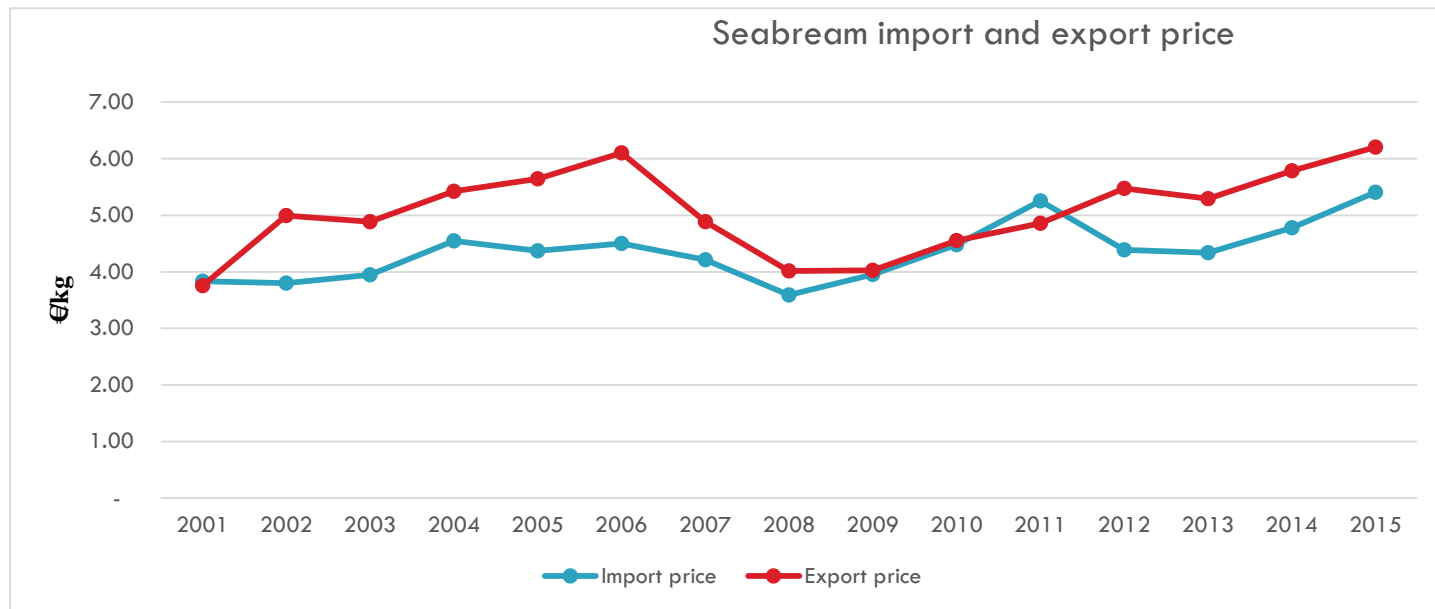
| Species | | Portion Rainbow Trout production (tons) 2005 - 2014 | | | | | | | | | |
|---------------|----------------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Portion Trout | Country | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| | TURKEY | 48.033 | 56.026 | 58.433 | 65.928 | 75.657 | 78.165 | 100.239 | 111.335 | 122.873 | 107.533 |
| | ITALY | 39.000 | 39.000 | 39.000 | 38.900 | 40.500 | 39.000 | 39.000 | 36.300 | 36.000 | 36.800 |
| | DENMARK | 29.247 | 27.028 | 28.527 | 28.050 | 26.374 | 26.538 | 26.538 | 21.895 | 27.591 | 27.591 |
| | FRANCE | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 22.000 | 23.500 | 23.500 | 20.870 | 22.000 |
| | POLAND | 14.000 | 17.000 | 17.000 | 15.000 | 14.000 | 11.000 | 13.000 | 14.500 | 14.500 | 17.500 |
| | SPAIN | 25.000 | 24.000 | 20.000 | 20.000 | 20.000 | 18.000 | 18.000 | 14.400 | 15.000 | 13.000 |
| | UTD.KINGDOM | 12.500 | 11.000 | 9.955 | 10.000 | 10.000 | 8.950 | 8.900 | 10.996 | 10.000 | 11.000 |
| | GERMANY | 23.000 | 23.000 | 23.000 | 23.000 | 23.000 | 22.300 | 10.062 | 8.116 | 8.333 | 8.466 |
| | GREECE | 4.892 | 3.187 | 2.820 | 3.420 | 2.588 | 2.712 | 2.389 | 1.967 | 2.014 | 2.014 |
| | AUSTRIA | 1.728 | 1.671 | 1.671 | 1.200 | 1.250 | 1.200 | 1.270 | 1.337 | 1.322 | 1.322 |
| | IRELAND | 1.100 | 1.100 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | PORTUGAL | 845 | 943 | 937 | 941 | 936 | 951 | 900 | 900 | 1.000 | 1.000 |
| | CZECH REPUBLIK | 597 | 600 | 623 | 614 | 526 | 476 | 580 | 388 | 439 | 426 |
| | CROATIA | 800 | 800 | 800 | 800 | 2.000 | 2.095 | 2.358 | 1.232 | 350 | 361 |
| TOTAL | | 225.742 | 230.355 | 228.766 | 233.853 | 242.831 | 234.387 | 247.736 | 247.866 | 261.292 | 250.013 |

Seabream: international trade balance



- Negative trend in trade balance
- Target market of seafood
- Mainly fresh and chilled

Seabream import and export price – Italy –



Source: own elaboration based on EUMOFA

Seabass: international trade balance



- The increase of the production seems related to the increase of export
- Target market for this product (reflected in price)
- Fresh & Chilled import/export products

Seabass import and export price – Italy –



Trout: international trade balance



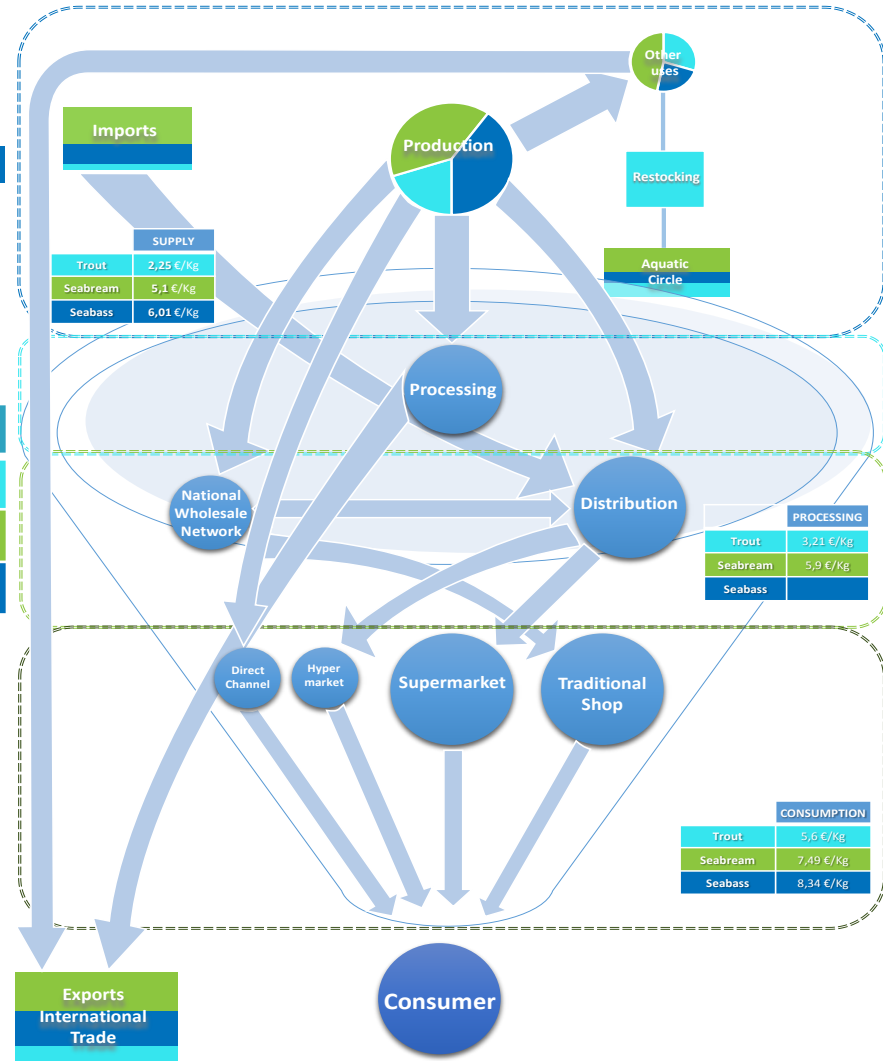
- Positive trend
- Russian trade conflict
- Increase trend of live fresh and chilled trout

Supply Chain in Spain

| | SUPPLY | PROCESSING | CONSUMPTION |
|----------|-----------|------------|-------------|
| Trout | 2,25 €/Kg | 3,21 €/Kg | 5,6 €/Kg |
| Seabream | 5,1 €/Kg | 5,9 €/Kg | 7,49 €/Kg |
| Seabass | 6,01 €/Kg | | 8,34 €/Kg |

Average prices by chain

Source: MAGRAMA



Distribution

- Although supermarkets represent the largest share of retail sales, traditional channels such as fishmongers and municipal retail markets are relatively more frequent in Italy than in most other European countries.
- In Spain, supermarkets and traditional channels represents the 90% of market share (68% and 22% respectively) for trout, seabass and seabream.
- Traditional channels achieve highest prices for seabass and seabream products (+15%).

Distribution (and price)

The most important wholesale markets for fishery and aquaculture products in Italy coincide with the largest cities of the country: Milan, Rome, Turin, Naples and Palermo. Products from fishery and aquaculture are distributed by wholesale fish traders and only a minor part is sold directly by fishermen or farmers.

Prices of fresh seabream in the Wholesale Market of Milan (EUR/kg)

| Origin | Size | System | 2004 | | 2005 | | 2006 | | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
|----------|--------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max | P.min | P.max |
| National | > 800 gr | Fisheries | 18.67 | 27.94 | 19.28 | 26.45 | 16.79 | 24.78 | 18 | 25.64 | 17.76 | 24 | 12.08 | 18.33 | 14.4 | 19.94 | 18 | 22 | 18 | 22 | 18 | 22 |
| National | 400 - 600 gr | Farming | 7.3 | 8.73 | 8.08 | 9.61 | 7.55 | 9.72 | 4.5 | 11.5 | 4.45 | 8.17 | 4.32 | 5.21 | 4.76 | 6.68 | 7.5 | 8.5 | 6.78 | 7.68 | 5.17 | 5.56 |
| Import | 400 - 600 gr | Farming | 5.59 | 6.73 | 5.27 | 6.62 | 4.47 | 5.33 | 4.6 | 5.4 | 4.5 | 5.4 | 4.55 | 5.62 | 4.48 | 5.35 | 5.35 | 5.94 | 4.91 | 5.92 | 5.18 | 7.97 |
| Import | 200 - 400 gr | Farming | 5.52 | 6.73 | 4.41 | 5.53 | 4.61 | 5 | 4.5 | 5 | 4.23 | 4.93 | 4.13 | 4.89 | 4.38 | 5.22 | 4.83 | 5.25 | 4.83 | 5.25 | 4.83 | 5.25 |

There are differences between national and import price. The import price is less variable in the reported period.

Place of purchase - Seabream

- Fresh seabream is predominantly sold in the fish counters of the supermarkets. The market share of large scale distribution is much bigger for seabream (66%) compared to other species (59%).
- Aquaculture products fit, much more than fisheries products, the needs of supermarkets, which are looking for steady supply all the year, stability of prices and traceability.

Places of purchase of the fresh seabream (volume) - 2010

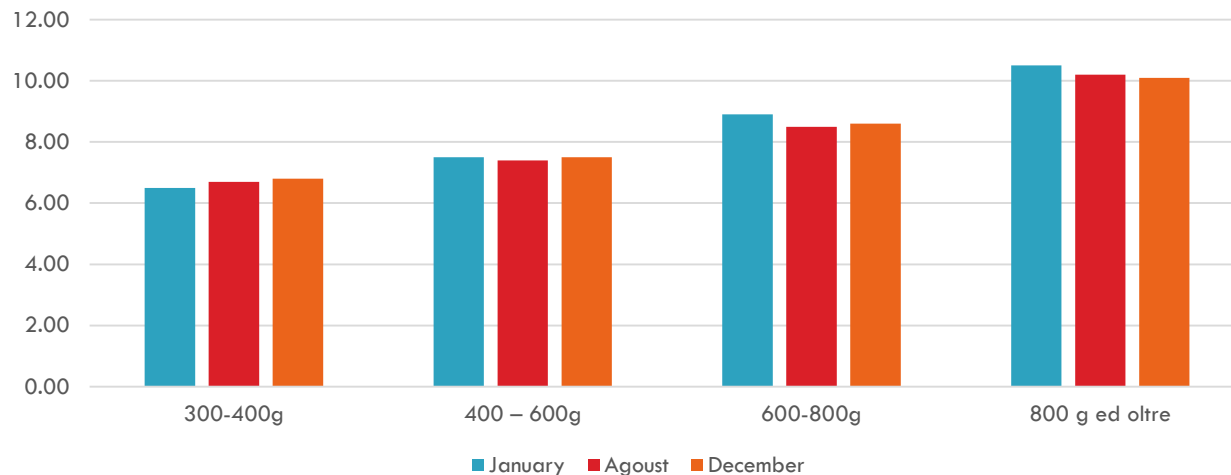
| % | All species | Seabream |
|--------------------------|-------------|----------|
| Supermarkets | 59.1 | 66.2 |
| Fishmongers | 28.9 | 22.1 |
| Hawker and local markets | 9.0 | 8.0 |
| Other | 3.0 | 3.7 |

Segmentation and price

The market for seabream is segmented according to:

1. production method (aquaculture/fisheries)
2. size
3. Origin (national versus imported, regionally traded)
4. Other(labels, traceability, presentation..)

Sea bream, price euro/kg., Italy Nord Ovest 2014



Look at seabream price collected in North -West of Italy in three months of 2014.

.....Segmentation and price

- The caught (wild) seabream market represents less than 1,000 t, i.e. less than 3% of the total market.
- Local catches are complemented by some imports from Spain. Wild species are viewed as superior to farmed species, more natural and of higher quality.
- This is reflected in the price which can reach up to 40 EUR/kg. The demand for wild seabream exists mostly in traditional channels while large scale retailers focus on farmed seabream.

| Aquaculture product (in a large Italian retail market) | Consumer price (€/Kg) |
|--|-----------------------|
| Seabream – origin Greece (350g/piece) | 10.90 |
| Seabream – origin Italy (230g/piece) | 15.50 |
| Seabream – origin Italy, Private quality label (Naturama) (450g/piece) | 11.83 |
| Seabream fillets – origin Greece (economy packaging – 250g) | 26.90 |
| Seabream fillets – origin Greece (thin slices – 150g) | 31.90 |

Source: surveyed by AND International

Segmentation by origin and size and price

- Seabreams of Italian origin are selling at a premium, compared to Greek products
- However, this premium is mainly connected to the size, since Italian seabream is generally marketed at sizes (300-400 g, 400-600 g, 600-800 g) bigger than Greek fishes (mainly 250-300 g).
- Turkey and Malta also supply low/medium quality and small sizes.
- Spain and France are selling higher quality and bigger sizes (and a part of wild seabream in the export volume also partly explains the higher average price)



Segmentation by labels / brands

- The market leader, COOP Italia, has 8 aquaculture species under private label scheme with specifications in particular on traceability, sustainability and animal welfare. COOP has selected 5 suppliers for seabream, which all produce in sea cages.
- Farmed seabream is one the species in the NATURAMA quality scheme of the ESSELUNGA retailer. In June 2013 the seabream of Italian origin is sold the double of the price of Greek seabream, even with a smaller unit weight (230 g for the Italian product vs. 350 g for the Greek seabream). The **NATURAMA** seabream (450 g/piece) is sold with a premium of 12% compared to unbranded seabream of Italian origin and a premium of 121% compared to unbranded seabream imported from Greece.



Segmentation by presentation

- Italian seabream market is mostly fresh-based with large price swings.
- By tradition Italian consumers are consumers not only of fresh fish, but also of whole fish, especially for seabream.
- Fillets products are still little frequent on the market but expanding. For instance ESSELUNGA sells fillets of seabreams (seabreams are filleted in Greece, where filleting costs are much lower than in Italy).



Consumption – seabram

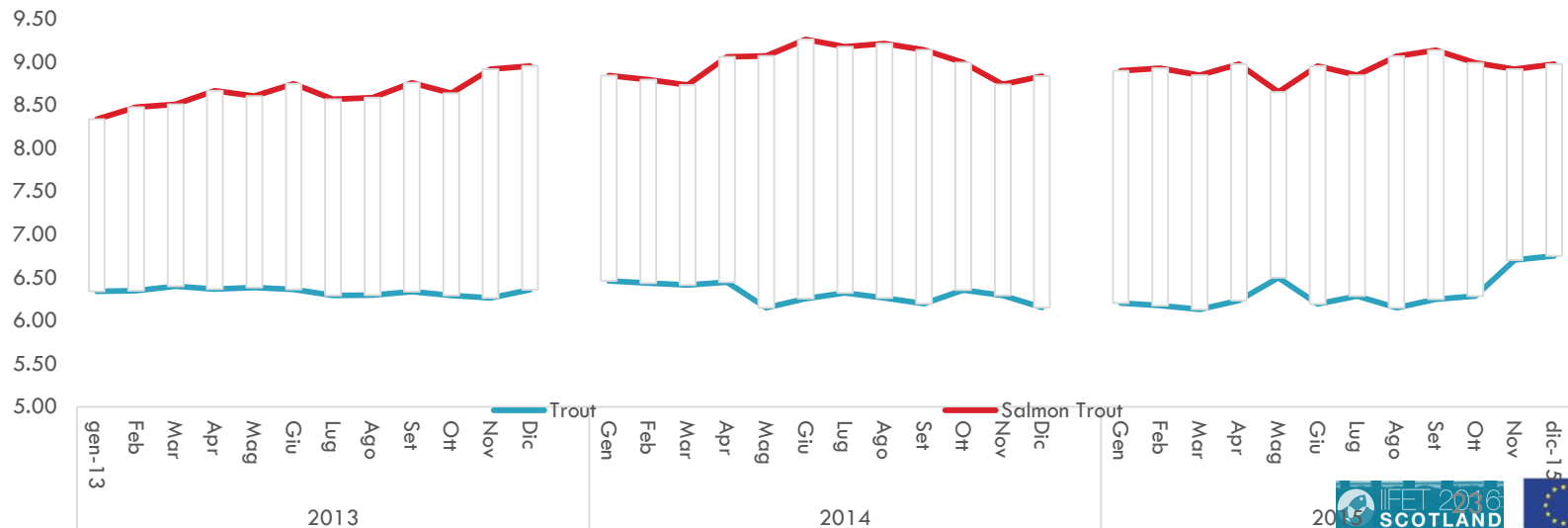
| Category | % 2014 | |
|--|--------------|--------------|
| | volume | value |
| Fresh e unfrozen | 48,0 | 47,8 |
| Not processed (natural) | 45,3 | 43,8 |
| Processed | 2,8 | 4,0 |
| Frozen (not packed) | 5,9 | 5,0 |
| Not processed (natural) | 4,9 | 4,4 |
| Processed | 1,0 | 0,6 |
| Frozen (packed) | 17,7 | 14,7 |
| Not processed (natural) | 8,9 | 7,8 |
| Processed | 8,8 | 7,0 |
| Preserved food (packed) | 24,0 | 24,2 |
| Dry, salty and smoked (packed and not packed) | 4,4 | 8,2 |
| Total of fish products | 100,0 | 100,0 |
| Source: own elaboration, from data Ismea | | |

Retail prices - Trout and salmon trout price from 2013 to 2015 (only data available).

Last week promotion in Parma



Retail prices for trout and salmon trout (euro/kg)



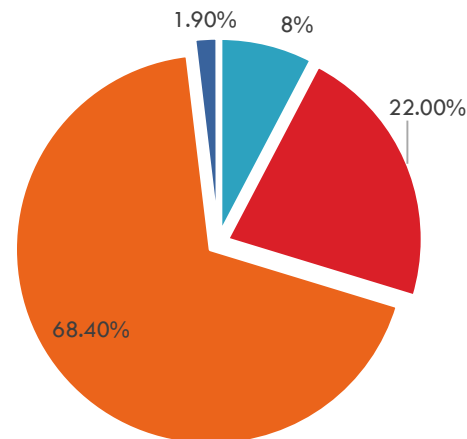
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Consumption

Consumer Identikit of Seabream and Seabass

| | Seabream | Seabass |
|-----------------|-------------------------------|-------------------------------|
| Higher Consumer | South - Center | Center and North - West |
| | Upper Middle income | High income |
| | Purchasing Manager ≤ 34 Years | Purchasing Manager ≥ 55 Years |
| | New - Families | Older Couples |
| Low Consumer | North - East | South |
| | Low Average Income | Low Income |
| | Purchasing Manager ≥ 65 Years | Purchasing Manager ≤ 34 Years |
| | Older Singles | Pre - Families |




SEABREAM AND SEABASS



- Hawkers/National Markets
- Fish Shops
- Modern Distribution
- Other Channels

Consumption details in Spain



| | | Traditional shop | Supermarket | Hypermarket | Direct channel |
|--|---------------|------------------|--------------|-------------|----------------|
|  Seabream | Weight | 9.293,54 | 30.128,76 | 4.304,91 | 524,57 |
| | Value | 76.525,38 € | 214.516,90 € | 31.959,02 € | 4.078,02 € |
| | Average price | 8,23 € | 7,12 € | 7,42 € | 7,77 € |
|  Seabass | Weight | 7.351,38 | 19.309,16 | 2.557,42 | 126,45 |
| | Value | 67.434,09 € | 153.229,03 € | 19.611,16 € | 928,03 € |
| | Average price | 9,17 € | 7,94 € | 7,67 € | 7,34 € |
|  Trout | Weight | 4.986,93 | 16.307,69 | 2.287,23 | 163,57 |
| | Value | 27.362,03 € | 92.340,31 € | 12.555,18 € | 1.002,02 € |
| | Average price | 5,49 € | 5,66 € | 5,49 € | 6,13 € |

Main references

- https://ec.europa.eu/fisheries/inseparable/sites/inseparable/files/schoolproject_it.pdf
- https://ec.europa.eu/fisheries/inseparable/sites/inseparable/files/AQC_IT.pdf
- https://ec.europa.eu/fisheries/inseparable/it/farmed-eu#quicktabs-farming_in_the_eu_it=1
- <http://www.feap.info/Default.asp?SHORTCUT=582>
- <http://www.eumofa.eu/documents/10157/7a04438d-9c52-4191-99ca-cfad38985718>
- FAO, 2014, *The State of World Fisheries and Aquaculture*. FAO Fisheries and Aquaculture Department Food and Agriculture Organization of the United Nations, Rome, 2014.
- MiPAAF (2014). *Piano Strategico per l' Acquacoltura in Italia* (2014-2020). pp.282.
- AA.VV (2011). [REF 2011: acquacoltura - ortaggi - vinocapriuni - vino](#). IPSOA
- ISMEA 2014, R.E.F. - acquacoltura ortaggi oviapriuni vino - ISMEA 2011. [online] Ismea.it. Available at: <http://www.ismea.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/6701>

SEABASS



TROUT



SEABREAM



Thank for the attention

Cristina.mora@unipr.it

