INTERNATIONAL TRADE OF ECOWAS MEMBER COUNTRIES

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ABSTRACT

The ECOWAS regional group of countries is made up of 15 West African member states whose fundamental goal is economic integration and regional stability. The international trade of ECOWAS member states in the period from 2014 to 2019 was analyzed by application of important indicators such as foreign trade, international competitiveness, and comparative advantages. The main hypothesis of this paper assumed mainly a lower level of foreign trade openness, and export competitiveness as well as a deficit of foreign trade for most ECOWAS member countries. The results of the analysis confirmed the lack of international trade and the lower level of international competitiveness and comparative advantages of the analyzed countries.

KEYWORDS: ECOWAS, international trade analysis, comparative advantages, international competitiveness

1. INTRODUCTION

The Economic Community of West African States (ECOWAS) represents a 15-member regional group that promotes economic integration. This integration includes all fields of economic activity, particularly industry, transport, telecommunications, energy, agriculture, natural resources, commerce, monetary and financial questions, and social and cultural matters. As a trading union, ECOWAS aims to create a single, large trading bloc through economic cooperation. The Economic Community of West African States (ECOWAS) has accelerated its commitment to the long-standing objective of establishing

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1 International Trade Centre (2021), About ECOWAS, https://www.intracen.org/WACOMP/about-ECOWAS/
a single currency since its formation in 1975. The leaders believe that creating a regional single currency is a logical approach for addressing the low intra-community trade by reducing costs associated with using different currencies in trade transactions.²

All member states comprise a total area of 5.12 million km². The ECOWAS population is about 386.90 million people. In the year 2019, ECOWAS GDP per capita was 1777 USD. Debt as a share of GDP for the region is 36.53%.³ According to Imam and Salinas,⁴ the accelerating West African GDP growth rate is mostly triggered by foreign trade, while growth collapses are linked, among other things, to negative terms of trade shocks.⁵

ECOWAS was established in 1975 (by the Lagos Treaty) to improve economic cooperation and integration and security in the region and to speed up the involvement of African countries in globalization processes.⁶

Cabo Verde joined in 1976 and Mauritania left the organization in 2000. The ECOWAS agenda for regional integration was pushed forward drastically after signing the Treaty of Abuja (1991), which establishes the African Economic Community. In 1993 the Treaty of Lagos was approved to advance toward the implementation of a common external tariff (CET) and the principle of solidarity between member states was introduced. The four stages in the process of regional integration consist of the creation of a Free Trade Area, a Customs Union, a Common Market, and, after all, an Economic and Monetary Union.⁷

The ECOWAS includes two main institutions designed to implement policies, pursue a certain number of programs and carry out development projects in the Member States. These are the ECOWAS Commission and the ECOWAS

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⁷ AECID (2021), https://www.aecid.es/Centro Documentacion/Documentos/Eficacia%20y%20calidad/01_Informe%20CEDEAO_AECID_ENG_FINAL.pdf
Bank for Investment and Development. These institutions are often called The Fund. However, Projects include intra-community road construction and telecommunications and agricultural, energy, and water resources development.  

This paper was preceded by an analysis of foreign trade indicators, comparative advantages, and international competitiveness of all ECOWAS countries individually and at the community level and established a generally lower level of foreign trade openness, export competitiveness, and foreign trade deficit for most ECOWAS member countries. Accordingly, a research hypothesis is set on the positive effects of intra-regional trade on the economy of each Member State.

The purpose of this research is to understand the advantages and disadvantages of joining the community ECOWAS provides the Member States. The main goal is to explore how and to what extent the intraregional cooperation of the 15 ECOWAS member countries improves their trade and to draw relevant conclusions and recommendations based on the results. The research is based on the author’s secondary research.

The research consists of 4 interconnected parts. The introduction is followed by a methodology showing the mathematical equation of the indicator. The third part consists of the research results and analysis of the international exchange of ECOWAS countries. The paper concludes with research conclusions and recommendations for improving the foreign trade of ECOWAS countries.

The expected contribution of this research is to suggest to policymakers to build appropriate development strategies, including trade and industrial policies for West African countries in a globalizing world.

2. METHODOLOGY

The analytical part of the paper includes the results of widely used foreign trade indicators. Data were taken from the ECOWAS Regional Trade Statistics (2021) statistical database. The data form the basis for calculating indicators of intra-industry trade, trade balance, export-import ratio, trade openness, and the share of exports in the GDP of the 15 ECOWAS member countries for the

period from 2014 to 2019. The indicators in the research are methodologically processed. Methodological frameworks were taken from papers written by Kandžija⁹ et. al, Bezić, Galović, and Primorac¹⁰, among others.

The intra-industrial trade index was initially developed by Balassa, defining it as an index that tracks the degree to which an industry’s export value matches its import value.¹¹ Based on Balassa’s research, Grubel and Lloyd¹² have developed their model in more detail. This trade, which they labeled intra-industry trade, defines trade in similar, but slightly differentiated products, based on imperfect competition, or trade with close substitutes demanded from consumers in different countries who may have distinct tastes or preferences. Many studies after Grubel and Lloyd have discovered that the more advanced and developed an economy, the more specialized its trade structure is. Consequently, industrialized countries tend to record greater levels of intra-industry trade index than developing countries, with a rough continuum where middle-level income countries show IIT levels higher than low-income ones, but below those of industrial countries.¹³

Various researches of the factors that are leading to the success or failure of efforts to promote industrialization and growth have led to the conclusion that the growing level of intra-industrial trade has an important positive effect.¹⁴ Intra-industrial exchange creates additional international trade benefits even above those associated with comparative advantages.¹⁵ This allows the country to take advantage of larger markets. Intra-industrial trade (IITR) is made up of the total trade value that remains after deducting the absolute value of a country’s net exports or imports. For comparison between countries and in-

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dustries, the measures were expressed as a percentage of exports and imports of each industry. The index results oscillate between 0 and 100. The closer the results are to 100, the products that are imported and exported mainly come from the same industry. If a country exports and imports approximately equal quantities of a specific product, the value of the index is high. If the trade is mostly one-way (export or import), the index value is lower. The indicator equation is as follows:

\[ \text{IITR}_i = 1 - \left(1 - \frac{|\text{expoi}_i - \text{impoi}_i|}{\text{expoi}_i + \text{impoi}_i}\right) \times 100 \]  

(1)

Whereas:

\[ \text{expoi}_i \] – export of the country “i”

\[ \text{impoi}_i \] – import of the country “i”

The trade balance indicator (TBAL) is calculated as the difference between the values of imports and exports of goods and services. The trade balance indicator is used in macroeconomic surveys to measure sectoral competitiveness or the competitiveness of the economy. When imports of goods and services exceed exports, we call it a trade deficit. If the situation is reversed, then it is a trade surplus. See the equation of the TBAL indicator below:

\[ \text{TBAL}_i = \text{expoi}_i - \text{impoi}_i \]  

(2)

Whereas:

\[ \text{expoi}_i \] – export of the country “i”

\[ \text{impoi}_i \] – import of the country “i”

The share of exports in imports (EXIM) represents the share of exports in imports of the observed countries. The result is expressed as a percentage and is found in the following equation:

\[ \text{EXIM}_i = \frac{\text{expoi}_i}{\text{impoi}_i} \times 100 \]  

(3)

Whereas:

\[ \text{expoi}_i \] – export of the country “i”

\[ \text{impoi}_i \] – import of the country “i”
The degree of openness shows the trade openness of the surveyed economies. It is argued that trade openness brings numerous economic benefits, including increased technology transfer, skills transfer, increased workforce, overall factor productivity, and economic growth and development.\(^\text{16}\) It is calculated as the sum of exports and imports relative to the realized gross domestic product of the observed countries in a given period.\(^\text{17}\)

\[
\text{TOI}_i = \frac{\text{expo}_i + \text{impo}_i}{\text{GDP}}
\]  

Whereas:
- \(\text{expo}_i\) – export of the country “\(i\)”
- \(\text{impo}_i\) – import of the country “\(i\)”
- \(\text{GDP}\) - the gross domestic product of the observed state

The increase in the sum of exports and imports in gross domestic product results in a greater degree of economic openness and implies the observed country’s greater involvement in international foreign trade flows. Indicators that measure the degree of openness of countries clearly show the stability and involvement of the foreign trade sector in foreign trade flows.\(^\text{18}\)

The following elements are considered when measuring how dynamic and propulsive export is:

\[
\text{EGDP}_i = \frac{\text{expo}_i}{\text{GDP}}
\]  

Whereas:
- \(\text{expo}_i\) – export of the country “\(i\)”
- \(\text{GDP}\) - the gross domestic product of the observed state

The growth of the export of goods’ share within the gross domestic product in a certain period shows the higher intensity of the observed economies’ exports.

In contrast, the decrease in the share of merchandise exports in the GDP of the economy reflects the lower intensity of the observed economies’ exports.  

3. ANALYSIS OF THE RESULTS OF INTRA-REGIONAL TRADE INDICATORS OF ECOWAS COUNTRIES

The following are the results of intra-industry trade, trade balance, export-import ratio, trade openness, and the share of exports in GDP. 15 ECOWAS member countries in the period from 2014 to 2019 were surveyed. The following is an analysis of the intra-industrial exchange results of ECOWAS countries.

Graph 1. Intra-industrial Trade Indicator for EAEU countries from 2014 to 2019

Nigeria, Ghana, Ivory Coast, Benin, and Burkina Faso belong to the group of countries with the highest intra-industrial exchange index. Nigeria mainly exchanges oil for refined petroleum products, cars, and flour. In the example of Ghana, raw materials such as oil, gold, and cocoa are exchanged for refined petroleum products, oil, and semi-processed gold. The Ivory Coast trades in agricultural products for the oil and smaller ships. These are mainly import-oriented countries.

Source: Author’s Representation According to the ECOWAS Regional Trade Statistics (2021)

(except for the Ivory Coast, which produces surpluses - see Graph 2). One-way trade, predominantly import, is characteristic of Liberia, Niger, and Sierra Leone.

**Graph 2. Foreign Trade Balance Indicator (TBAL) for ECOWAS Countries from 2014 to 2019**

![Graph showing foreign trade balance indicator for ECOWAS countries from 2014 to 2019.]

Source: Author’s Representation According to the ECOWAS Regional Trade Statistics (2021)

Graph 2 shows the dominance of the trade deficit for ECOWAS member-countries other than the Ivory Coast. Exceptions are also countries like Ghana in 2019 and Nigeria in 2014. The largest deficits are characteristic of Nigeria, Senegal, and Liberia, and the smallest deficits were recorded in the example of Ghana, Guinea-Bissau, and the Gambia. The countries such as Nigeria, Ghana, Senegal, and Togo account for over 70% of ECOWAS output.

It is important to point out that the economic growth of ECOWAS countries depends mainly on foreign trade. The US, five EU countries (France, Germany, the United Kingdom, the Netherlands, and Spain), and China account for
approximately 68.3% of ECOWAS trade (UNCTAD, 2015; Olakojo: 2018). In the aggregate, the conclusion is that the trade deficit is inherent to the ECOWAS group except in 2014 thanks to Nigeria’s huge trade surplus.

The production of ECOWAS countries mainly consists of agricultural products. ECOWAS intraregional trade accounted for 8.4% of total trade in 2014 (ITC, 2016). Moreover, 50% of intraregional exports are directed from the resource-rich countries like Nigeria and Ivory Coast to the large consumer countries like Burkina Faso, Sierra Leone, Ghana, Senegal, and Mali. The ratio of exports and imports of ECOWAS countries at the global level in the 2014 to 2019 period is shown below.

Graph 3. The Share of Exports in Imports (EXIM) of ECOWAS Countries from 2014 to 2019

Ivory Coast, Ghana, Benin, and Burkina Faso belong to the group of countries with the highest level of export competitiveness. It is interesting to notice that Ivory Coast’s exports exceed imports in all years of the observed period except in 2018.

The Ivory Coast mostly exports refined petroleum products, crude oil, cocoa, and foodstuffs (cocoa butter). Ghana’s exports consist mostly of processed wood, plastics, textiles, semi-processed gold, and cocoa. Most of Benin’s ex-
ports include tobacco, construction materials, and agricultural products such as cotton and cashews.  

Furthermore, Nigeria is also marked by the predominance of exports over imports in 2014 due to its largest export product, oil. On the other hand, the smallest share of exports in imports was recorded in the examples of Liberia, Niger, Sierra Leone, and the Gambia. Overall, the share of exports in imports of ECOWAS countries ranges between 76% and 111%. The following Graph 4 shows the degree of 15 ECOWAS countries’ trade openness in the period from 2014 to 2019.

Graph 4. Trade Openness Index (TOI) for ECOWAS countries from 2014 to 2019

Source: Author’s Representation According to the ECOWAS Regional Trade Statistics (2021)

Trade openness encourages economic development by connecting the world economy and new markets. Although most countries have a foreign trade deficit, the sum of imports and exports in the GDP of ECOWAS countries ranges between 0.33 and 0.44 in the observed period. The lowest TOI indicator was registered in the examples of Nigeria, Niger, and the Ivory Coast. In contrast, the highest TOI was registered in the examples of Liberia, Cape Verde, and Guinea. When considering Liberia’s trade openness, it is an import-dependent ECOWAS country whose imports take precedence over exports. Nigeria

as one of the most dominant ECOWAS countries recorded the lowest trade openness. From 1960 to 2019, the average TOI indicator value of Nigeria was 31.96%. In 2019, the TOI indicator was 34.02%. In comparison, the world average TOI indicator (152 countries) was 91.55%.

Reasons for the lower TOI indicators of Nigeria can be found in the export of primary products (raw materials - oil) which generally have lower added value in the production process along with Nigeria’s higher import orientation.

Furthermore, Graph 5 shows the share of exports in the GDP of ECOWAS countries. The observed period is from 2014 to 2019.

**Graph 5. Share of exports in GDP (EGDP) for ECOWAS countries from 2014 to 2019**

Source: Author’s Representation According to the ECOWAS Regional Trade Statistics (2021)

The total export orientation of ECOWAS varies between 14.8% and 21.1%, which is 50% less than the world average of EGDP indicators in 2019. If we summarize the results of Graph 5 and previous graphs, we can presume that ECOWAS countries do not show an enviable level of export orientation. It has already been mentioned that most ECOWAS countries face a foreign trade deficit, which is an additional argument in favor of the above-mentioned thesis. The largest share of

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exports in GDP was registered in Cape Verde, Ghana, and Guinea. Cape Verde’s largest export products are fish (75%) and clothing (10%). However, Cape Verde is an import-oriented country with a foreign trade deficit. The lowest level of EGDP indicators is characteristic of Niger, Nigeria, and Sierra Leone, which are simultaneously ranked below the ECOWAS average.

4. CONCLUSION

The ECOWAS regional group was established with the goal of economic cooperation, integration, and regional security. It consists of 15 West African member states. In 1975, ECOWAS was established as a free trade zone, and since 2000 it has become a customs union. ECOWAS’ progress has not been rapid but slowed down due to various political instabilities and conflicts within certain member states. The paper analyses the foreign trade, comparative advantages, and international competitiveness of 15 ECOWAS countries, including Benin, Burkina Faso, Cape Verde, Côte d’Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal, and Togo. The obtained results have confirmed the basic hypothesis of the paper, namely that there is a lower level of foreign trade openness, export competitiveness, and a foreign trade deficit in most of the surveyed ECOWAS countries. Based on the results of the analysis, it should be noted that the most prominent countries in terms of exports are the Ivory Coast and Nigeria, and a lower level of international competitiveness was registered in the case of Liberia, Niger, and Sierra Leone. To achieve a higher level of international competitiveness and comparative advantage for ECOWAS countries, customized policies that encourage trade (especially intra-industrial trade) and FDI should be prepared by highly developed countries that are also ECOWAS’ trading partners. By joining the global value chains, ECOWAS’ economies would be improved, and they could enjoy the benefits of industrialization, technology, and infrastructure investment.

One of the main preconditions is the political stability of ECOWAS member countries, which would eliminate corruption and encourage productivity and structural transformation. This should also stimulate the growth of export sectors such as agriculture, processing industries, and mining.

LITERATURE

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