Measurement of blue economy in Poland

Jakub M. Kwiatkowski[12], Zbigniew Mogiła[1]

[1] Institute for Development, Sopot, Poland

[2] University of Gdansk, Poland

INSTITUTE FOR DEVELOPMENT

"Tackling land-sea interactions on the way towards Blue Growth in Baltic Sea Region"

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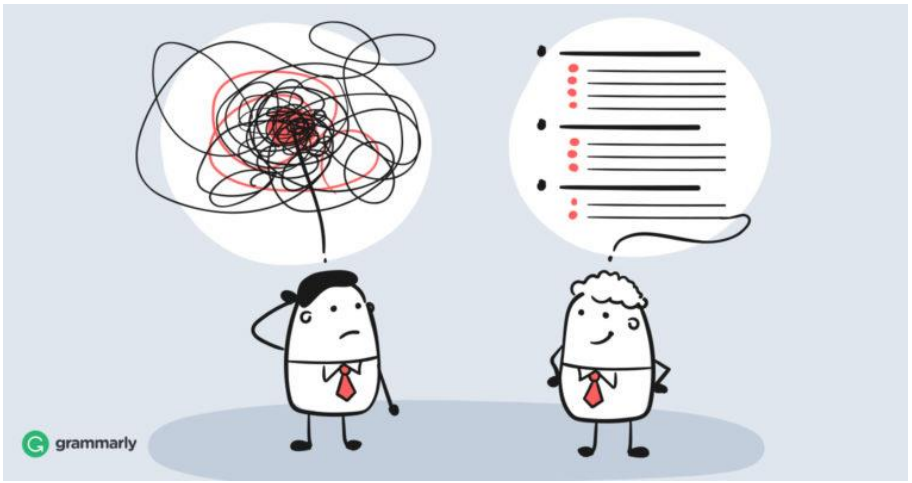
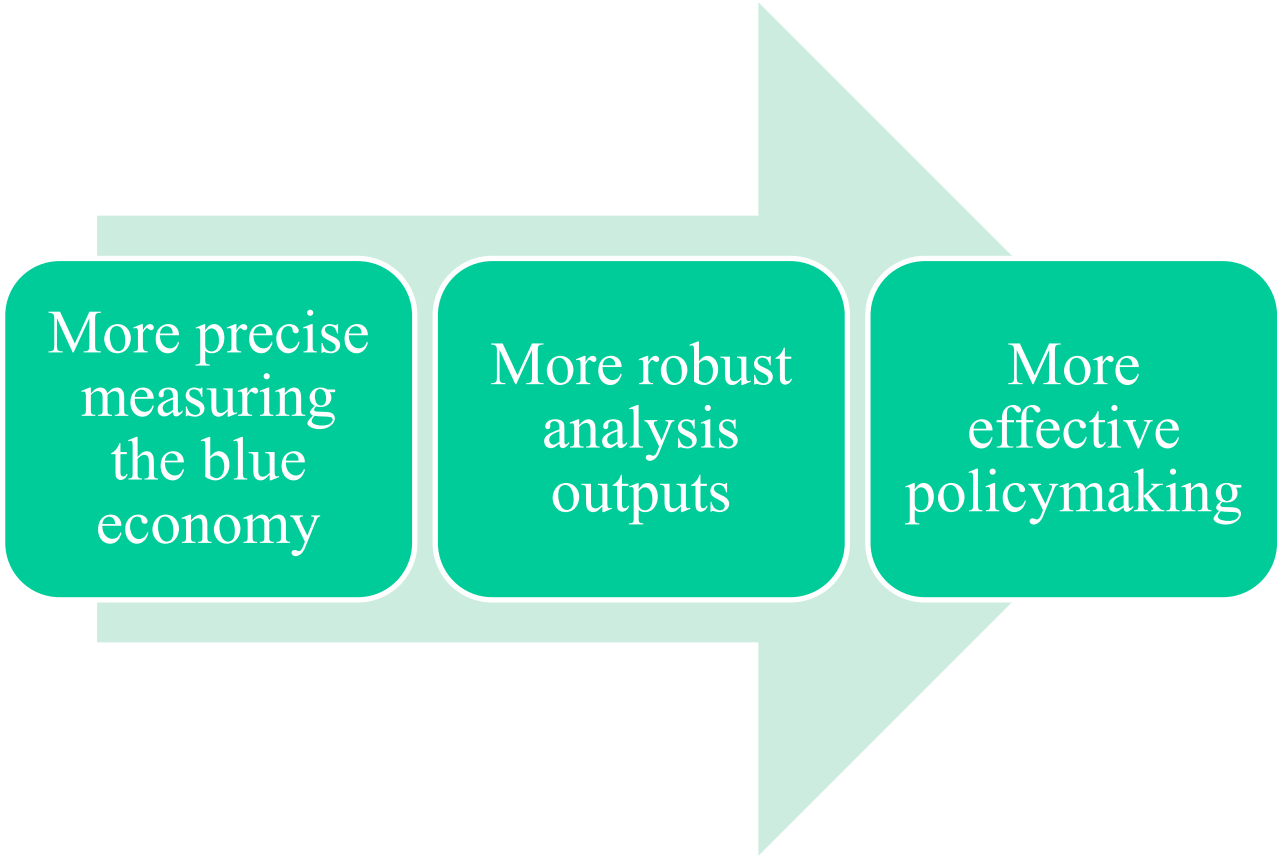
Outline



- Motivation
- Objectives
- Decomposition of blue growth in the Baltic Sea Region
- Methodology of measuring blue growth in Poland
- Conclusions

Motivation


More precise measuring the blue economy
More robust analysis outputs
More effective policymaking

Objectives

1. Decomposition of blue growth in the Baltic Sea Region (BSR) into **internationally-driven** and **country-specific factors** (shift-share analysis using EC DATA)

2. Presentation of the **methodology of blue economy measurement** in Poland

Decomposition of blue growth in the BSR (1)

Interpretation of the results for Poland

2009-2018 total gross value added growth

BSR GROWTH EFFECT

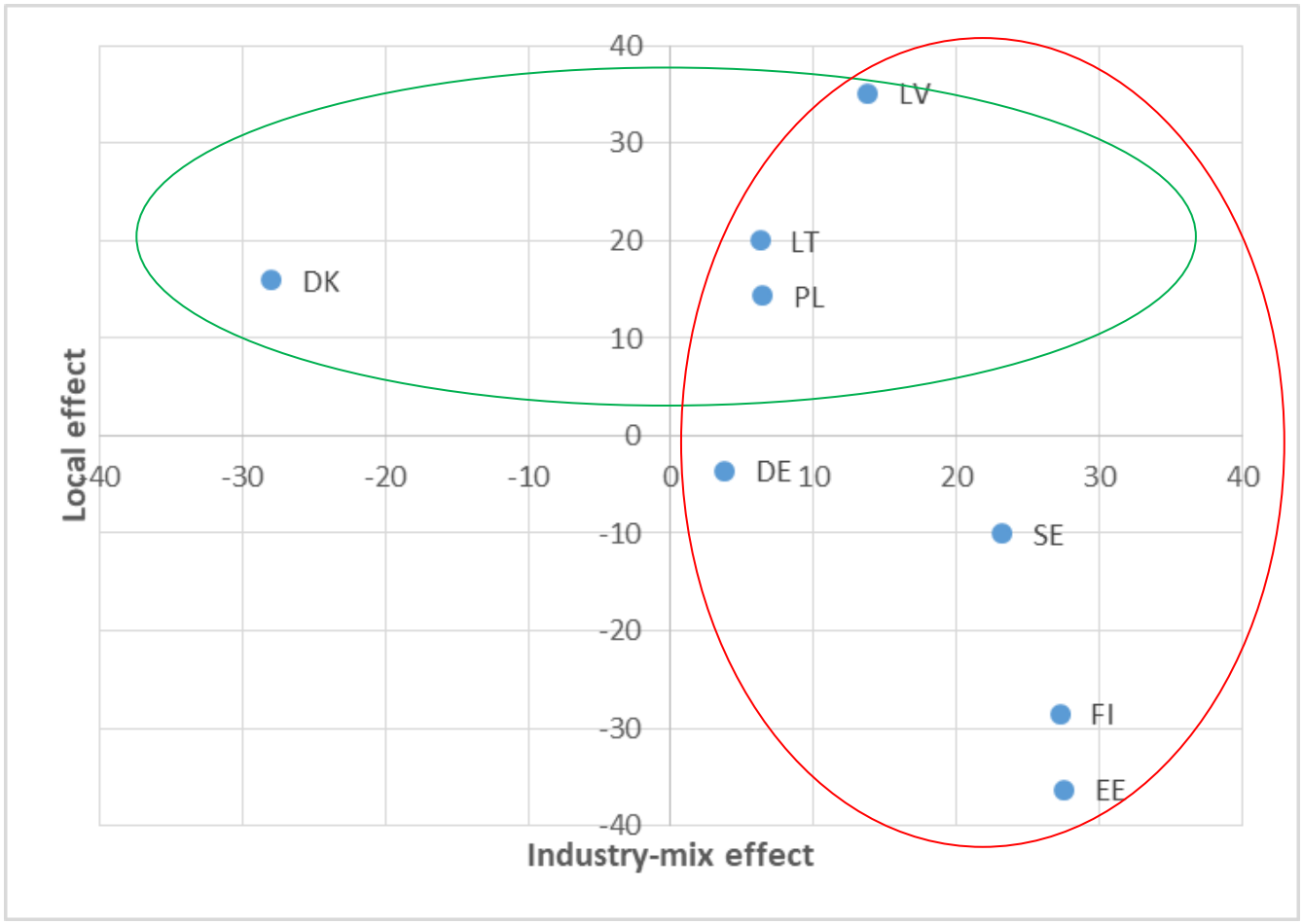
26.1%= 5.3%+6.4%+14.4%

Poland's blue economy has a relatively large share of sectors that tend to grow faster at the BSR level (**INDUTRY-MIX EFFECT**)

Several blue sectors in Poland are more competitive than their counterparts in the BSR (**LOCAL EFFECT**)

Decomposition of blue growth in the BSR (2)

Industry-mix and local effects over 2009-2018 (in perc. points)



Are our results in line with the programming documents?

Sectors growing faster than the BSR blue economy as a whole (INDUSTRY-MIX EFFECT):

- *processing and preserving of fish*
- *crustaceans and mollusks*
- *prepared meals and dishes*
- *wholesale of other food, including fish, crustaceans and mollusks*
- *cargo handling*
- *warehousing and storage*
- *service activities incidental to water transportation*
- *building of pleasure and sporting boats*
- *repair and maintenance of ships and boats*
- *manufacture of textiles other than apparel*
- *manufacture of cordage, rope, twine and netting*
- *manufacture of instruments for measuring, testing and navigation*
- *manufacture of engines and turbines, except aircraft*
- *sea and coastal passenger water transport*
- *inland passenger water transport*
- *other transportation support activities*
- *accommodation*
- *transport and other expenditure*

Sectors with the greatest potential for growth according to *Sustainable Blue Growth Agenda for the Baltic Sea Region:*

- short sea shipping,
- coastal and cruise tourism
- offshore wind
- shipbuilding
- aquaculture
- blue biotechnologies

How can we possibly improve the EU methdology of measuring the maritime economy to make analyses of blue growth more reliable?

Measurement trade-off

Versality of methodology

Accuracy of methodology

Is versality versatile?

- Different industries included:
  - Sea services (OECD, 2016 vs Ecorys, 2012)
  - Sea R&D (OECD, 2016 vs Ecorys, 2012)
  - Desalination (Ecorys, 2012 vs. OECD, 2016)
- Non-existing/measured industries
  - Blue biotechnology

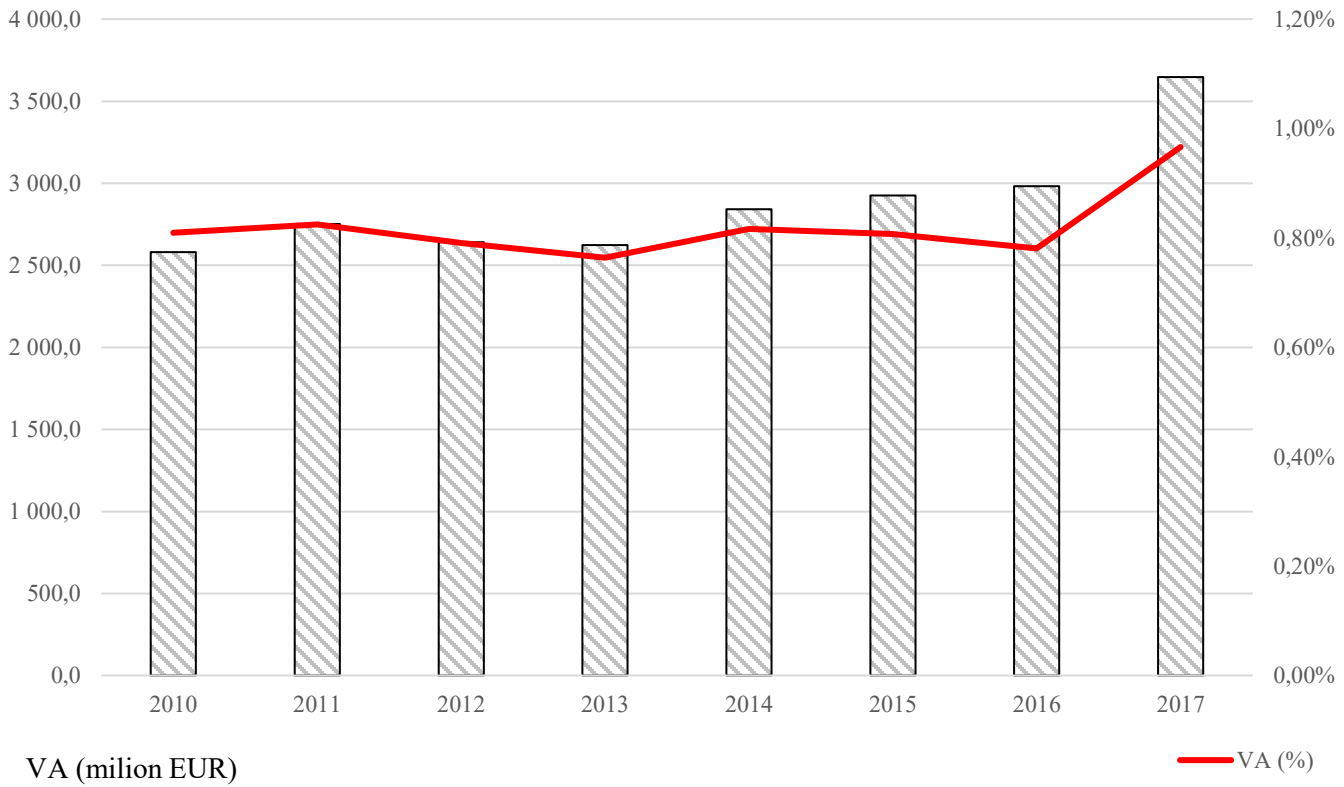
Challenges

- Which industries should be considered as blue?
- What share of an industry is related to the blue economy?
  - Tourism & gastronomy
  - Pipelines

Our approach

- Micro-foundations – Orbis Database
  - Geographic dimension
  - Economic dimension
- Local data sources (Local Data Bank)

Results (1)


4 000,0
3 500,0
3 000,0
2 500,0
2 000,0
1 500,0
1 000,0
500,0
0,0
1,20%
1,00%
0,80%
0,60%
0,40%
0,20%
0,00%
2010
2011
2012
2013
2014
2015
2016
2017
VA (milion EUR)
VA (%)

Results (2)

- In 2010, the size of the blue economy in Poland totaled 2.18 bilion euro according to EU (2013) estimates
- On the other hand, our results show that blue economy was responsible for value added of 2.58 bilion euro in 2010
- The difference in methodology leads to 400 milion euro difference:
  - Approximately 18% of total
  - Twice as much as whole tourism industry
  - Nearly as much as the largest blue industry - shipbuilding

Conclusions (1)

- a greater share of **manufacturing and tourism-related branches** in total gross value added tends to put the blue economy of the BSR on the track of fast growth,
- the positive contribution of the local effects to maritime development is reported for **Denmark, Latvia, Lithuania and Poland** showing the strong competitive advantage of several blue sectors in their economies,
- no apparent association is found between country-level specialization and both structural and local effects suggesting **no significant impact of marine and maritime policies on the priority sectors** as set out in *A Sustainable Blue Growth Agenda for the Baltic Sea Region,*

Conclusions (2)

- the size of the blue economy clearly differs depending on the methodology applied,
- this, in turn, can lead to contradictory results and suboptimal public intervention,
- on the other hand, lack of international comparability is defective from the international (e.g. the EU) perspective,
- **With above in mind, we propose a more precise methodology of blue economy measurement to better address maritime potentials and problems**

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Thank you

mogila.zbigniew@gmail.com
jakub.kwiatkowski@ug.edu.pl