Economic Report of the EU Aquaculture Sector

MAC working group

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Outline of presentation

- Background for the data collection for aquaculture in EU
- Content of the report from 2022 (EWG 22-17)
- Special chapters

The aim of the data collection under EMFF and EMFAF

- The Common Fisheries Policy (CFP) should ensure that fishing and aquaculture activities contribute to long-term environmental, economic, and social sustainability.

- **Collection and dissemination of aquaculture data is done in order to provide a sound basis for scientific advice in support of the EU Common Fisheries Policy**

Background

- The data collected are specified by Commission regulation
- Data are reported on species and production technique
- Data for the years 2008 to 2020 (Additional data from FAO and EUROSTAT)
- 29 experts covering 19 countries. Furthermore, 3 JRC experts.
- The report and data are published at JRC website (coming soon)

What is collected – Primary production data

Comprehensive overview of the latest information available on the production volume, economic value, structure and competitive performance of at the national and EU level for the years 2008 to 2020.

- Economics – Detailed sales volume and value and cost for aquaculture firms
- Social – Socio-demographics on age, gender, education, nationality
- Environment – (Mortality and Medicine use)

Contents of the report

EU Aquaculture Sector Overview

- The Structure of the EU aquaculture sector
  - Marine finfish (salmon, seabream/seabass, bluefin tuna and other species)
  - Shellfish (mussels, oysters, clams and others species)
  - Freshwater (trout, carp and other species)

<u>Special topics:</u>

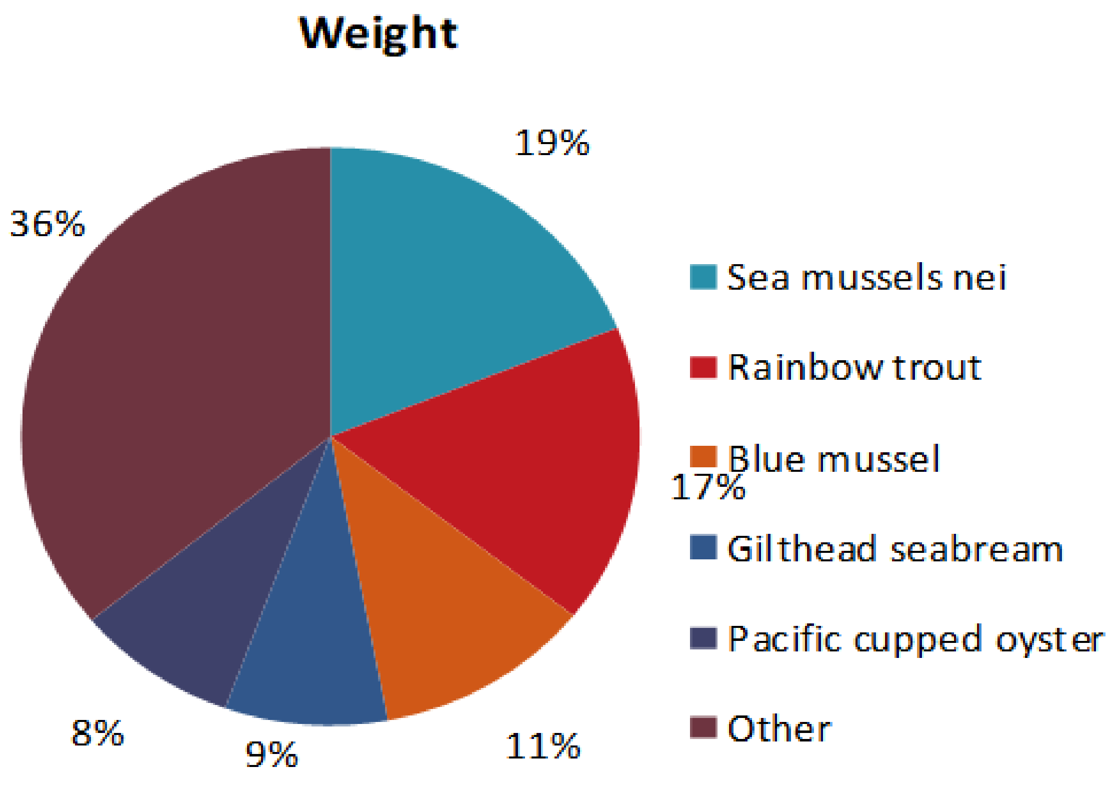
- 5. Energy prices – increasing prices effect on the EU aquaculture sector
- 6. Nowcast estimation of a selection of indicators for 2021 (and 2022)
- 7. Socio-Demographics of the EU Aquaculture Sector

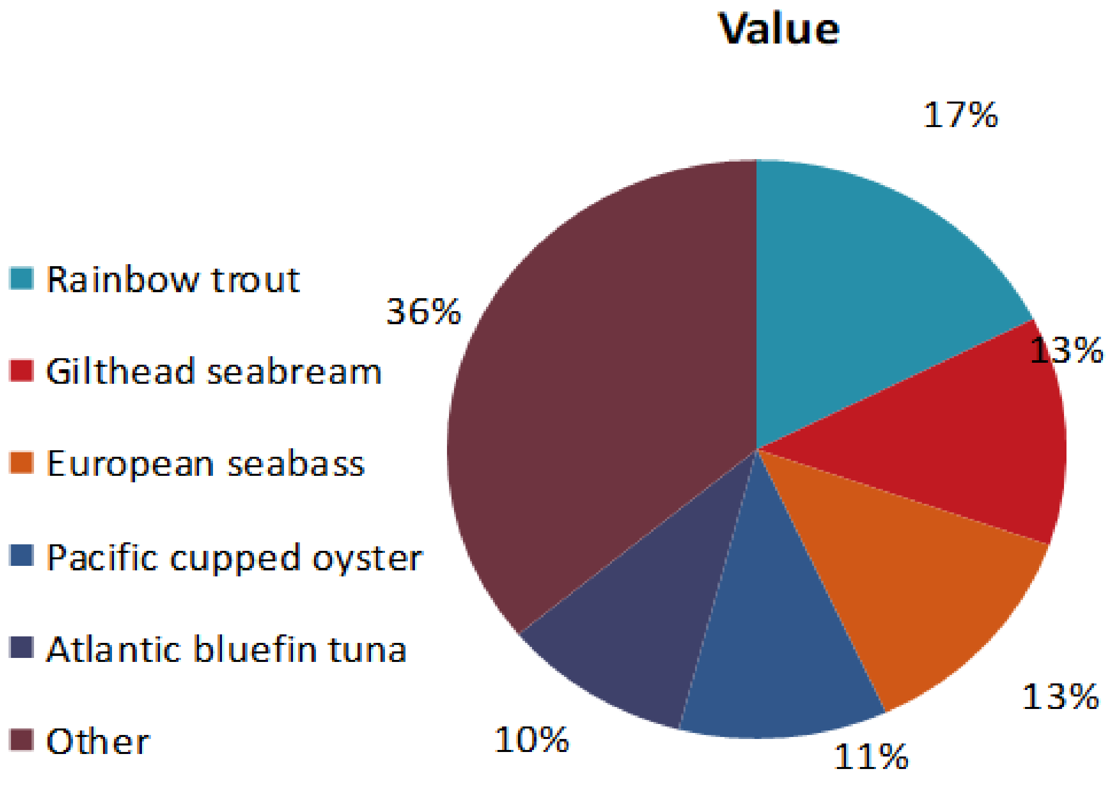
The EU 27 aquaculture in numbers (2020)

- There are about **14 thousand enterprises** (whose main activity is aquaculture).
- More than 80% are micro-enterprises, employing less than 10 employees.
- Total **employment is estimated to 57 thousand** and 35 thousand full time (FTE)
- Production (first sales) reached **1.2 million tonnes** and **€ 3.9 billion** in value
- The sector **performance decrease 4% in sales volume and 4% in the turnover** compared to 2018. (Decrease of 3% from 2019 in volume and value)
- Nowcast estimate that sales value and volume will increase 4% in 2021

Main species by weight and value (2020)

- Main species by weight are Mediterranean mussels, trout, blue mussels, seabream, oyster
- Main species by value are trout, seabream, seabass, oysters, tuna



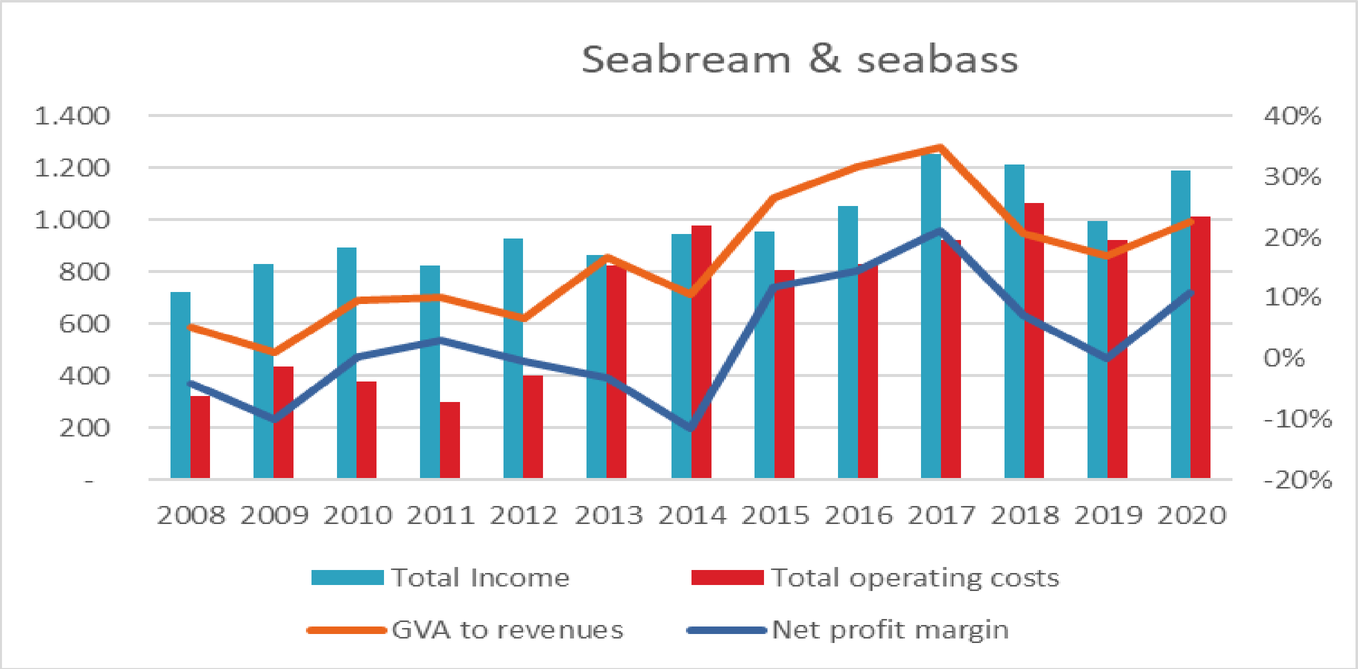


Main results - Marine fish sector 2020

The most important segment in terms of value (42%), covering 21% of the weight, few species - high specialisation.

The largest producers is Greece (seabass/seabream)

The marine sector is capital intensive and have larger enterprises.
It employs around 8,000 persons in 550 enterprises



Main results - Shellfish sector 2020

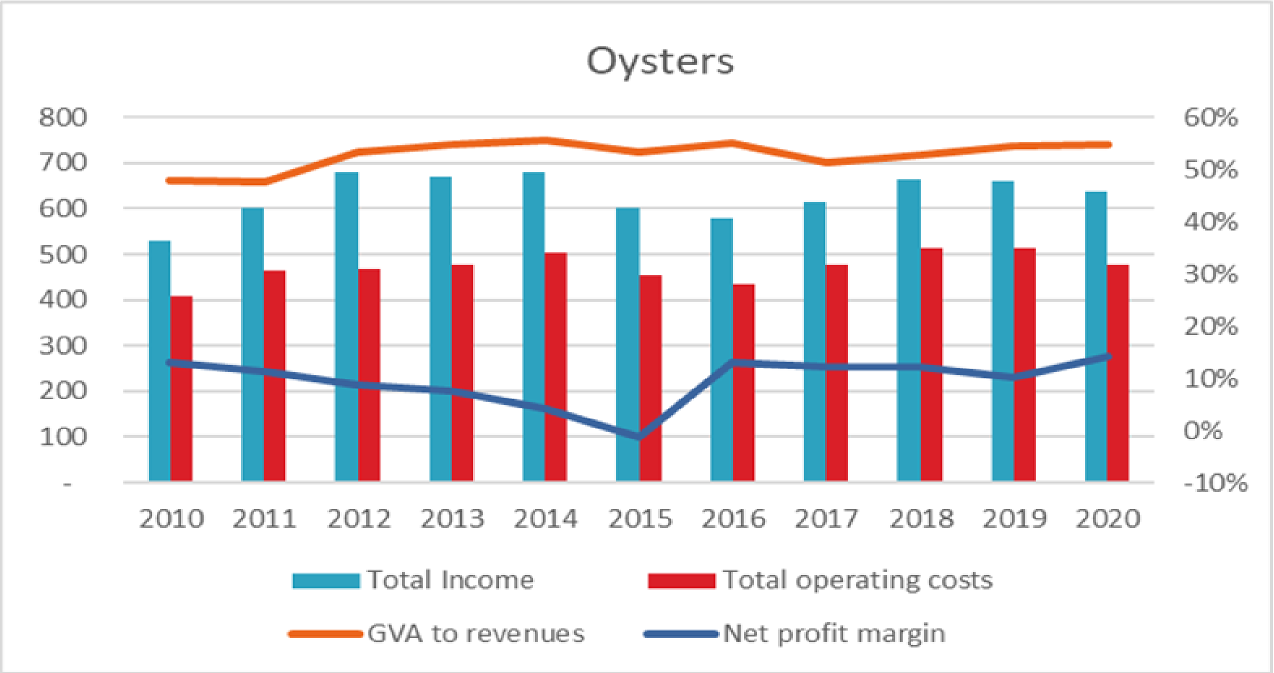
Shellfish contributes (30%) in terms of value and (51%) in volume.

Main producers are Spain, France, Portugal and Italy

Species are Oysters, Mediterranean- and Blue-mussels and Clams

Dominated by small scale family owned enterprises

The shellfish sector is the most important in terms of employment 29,000 persons, distributed on 7,000 enterprises



Main results - Freshwater fish sector 2020

Freshwater contribute 28% of value and 28% in volume.

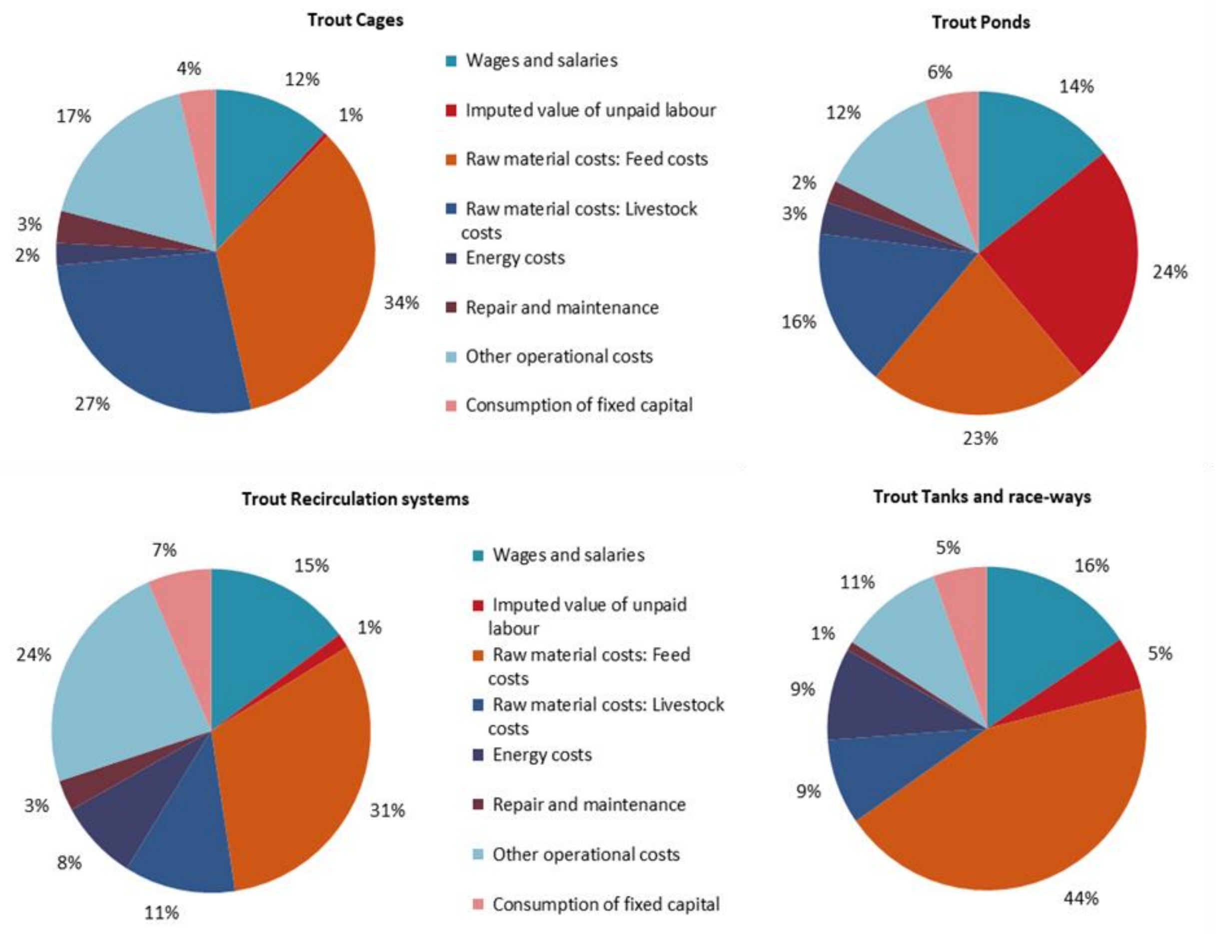
Main producers are Italy, Denmark, France and Spain

Species are trout and carp

Trout are produced in both intensive and extensive systems
Carp is produced in extensive systems

Small scale family owned enterprises

Employment 20,000 persons.
Around 7,000 enterprise.



Special Topics – Nowcast

Nowcast for aquaculture sector:

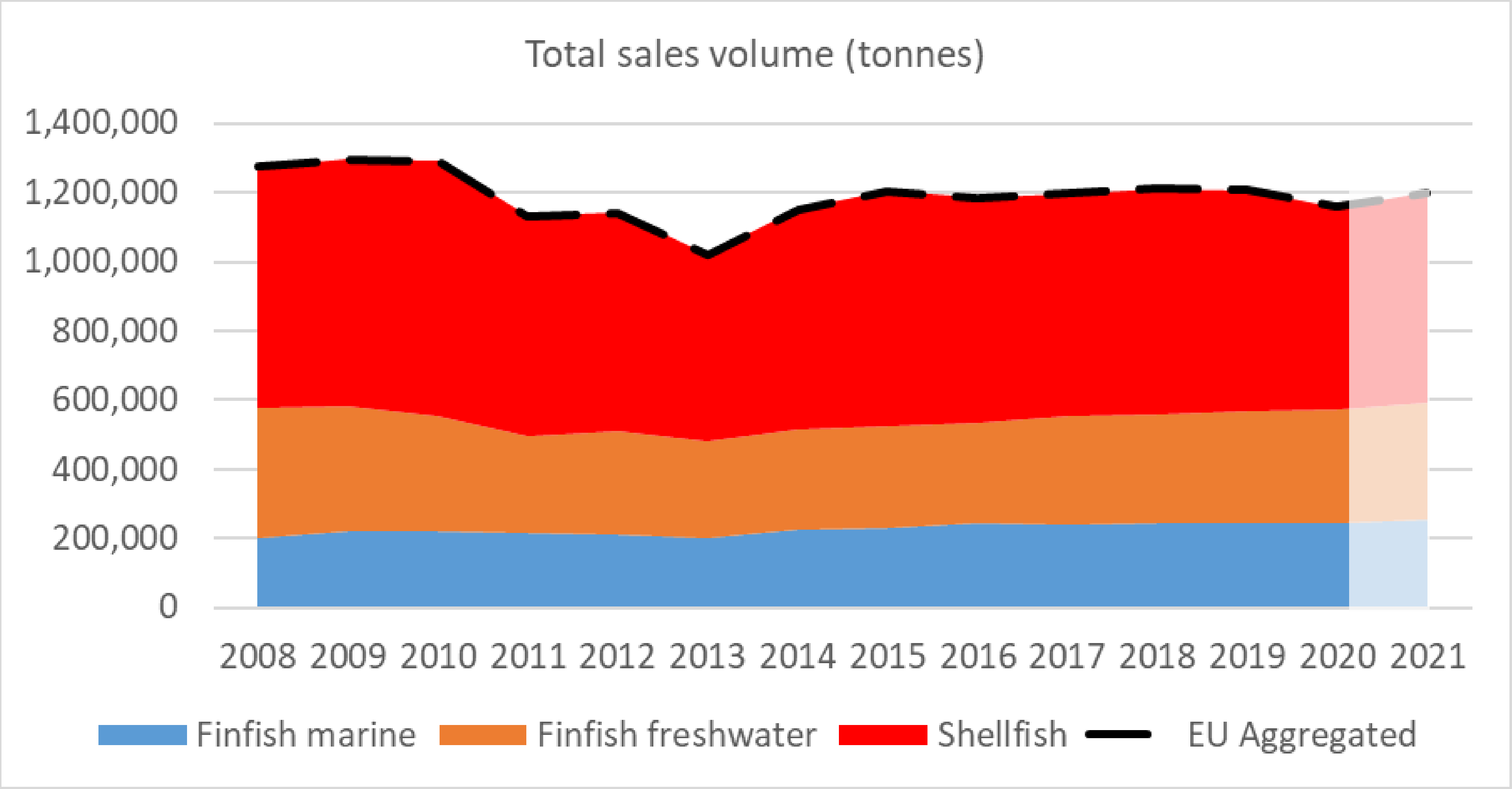
1. The nowcast-model only estimate production volume, value and employment in the sector

2. Only 2021 is reported (lack of data for 2022)

3. This is also due to situation with increasing energy prices and the aftermath of the Covid-19 pandemic

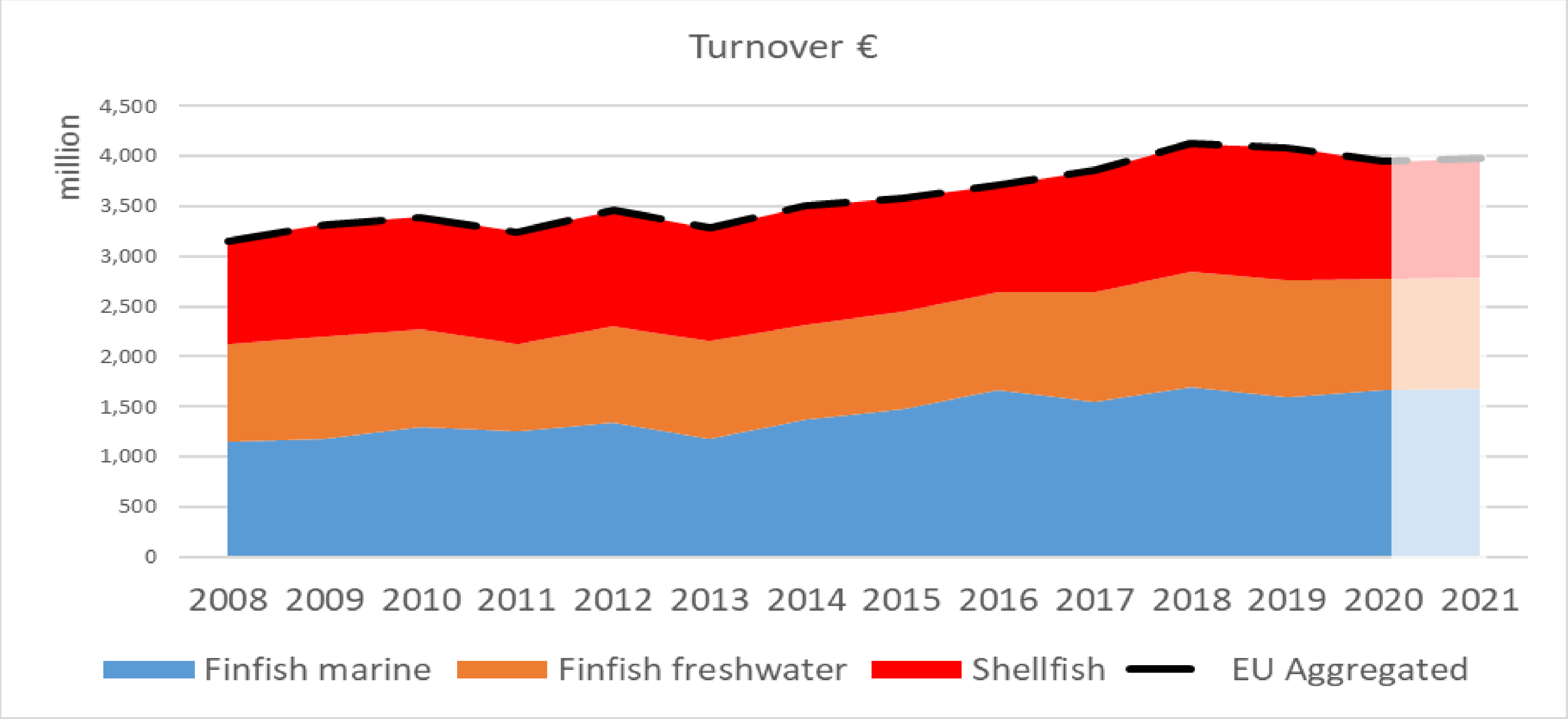
Nowcasting (I)

- Total sales volume is excepted to increase 4% in 2021



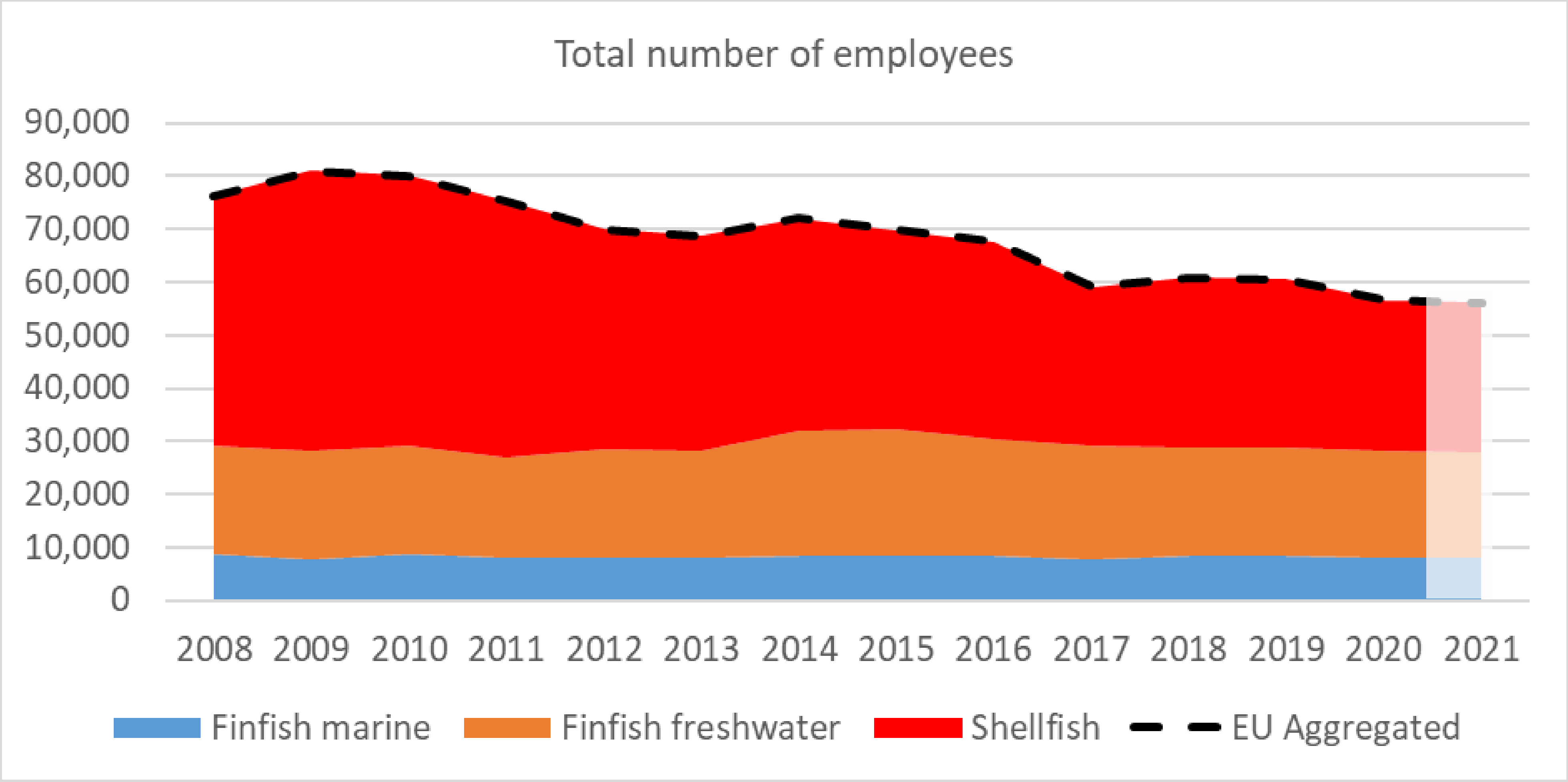
Nowcasting (II)

- The economic development is expected to improve in 2021 by 4% compared to 2020.



Nowcasting (II)

- Employment is expected to decrease in 2021 by 1% compared to 2020.



Special Topics – Energy

Energy prices effect on the aquaculture sector:

1. An average price of energy is estimated for EU 2022
2. Three productions are analysed using their cost structure
3. A direct cost (electricity, energy, fuel) is estimated
4. An indirect cost (feed) is estimated

Conclusion

Direct energy use – cost increase of 70% from 2020-2022
Indirect cost (feed) – cost increase of 55% from 2020-2022

Industries with high energy use and production of feed fish is the most exposed, where the shellfish sector is less exposed.

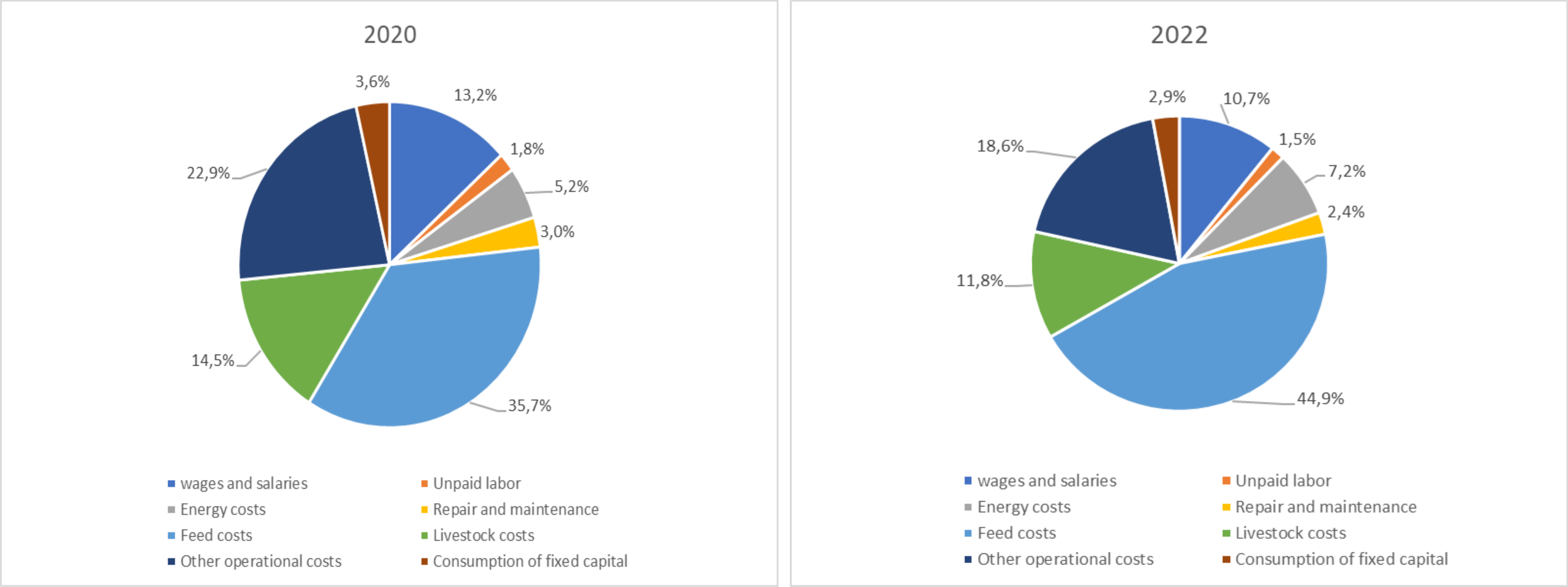
Special Topics – Energy

<u>Energy prices effect on the aquaculture sector:</u>

Direct and indirect cost of energy prices – from 2020 to 2022 (Trout in RAS).

- In monetary terms, this correspond to an increase of 70% in the direct cost of energy and 55% in the indirect costs through feed

Figure 5.5. Estimated cost structure of the Danish RAS trout segment in 2020 and 2022.



Special Topics – Social data

Social data:

1. Data is provided on gender, age, education, nationality and employment status
2. The analysis provide information on the EU and national level
3. The data was analyzed for the 3 main sectors and production technology

Conclusion

The socio-demographic data provides some interesting and useful insights on distribution of the different variables on countries, age, gender, segments and production technology.

One of the interesting results is on education in different segments/technology

Thank you

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