



PrimeFish



Horizon 2020  
Programme

# WP2 – ECONOMIC PERFORMANCE AND PRICES

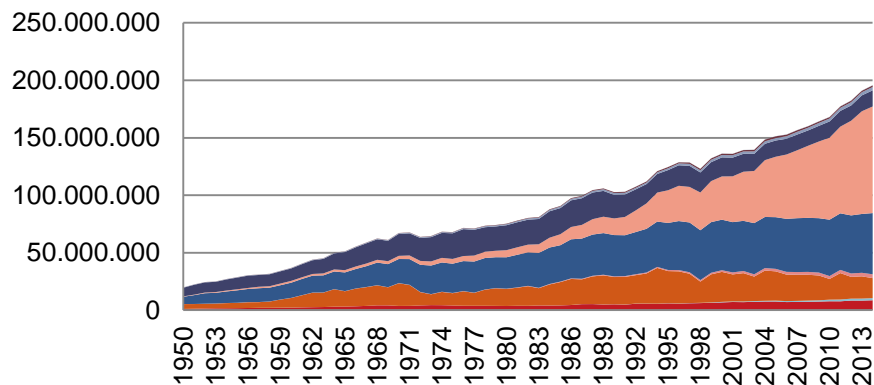
## PAUL STEINAR VALLE

### KONTALI ANALYSE AS

Annual meeting, Vilanova, 2017

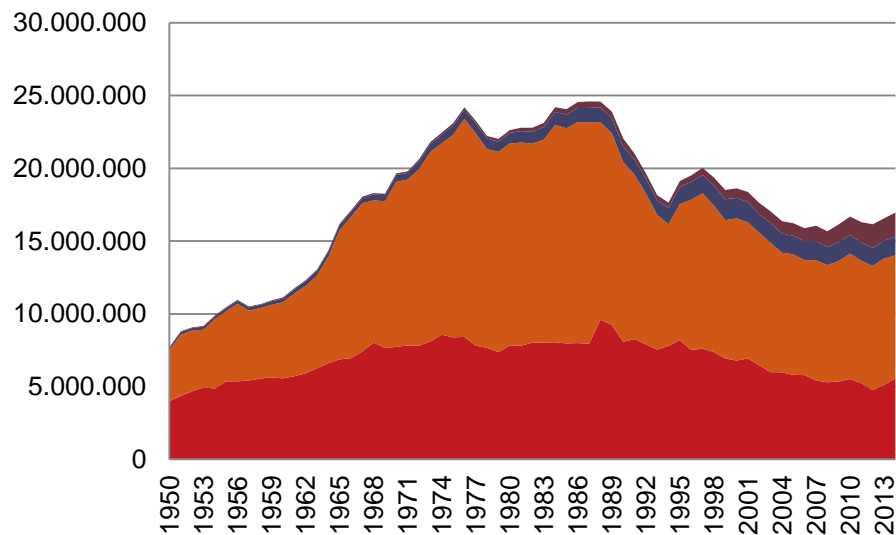
# A reminder; Europe in a global perspective – EU versus Non-EU

## Fisheries and Aquaculture by continent



- Fisheries\_Africa
- Fisheries\_Americas
- Fisheries\_Asia
- Fisheries\_Europe
- Fisheries\_Oceania
- Aquaculture\_Africa
- Aquaculture\_Americas
- Aquaculture\_Asia
- Aquaculture\_Europe
- Aquaculture\_Oceania

## Fisheries and Aquaculture, EU

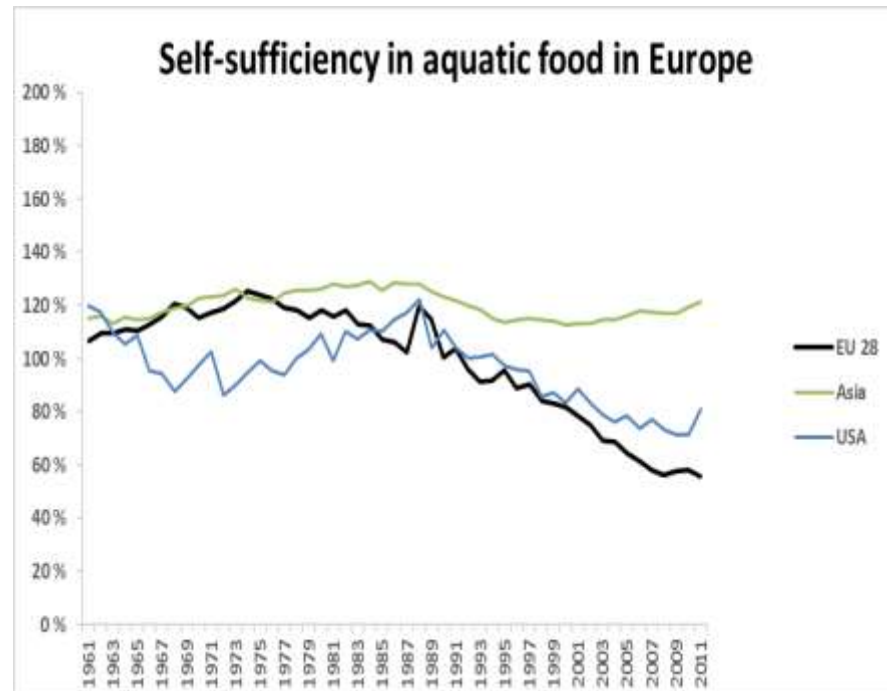


- Europe\_Fisheries\_EU
- Europe\_Fisheries\_Non\_EU
- Europe\_Aquaculture\_EU
- Europe\_Aquaculture\_Non\_EU

# Seafood Export/Import Imbalance and Self-Sufficiency



The EU Fish Market – 2016, EUMOFA



FAO-data



## Economic performance

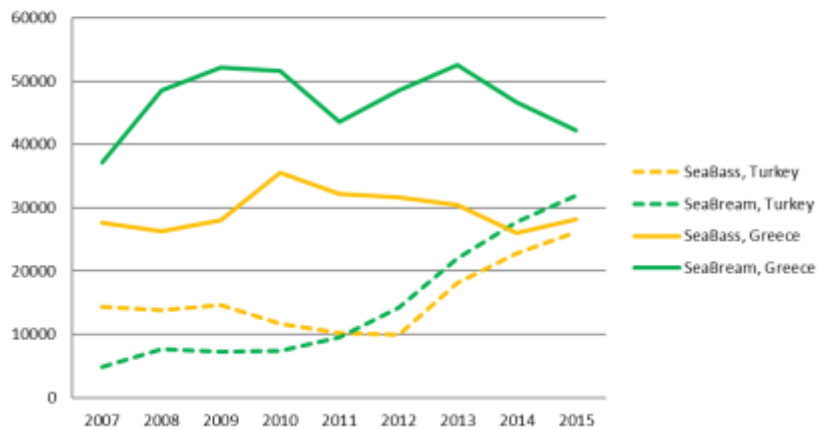
**The seafood markets**  
**Volume & Price = Value**



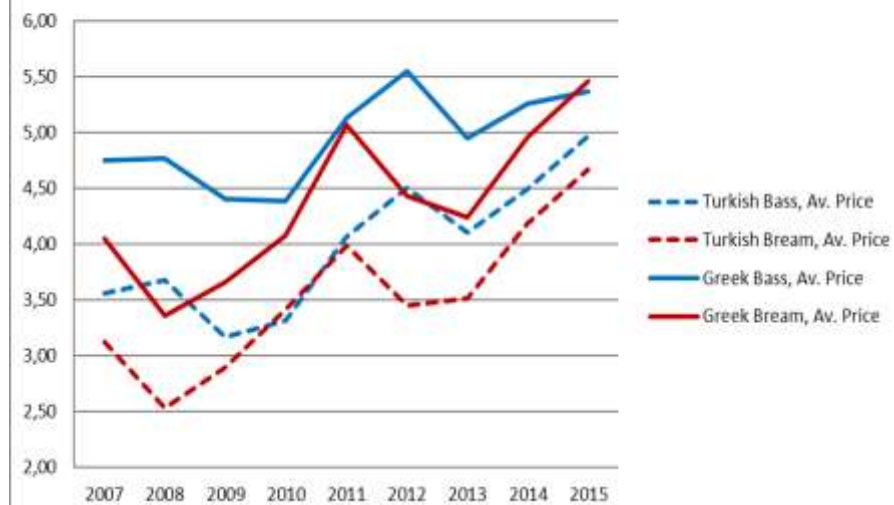
# SeaBass and SeaBream sector – a relevant example?

## SBSB export volumes

### Greece versus Turkey – as main competitors



## SBSB export prices - Greece and Turkey -



# Some key observations...

- Low ex EU import prices challenge the **profitability** of European (EU) B&B sector (Turkish export prices being ~ 20 %) below Greek
- Forcing the European closer to their producing costs
- The **innovative (future) developments** i.e. sectors ability to meet the future consumer demands and/or emerging markets in Europe ...?
- Processed products – fillets and added value products are currently not found profitable within EU with the current raw material (whole fish) price/cost AND labour cost.
- WHILE extra EU competitors (Turkey) do!
  
- **The situation is a challenge for the competing strategies for European B&B sector both**
  - in short perspective - and
  - in the long run....?
  
- **However, is B&B unique – i.e. an odd case – or representative also for other seafood sectors?**



## Economic performance

Historical and Future price (and volume)  
perspectives



# Seafood price studies & Boom and Bust

- **Boom and Bust**
- **Identification of price systematics through structural time series models (the Kalman filter) (uninformed modelling)**
- **Decompose a time series into elementary components:**
  - **Trend**
  - **Seasonality**
  - **Cycle**
  - **Irregular component (unexplained price changes)**



- The trend analysis and the cycles are based on the factorization of the phenomenon observed in various components (e.g. price level, increasing or decreasing long term trend, seasonality -fluctuations within the year which tend to repeat, cyclical -deviation from long-term trends-, and irregular component - exceptional events - outliers).
- The Graph reporting Forecast include a Confidence charts. User can choose what type of confidence level based on risk aversion. The range of the confidence help the user to understand the precision of the prediction.
- For every chart and table, showing the decompositon of time series, a short comment has been reported by the authors. However, the chart itself should be quite explanatory of the price trend in the observed period.
- The items Slope, Seasonal, Cycle and Irregular yield have values in the interval  $[0,1]$ . The unit of the item Period refers to month.

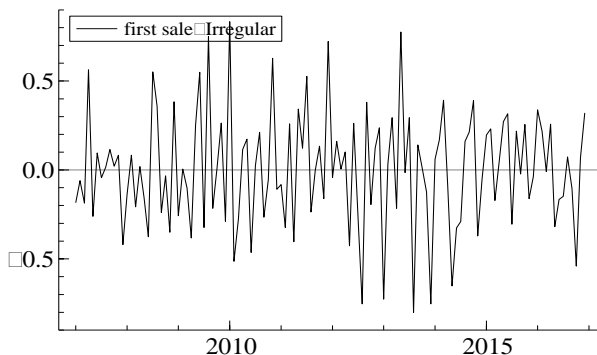
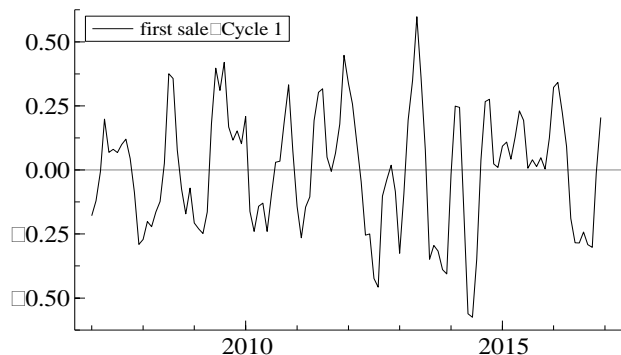
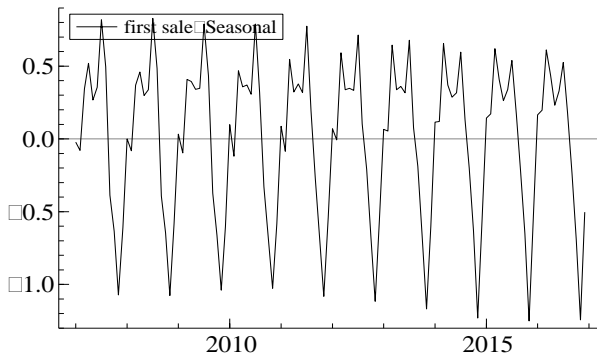
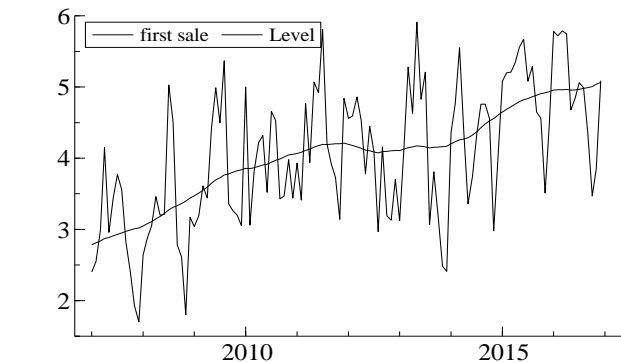
# Market, Market levels and Species

## Investigations

	canada	iceland	norway	spain	uk	denmark	faroe	germany	italy	turkey	greece	vietnam
Cod	na	e	f	r	f r							
Herring		e	f		f	f	na	f r				
Salmon			e		r		na					
Trout				f w r <sup>(1)</sup>	f r	f r			na <sup>(2)</sup> )	na		
Seabas s				r					f r <sup>(2)</sup>		na	
Seabrea m				f w r <sup>(1)</sup>					f r <sup>(2)</sup>		na	
Pangasi us												

Caption: f = first sale, w = wholesale, r = retail, i = import, e=export, na=not available

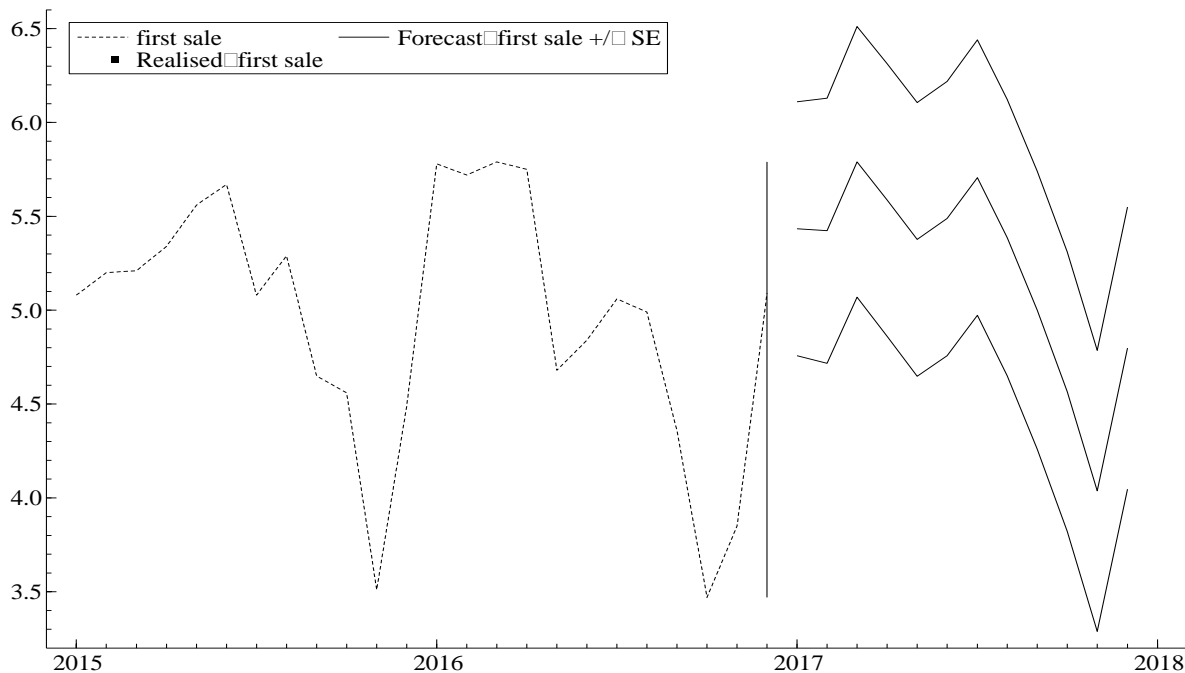
# Denmark first sale trout: an excellent case



Denmark first sale trout market shows a growing trend along all period in which prices increase by about 2€. Data shows a good regularity in seasonality with the lowest price in november/december. The amplitude of cycle is about 12 months.

Year	Phase
01/10/07	Bust
01/01/08	Boom
01/03/09	Bust
01/08/09	Boom
01/09/10	Bust
01/01/11	Boom
01/03/12	Bust
01/08/12	Boom
01/09/13	Bust
01/01/14	Boom
01/03/15	Bust
01/08/15	Boom
01/09/16	Bust
01/12/16	Boom

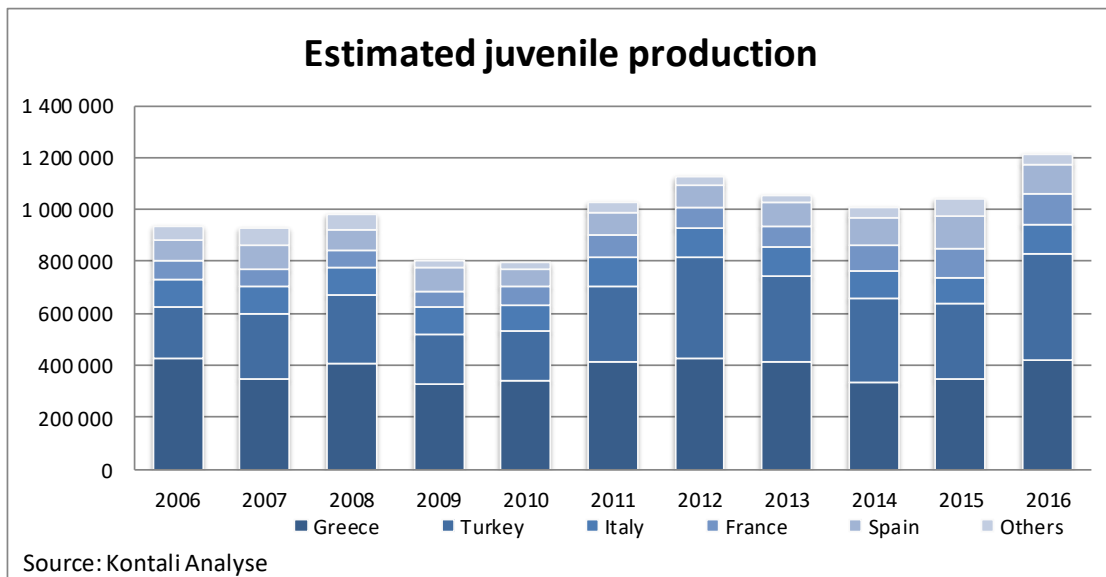
# Denmark first sale trout: an excellent case



Forecast for Denmark first sale trout market shows stationary prices till July a decreasing trend till november then a new growth of prices.

# Boom and Bust

- Time-series price models – extrapolating the history
  - Versus
- Explanatory models – explaining the future prices
  - i.e. based on expected production, exchange rates
- Future harvest estimations
  - Currently model for salmon production (Kontali)
  - Simple estimation (expert inputs) for seabass and seabram (Kontali)





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# WHAT'S IMPORTANT FOR STRENGTHENING THE SEAFOOD SECTOR...?

Stakeholder day, April 6th, 2017





Thank you all for your attention!

