

A comparison study between the blue economy gross value added (GVA) in Baltic Sea “EUSBSR” (Poland) and east Mediterranean Sea (Egypt)

Eman Adel Eid Hassan*

Abstract

A recent trend in the economy focus on the new concept of ‘blue economy’ it has a new dimensions in the last few years, it is important to highlight the maritime activities’ vision in Poland with its national economy, the papers in that field explain the regional implementation of the blue economy , it is a few visions about the local dimension of blue economy. That can be according to the absentness of statistical data for maritime economy. The aim of the explain of definition and evaluate the statistics of employees and gross value added between the Baltic sea EUSPSR(Sweden ,Denmark, Estonia ,Finland, Germany, Latvia, Lithuania and Poland) (EU strategy for the Baltic sea region(2023), and east Mediterranean sea(Cyprus, Malta, Greece, Croatia, Spain, Italy, France, Turkey, Israel, Morocco, Egypt, Montenegro, Slovenia, Monaco, Tunisia, Albania, Algeria, Lebanon, Syria, Bosnia and Herzegovina and Palestine)(the marine and coastal environment(2023).

The paper focus on the strategy of the “blue ocean” with its opportunities in the rural areas of many sectors that will support the global competition at the Baltic Sea EUSBSR and east Mediterranean sea

Keywords: blue economy, new dimensions , marine and coastal resources ,EUSBSR ,Mediterranean Sea.

JEL classification:B22,E24,C82,F40,F62

* Ph.D. in economic , lecturer at Ahrum Canadian university

دراسة مقارنة بين إجمالي القيمة المضافة للاقتصاد الأزرق (GVA) في بحر البلطيق "EUSBSR" (بولندا) وشرق البحر الأبيض المتوسط (مصر)

ملخص

هناك اتجاه حديث في الاقتصاد يركز على المفهوم الجديد "الاقتصاد الأزرق" الذي أصبح له أبعاد جديدة في السنوات القليلة الماضية، ومن المهم تسليط الضوء على رؤية الأنشطة البحرية في بولندا مع اقتصادها الوطني، كما توضح الأوراق البحثية في هذا المجال التنفيذ الإقليمي للاقتصاد الأزرق، عبارة عن بعض الرؤى حول البعد المحلي للاقتصاد الأزرق. ويمكن أن يكون ذلك في ظل غياب البيانات الإحصائية للاقتصاد البحري. الهدف من شرح تعريف وتقييم إحصاءات العاملين وإجمالي القيمة المضافة بين بحر البلطيق EUSPSR (السويد والدنمارك واستونيا وفنلندا وألمانيا ولاتفيا وليتوانيا وبولندا) (استراتيجية الاتحاد الأوروبي لمنطقة بحر البلطيق (2023) وشرق البحر الأبيض المتوسط (قبرص، مالطا، اليونان، كرواتيا، إسبانيا، إيطاليا، فرنسا، تركيا، إسرائيل، المغرب، مصر، الجبل الأسود، سلوفينيا، موناكو، تونس، ألبانيا، الجزائر، لبنان، سوريا، البوسنة والهرسك وفلسطين) (البيئة البحرية والساحلية (2023).

تركز الورقة على استراتيجية "المحيط الأزرق" مع الفرص المتاحة في المناطق الريفية للعديد من القطاعات التي ستدعم المنافسة العالمية في بحر البلطيق EUSBSR وشرق البحر الأبيض المتوسط.

الكلمات المفتاحية: الاقتصاد الأزرق، الأبعاد الجديدة، الموارد البحرية والساحلية، EUSBSR، البحر الأبيض المتوسط

1 Introduction

1.1 introduction to problem

the blue economy was an international argument for a main question about the availability of implementing the green economy to coastal countries and it was described in a wide range in “the blue economy concept paper” in the conceptualizing oceans as a “development spaces”.(Dorota michalak,D.,&Szyja,(2022).

This paper display the difficult in implementing the principles of blue economy in both the Baltic sea EUSBSR and east Mediterranean sea in the recent years with a vision of identify the problem ,explaining the blue economy in employee and gross value added at its local dimension .The economy in many sectors had developed according to the new implement of the blue economy with a value added to its fast growth.

1.2 the importance of the problem

The implementing of the new blue economy is very important ,the human activity should encourage the importance of the new blue economy and the global implement of it , it should be enhanced for the positive activity in the ocean in sustainable relationship with blue economy starting a new steps for achieving the development in the economic ,environment and human health issues , the natural resources of the ocean should be support the activity in many sub sectors in both the Baltic sea EUSBSR and east Mediterranean sea.

1.3 A Literature Review section:

Guhter A Pauli(2010) highlights the blue economy history ,it was a start for the concept of the blue economy to find one hundred million opportunity for a new jobs, that will be effective tools to enhance the global economy , it is such an integration of the real world economics

NJ Bennett, AM ciseross- Montemayor, J Blyth(2019), explaining the risk of the blue economy that develop the idea of

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harming marine environment and human resources, so new policies were needed , a chart of priorities should be set toward the environment sustainability to fit the blue economy.

KI-Hoon lee, Junsung Noh, Jong seong Khim(2020), the blue economy reflects the strategy of the world’s oceans and water resources, the economic activity is a balance between the ocean’s activities and the sustainable development, the trend of implementing a blue economy is a supporting of sustainable development goals (SDGs)it may face some challenges, there was a relation between them , it is a develop of good health and well being in the DSG3 and the decent work and economic growth in DSG8.it can play a direct or indirect role in the economic’s development.

Michelle voyer, Genevience Quirk, Alistair McIlgorm, Kamal Azmi(2018), blue economy became a popular concept in modern marine and it has a frame in an ocean governance, it brings many opportunities for development, it should be prevented by a policy to protect the environment , the international blue economy policy analyze the practice of the way of supervision the blue economy, it focused on marine industries with a growing trend of security for the world’s ocean.

D.Dimopoulos, D.Queiros, C.Van Zyl(2012), the future of the marine tourism in the light of implementing blue economy is very clear, it is a popular activity, it has a future risks because of the domestic crime and the political instability, so the government prepared a regulations to prevent the activity of the blue economy.

Claire A. Amuhaya (2022),many countries played an essential role in advancing the blue economy as a new concept in the global stage, they used a national policies to maximize blue economy benefits.

Simone Smith –Godfrey(2016),there was a strong relation between the improving of the international trade and the importance of the ocean, the land and the ocean evolves in a great role in the economy , the blue economy analyze the criteria of a necessary use of the ocean, there were many activities related to ocean services. The blue economy focused on the growth of the economy through the effective use of ocean.

2-Methodology

Part (1) (Figures, tables)

Table No(1): the main indicators of the blue economy in EU

Indicator	Value
Gross value added	€183.9 billion
Employment	4.45 million
Net investment ratio	33%
Gross profit	€72.9 billion

Source: European commission (2022)The EU blue economy report(2022), publication office of the European union , Luxemburg .

The gross value added increased with 31% in 2019 ,and for the employment it was increased too but with 17% compared with 2018 ,for the gross profit it was an increase in its value at the last ten years with an average of 41% to reach 7.2 billion at 2019 .

The blue economy in Poland and Egypt

The concept of the blue economy changed the sectors of the economics as whole , it is a faster progress with the mix effect in the industry , it is a process of covering the activity.

with fish with meals and dishes and the interaction in the activity in the food .it is a service activity in the fishing , it is a pleasure in sports in boats .

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the process of building and repair ships with water transportation , the sectors can benefit from the activity in the sea through the blue economy (Cliquot, N., Attrey (2017).

The economy in Egypt aimed to develop the blue economy through maritime fishing and tourism , it was one of the potential trend to shape the economy, it is an essential trend as it is very important in the last few year globally as it generated about 83\$ billion end contributed with 3 billion job opportunities all over the world and for Egypt it is contribute a new stage for a trade and transfer technology and a main resource for food and economic activity, it is a way to achieve a SDGs .

Table NO(2) the blue economy added value in Poland

Item	Value in Poland(1)	Value in Egypt (2)
Size of blue economy	2.18 billion euro	1.11 Billion euro)1.2 billion \$
value added	7.58 billion euro (0.09% per capita)4	8.12 billion euro))8.8 billion \$(3)

Source :

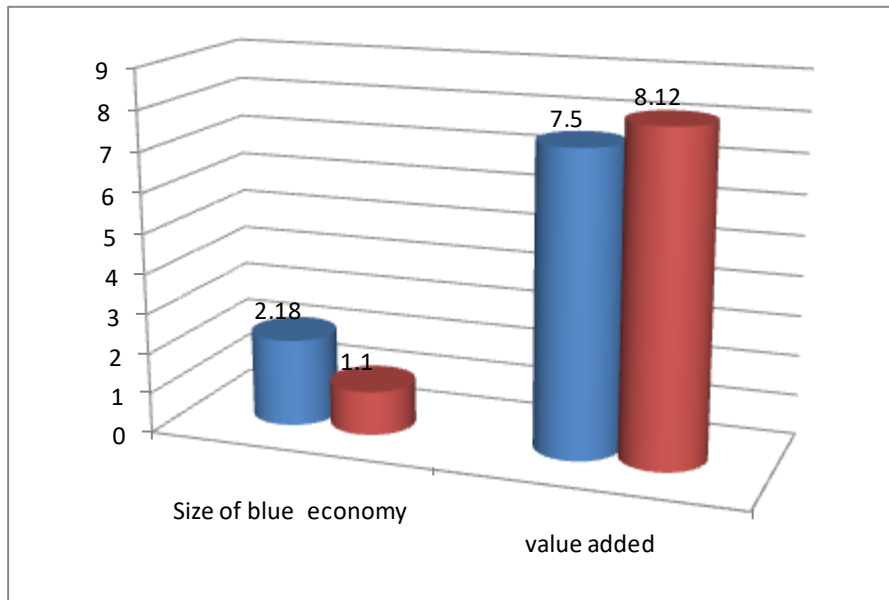
(1)Jakub M. kwiatkowski, zbigniew Mogita (2021),measurement of the blue economy in Poland ,institute for development, sopot ,Poland, university of Gdansk, Poland.

(2) Alaa A Sarhan (2021), towards a blue economy in Egypt : economic assessment of environmental degradation of marine and coastal resources, faculty of graduate studies and environmental research , Ain shams university, Egypt

(3) value added of blue economy is 2.2% of the total value added in Egypt according to world bank statistics) (2.2*404.1 billion \$=8.8 billion\$)

For the size of the economy it was a development in the indicator of the size of economy in Poland and for the value added the progress in the Egypt was a change to reach 8.12 billion euro but in Poland it was only 7.5 billion euro.

Figure No(1)) the blue economy added value in Poland and Egypt



In 2010 the value of the blue economy in Poland reached 2.18 billion euro at the other side, our research find the added value of that blue economy at 2.58 billion euro in the same year • The methodology wasn't the same that leads to 400 million euro difference: – that can be account for about 18% of total – it can be counted as twice comparing with the tourism industry – Nearly as much as the largest blue industry – shipbuilding.

For the implement a way to evaluate we need to focus on the main challenge in implementing the blue economy in coastal area on the Baltic Sea in north-central Poland, it is clear to say that the main challenges and also the strength through many opportunities was founded with the transition to a green economy, that is a trend for more diversity in the economy, that

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is a reaction of the growth of the rate of population and significant natural resources.

There was a strong relation between implementing the strategy of the blue economy in Poland and the sustainable development, it will participate in the available jobs for local employers (even most of them a staff of small- and medium-sized enterprises [SME]), that need a skills in a specific form , it is different from the green economy , that skills will support the implement of the blue , it is very important to enhance the level of skills for employee in labor market , they need a specific training programs , this will target an effective result with a support of the a new transition to a low-carbon economy. (Cliquot, N., Attrey, A., Barr, J., Giguere, S., Meghnagi, M., Iglesias, F., ...& Stroud, D. (2017).

Part (2) statistic evaluation using SPSS

Table No (3) the sectors and subsectors for blue economy

Sector	Subsector
Coastal tourism	Accommodation transport other expenditure
Marine living resources	Oil and gas Protecting of fish products Distribution of fish product
Shipbuilding and repair	Ship building Equipment and machinery
Port activities	Cargo and water housing Port and water projects
Martine transport	Passenger transport Service for transport

Source : European commission (2022)The EU blue economy report(2022), publication office of the European union , Luxemburg

Table No (4) the Employment (thousands)

Sectors	Mediterranean	EUSBSR	The change
coastal tourism	500	90	410
marine living resources	40	18	22
ship building and repair	20	23	-3
port activities	15	17	-2
Martine transport	24	12	12

Source: European commission (2022)The EU blue economy report(2022), publication office of the European union , Luxemburg

For employment rate in the Mediterranean sea it is better case than EUSBSR in coastal tourism, marine living resources and Martine transport sectors but for the others sectors like ship building and repair and port activities it is better at EUSBSR.

Table No (5) Gross National Value (GNV) billion euro

sectors	Mediterranean	EUSBSR	The change
coastal tourism	6.5	1	5.5
marine living resources	5	0.3	4.7
ship building and repair	0.2	0.3	-0.1
port activities	0.9	1.5	-0.6

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Martine transport	1.5	0.8	0.7
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Source: European commission (2022)The EU blue economy report(2022), publication office of the European union , Luxemburg

For GVA in the Mediterranean sea it is better case than EUSBSR in coastal tourism, marine living resources and Martine transport sectors but for the others sectors like ship building and repair and port activities it is better at EUSBSR

1.3 hypotheses

H0:There was no significant difference between the Baltic sea “EUSBSR” (Poland) and east Mediterranean sea

H1:there is a significant difference between the Baltic sea “EUSBSR” (Poland) and east Mediterranean sea

H1

$p < 0.05$

$X1 \neq X2$

H0

$p \geq 0.05$

$X1 = X2$

Table No(6) the statistics indicators evaluation

Indicator	Value
Size Number	5
D.f	4
Mean	119.8
Variable	32549.2
Std. Deviation	180.413
St. error	80.68
T test	1.48
T critical	1.2
P1 tail	0.105
P2 tail	0.211

Descriptive statistics for the study variables

This part of the study presents descriptive statistics for the independent and dependent study variables in order to Obtain general readings or descriptions of data and how it is organized, categorized and summarized as well present it clearly in the form of a table

T critical <T test

The findings of this study, as shown in the Table, indicate that There was a significant difference between EUSBSR” and east Mediterranean Sea, so we reject H0

3- conclusion:

The paper evaluate statistics that encourage innovative with effective activities, that for evaluating the effectiveness of the practical implement of the strategy of blue economy with its new tools, it is a new transfer of blue economic strategy to see a new trend in dealing with ocean strategy and additional benefits receipt.

The economy in Poland had developed according to the new implement of the blue economy with a value added to its fast growth. Zalizko, V. (2017, June).

Egypt has a good size of blue economy for a coastline of 3000 kms with 1150 kms on the Mediterranean Sea ,(The blue economy in the Mediterranean (2022)

The mainly using of the blue economy in construction activities in coastal trends, the med sea gross value added was 8.1 billion dollar , it was developed its coastal activity at the last ten years it reached 190 million dollar after it was only 65 million dollar ten years ago (Alaa A Sarhan (2021)

Practical in changing the old path of the economy with a developing search in the concepts of blue economy to solve the barriers in implementation with the need for high level of innovation, it is a challenge of implement the new principles with the lack of data about the know-how and the innovation progress, that will realize the effective comparison between

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economic security in both the Baltic Sea EUSBSR and east Mediterranean Sea. There was no significant difference between the east and black, so we fail to reject H0

For employment rate and GVA in the Mediterranean Sea it is better case than EUSBSR in coastal tourism, marine living resources and Martine transport sectors but for the others sectors like ship building and repair and port activities it is better at EUSBSR

Conflict of interest

The authors declare no conflicts of interest regarding the publication of this paper

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