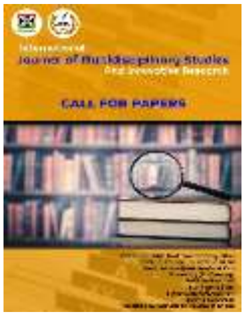

International Journal of Multidisciplinary Studies and Innovative Research

ISSN: 2737-7172 (O), ISSN: 2737-7180 (P)

Volume 13, Number 01, pp. 70-84

DOI: 10.53075/Ijmsirq/09873656554345

Exploring the logistical Implications of the exit of Burkina Faso Mali and Niger from ECOWAS in the lenses of the Heckscher – Ohlin trade theory

Sophia Dauda[1], Clement Nangpiire [2], Abdul-Aziz Mustapha[3]

[1]Catholic University of Ghana, Fiapre, Department of Management, P.O. Box 363, Sunyani, Bono Region Ghana

[2]SDD University of Business and Integrated Development Studies, Department of Procurement and Supply Chain management, School of Business P.O. Box WA54, Wa. Upper West Region, Ghana

[3]Department of Logistics and Procurement Management Tamale Technical University

Corresponding Author: Sophia Dauda Sophia.tfsa@gmail.com/Sophia.dauda@cug.edu.gh

How to Cite

Sophia Dauda, Clement Nangpiire, Abdul-Aziz Mustapha (2025). Exploring the logistical Implications of the exit of Burkina Faso Mali and Niger from ECOWAS in the lenses of the Heckscher – Ohlin trade theory. *International Journal of Multidisciplinary Studies and Innovative Research,* 13(1), 70-84. DOI: 10.53075/Ijmsirq/09873656554345

ABSTRACT: The study employed the Heckscher-Ohlin theory to explore the potential logistical impacts on ECOWAS bloc following the intended exit of Mali, Burkina Faso and Niger. An explorative qualitative design was adopted. Data were gathered from news websites, articles, reports of international trade and logistics organisations and analysed using Atlas.ti, focusing on logistical cost, flow and schedules. The findings indicated that the departure would significantly impact costs as taxes and tariffs would be reintroduced. The high costs would affect both parties, with the contending countries experiencing more severe consequences, due to their reliance on the remaining members for imports and exports. Logistical flow would be disrupted, hindering the previously seamless movement of goods and persons. The imposition of travel requirements would further impede logistical freedom, resulting in delays. Stakeholders should devise strategies through bilateral agreements to maintain supply chains efficiency focusing on mitigating logistical disruptions due to reintroduction of barriers and restrictions.

Keywords: Logistics, trading bloc, ECOWAS, Heckscher-Ohlin trade theory, trade, exit

1. INTRODUCTION

In the landscape of trade, regional cooperation and integration has been a beacon that fosters collaboration and economic growth. In Africa, the Economic Community of West African States (ECOWAS) has been at the forefront fostering these collaborations, ensuring political stability and social development among its member nations (Nsuoli, 2004). However, recent geopolitical moves present the possibility of significant changes, as Mali, Burkina Faso and Niger contemplate their departure from the bloc. This move carries profound implications not only for the departing countries but the entire ECOWAS region.

Logistics is fundamental in the success of international trade (Salawu et al., 2022). Logistics, encompassing management of resources, information and goods movement is crucial in facilitating trade by ensuring efficient transportation, reducing delays and reducing or cutting costs in cross-border transactions (Gani 2017; Salawu et al., 2022). The World Bank (2015) employed the Logistics performance Index (LPI) to measure efficiency of the logistics system across six (6) dimensions, namely customs, infrastructure, international shipments, logistics competence, tracking and tracing and timeliness. Through this assessment, the 2020 reports rated African countries relatively low. With the emerging issues in the ECOWAS bloc, it is important to explore qualitatively, the implication of the intended changes happening in ECOWAS on components of logistics closely related to the World Bank measures. The components under study include logistical cost, flow and schedules with references to the current media discussions. These components were chosen because the exit of the three countries would not change the World Bank's logistics components in the short run. Also, it is important to assess the implication of their exit considering the individual resource endowments of the exiting countries in the lenses of the Heckcher –Ohlin trade theory.

Mali, Burkina Faso and Niger, whose governments were taken over by the military, announced their withdrawal from ECOWAS on the 28th of January 2024 (Quaye, 2024). They stated unfair sanctions from ECOWAS for truncating democracies, failure of ECOWAS to assist in their fight against terrorism and insecurity and deviation of ECOWAS from its founding principles due to influence from foreign powers as the three main reasons for their exit (Quaye 2024). The potential exit presents a multifaceted challenge that demands careful examination. As such, this study explored how the exit of the three countries from ECOWAS would impact logistics in terms of cost, flow and schedules.

2. LITERATURE REVIEW

2.1 The Concept of Trading Blocs and ECOWAS

Trading bloc or regional integration is an association of countries to reduce or relax barriers to facilitate trade among member countries (Kumar, 2018). Basically, five forms of trading policies guide such integrations or associations. These include preferential trade agreement (PTA), free trade area (FTA), custom unions, common markets and economic unions (Kumar, 2018). Preferential free trade agreement (PTA) is the most basic form among trading blocs. Countries guided by such a policy agree to reduce tariffs and quotas on some goods traded between them. This bloc is followed by the free trade area (FTA). In this bloc, countries remove all trade barriers and restrictions to allow members trade whilst maintaining their own individual policies with non-member countries.

The third is the custom union trading bloc. Being guided by such a policy indicates that members eliminate all tariffs and quotas just like the free trade area. But here, the members adopt a common external tariff with non- member countries. This is also followed by the common market trading bloc. In this bloc too, tariffs and quotas are eliminated, the common external tariff is adopted and members allow free movement of goods, services, capital and labour among countries. Lastly is the economic union trading bloc. This bloc is the most integrated as it has all features of the above blocs with an additional feature of adopting a common monetary policy.

The Economic Community of West African States (ECOWAS) was established in 1975 as a free trade area but can now be described as a common market in the lenses of trading blocs. This is because its trading policy goes beyond elimination of tariffs and quotas enabling free movement of resources and adoption of a common external tariff in 2015 **(**ECOWAS, 2016**).** These features make ECOWAS a more common market than a free trade area. ECOWAS goes beyond trade and functions as a regional economic community through other mandates such as political cooperation, security, peacekeeping and social development.

This union consists of 15 countries with a mandate of promoting economic integration among members. They include Ghana, Burkina Faso, Benin, Cape Verde, The Gambia, Guinea, Guinea- Bissau, Liberia, Niger, Mali, Nigeria, Côte d'Ivoire, Senegal, Togo and Sierra Leone. Their Geographical location can be seen in figure 1, the map of ECOWAS

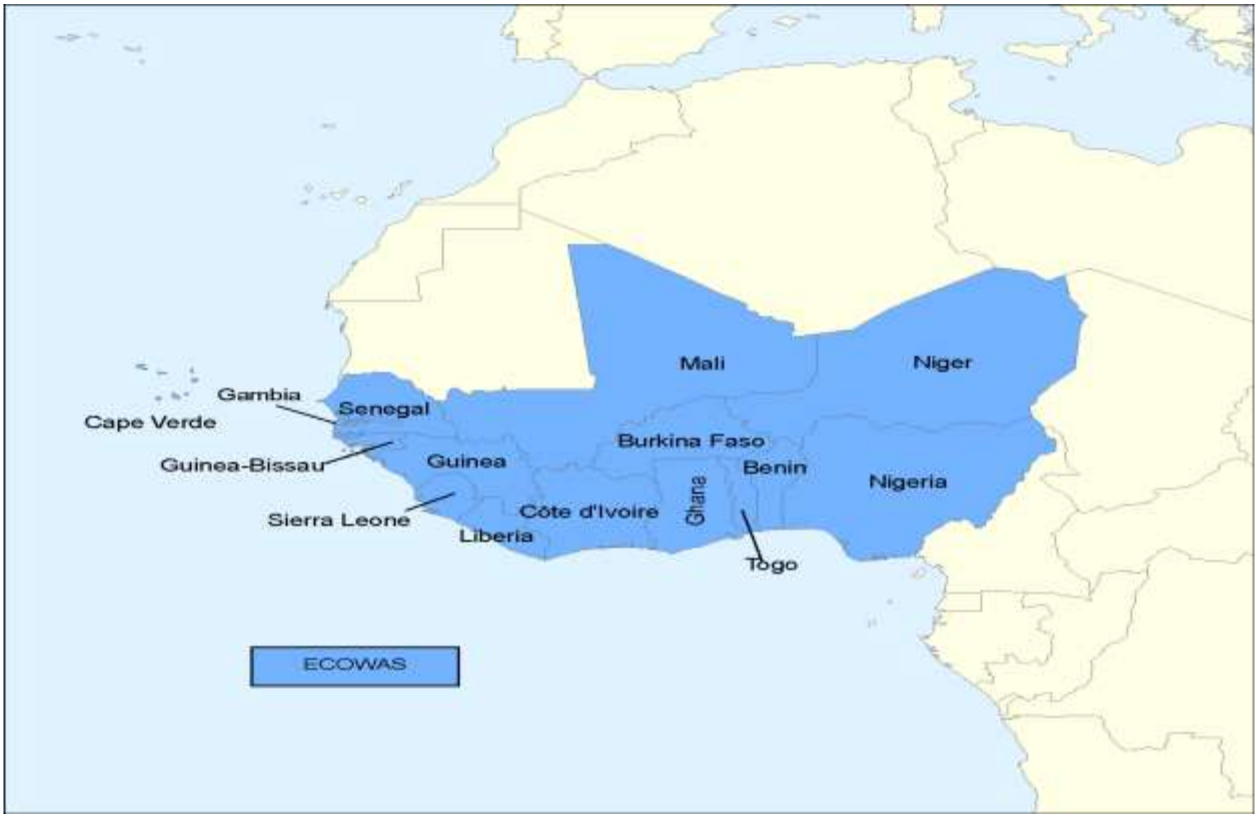

Figure 1: Map of ECOWAS
Source: Adopted from Eurostat

2.2 Logistics in ECOWAS

An important factor for regional and international trade is logistics. Logistics is defined by Waters (2003) as the business function responsible for the flow of materials from the point of origin to its final destination. Logistics in Africa has been reported to be poor, due to inadequate infrastructure, lack of appropriate technology, ineffective institutions and administrative obstacles (Festus 2021). In the ECOWAS region, the World Bank reported varying levels of efficiency and effectiveness in their logistics systems in its 2020 Logistics Performance Index (LPI) rankings. Per the reports, Ghana and Senegal are performing relatively well with 64.1 and 63.4 scores, respectively while Burkina Faso, Niger and Mali scored 56.6, 55.1 and 54.9, respectively. The rankings for these three countries suggest, they faced challenges in effectively moving goods across borders and their logistics networks (World Bank 2020)

In an attempt to resolve the logistical challenges, ECOWAS has implemented several interventions aiming to enhance trade facilitation and spur economic development. For Instance, ECOWAS has harmonised customs procedures in order to streamline processes at border crossings, It has implemented the ECOWAS trade liberalisation Scheme (ETLS) to simplify trade procedures and minimise bureaucracy, It has also engaged in infrastructure projects, supporting capacity building and encouraging information sharing and collaboration (Dada, 2015; Nitsche et al., 2024)

Logistical Interaction Between the Exiting Countries and other Countries

As landlocked countries**,** Burkina Faso, Mali and Niger rely heavily on neighbouring countries such as Ghana, Togo, Benin, Nigeria and Côte d'Ivoire for their imports and exports. Burkina Faso primarily utilises the ports of Tema in Ghana, Abidjan in Côte d'Ivoire, Lomé in Togo and Cotonou in Benin for their imports and exports for both the ECOWAS region and beyond (Logistic Cluster, 2022). Mali utilises the port of Abidjan in Côte d'Ivoire, port of Dakar in Senegal, port of Tema in Ghana and port of Lome in Togo for her imports and exports (Joshi, 2022). Niger relies on the port of Cotonou in Benin, Lome in Togo, Abidjan in Côte d'Ivoire, Tema in Ghana and Port Harcourt in Nigeria (Logistic Cluster, 2022). These exiting countries basically rely on the same ports for their international logistics activities.

2.3 The Heckcher –Ohlin Trade Theory

The Heckscher –Ohlin trade theory, developed by Swiss Heckscher and Bertil Ohlin in 1977 explains international trade based on differences in factor endowments between countries. The theory suggests that countries will export goods that intensively use their abundant factors of production and import goods that they are relatively scarce in. It underscores the importance of comparative advantage and offers some key assumptions; Countries have different factor endowments such as labour, capital and natural resources; Countries produce goods employing different combinations of factors of production.

This Heckcher –Ohlin theory has been widely utilised in various studies to analyse international trade patterns and factor endowments. For instance, Akther et al. (2022) utilized the theory and Rybcyzinski's trade predictions to trade between the USA and Bangladesh. In the study it was revealed that trade between these two countries follows the assertions of the theory. Ito et al. (2016) also analysed value –added trade and the predictions of the theory. Their investigation concentrated on manufacturing trade – value-added terms rather than general shipment flows. They concluded that, value-added trade patterns aligned more closely with the theory's predictions. Again Kalu (2022) conducted a study in Nigeria to examine whether the country's trade patterns followed the assertions of the theory. The outcomes of the study contradicted the theory's predictions, revealing that, the country's major exports to USA emanated from relatively scarce capital resources despite its abundant labour resources. In India, Prakash & Dhir (2023) assessed whether India's imports and exports conformed to the Heckscher – Ohlin theory considering the dynamic nature of the country's economic growth and its impact on factor endowments and trade structures. The study revealed that, though the country's trade patterns were consistent with its factor endowments, economic growth led to changes in production structures and factor endowments resulting in deviation from the predictions of the theory.

This current study does not compare just two countries but a whole trading bloc against three exiting countries. Therefore it is important to assess whether the composition of the three country's trade follow the predictions of the theory within the ECOWAS trading bloc. As such the following sections presents the factor endowments of the members of the ECOWAS trading block.

Factor Endowments - Resources Traded by ECOWAS Countries

Applying this theory in the context of this study, demands analyses of the factor endowments of the exiting countries and the rest of the member countries. Table 1 summarises the resources endowed by the members of ECOWAS. From the table 1, Burkina Faso is majorly endowed with gold, livestock, cotton and tomatoes; Mali is endowed with gold, livestock and cotton and Niger has uranium ore, livestock, onions and cowpea (Uexkull, 2011; Eurostat; ECOWAS, 2016; Joshi (2022). The resources of the other countries are listed as well.

Table 1: Countries and their primary exports within ECOWAS

S/N	Country	Primary Exports within the ECOWAS region
1	Ghana	Cocoa. Timber, Plastics, Textiles, Gold, Bauxite, Aluminum, Manganese ore, Diamonds, crude oil

2	Benin	Crude oil, Palm products, Cotton and Cocoa, manufactured food, beverages and tobacco, cotton cashew nuts, steel and cement
3	Côte d'Ivoire	Petroleum products, Cocoa, Coffee, Timber, Cotton, Fruits, palm oil, Fish
4	Nigeria	Petroleum and petroleum products, Cocoa and Rubber
5	Burkina Faso	Livestock, Gold, Cotton and Tomatoes
6	Niger	Uranium ore, Livestock, Onions and Cowpea
7	Mali,	Gold, Livestock, Cotton, Rice, Barley, Millet Citrus fruits vegetables and tobacco
8	Liberia,	Machinery
9	Senegal,	Fish, Petroleum products, Peanuts, Phosphate, steel, and Cotton
10	Togo	Cotton, Phosphate, Coffee, Cocoa, steel, cement, flour, margarine
11	Cape Verde	Fish products
12	Gambia	Peanut products, Cotton lint, Palm kernels, Fish
13	Guinea- Bissau	Crude Rubber
14	Guinea	Fish, Aluminum, Gold, Bauxite, Diamond, Coffee, Agricultural products
15	Sierra Leone	Diamonds, Cocoa, Coffee and Fish

Source: Uexkull, (2011), Eurostat (2011) ECOWAS (2016) and Joshi (2022)

Trade Statistics in ECOWAS
ECOWAS exports and individual country imports

To determine whether the logistical implication will be great or less, it is important to assess the worth of member countries in terms of trade volumes and the interdependence of countries, especially, the exiting countries. As such table 2 presents the dollar values of the cumulative exports (supply) of ECOWAS members and the individual imports of members from the ECOWAS bloc from the year 2018-2022. Cumulatively, the values indicate Nigeria is the highest importer of all exported products by the ECOWAS nations. This is followed by Cote d'Ivoire, Senegal, Ghana and the least importer is Cape Verde. Also, the exiting countries; Burkina Faso, Mali and Niger are 6th, 7th and 8th highest importers, respectively. The chronology of importation clearly shows who will be affected most should trade be disrupted.

Table 2: List of supplying countries in ECOWAS states for the product imported by ECOWAS states

Exporters	Exported value in 2018	Exported value in 2019	Exported value in 2020	Exported value in 2021	Exported value in 2022	Total	Positions in terms of highest imports
Economic Community of West African States (ECOWAS) Aggregation	9,787,649	13,269,418	8,544,931	10,497,046	13,274,773	55,373,817	
Nigeria	3,160,817	6,259,317	2,225,186	3,119,169	4,129,269	18,893,758	1st
Côte d'Ivoire	2,224,016	2,259,427	2,126,152	2,568,546	3,983,894	13,162,035	2nd
Senegal	1,344,366	1,579,566	1,501,541	1,769,735	2,041,849	8,237,057	3rd
Ghana	771,428	940,915	917,362	933,491	945,656	4,508,852	4th
Togo	695,471	713,951	679,842	739,365	733,983	3,562,612	5th
Burkina Faso	425,964	364,374	332,317	417,771	628,003	2,168,429	6th
Guinea	63,183	22,754	62,045	41,602	231,547	421,131	10th
Mali	368,124	405,482	283,233	396,525	223,040	1,676,404	7th
Niger	427,641	399,152	259,043	340,984	196,462	1,623,282	8th

Benin	139,557	120,449	85,860	92,759	89,522	528,147	9th
Gambia	8,611	22,561	23,330	16,227	29,068	99,797	14th
Sierra Leone	44,424	33,295	12,750	34,966	25,061	150,496	12th
Guinea-Bissau	0	40,111	28,564	22,052	11,725	102,452	13th
Liberia	114,027	107,755	7,571	3,854	5,694	238,901	11th
Cape Verde	20	309	135	0	0	464	15th

Source: International Trade Center (2024)

Trend of Cumulative Exports of ECOWAS from 2018-2022

Also Figure 2 is a representation of the trend of the cumulative exports of members. It can be seen that, there was downward movement or a decreasing trend from 2018 to 2020 and upward movement or an increasing trend from the year 2020 to 2022.

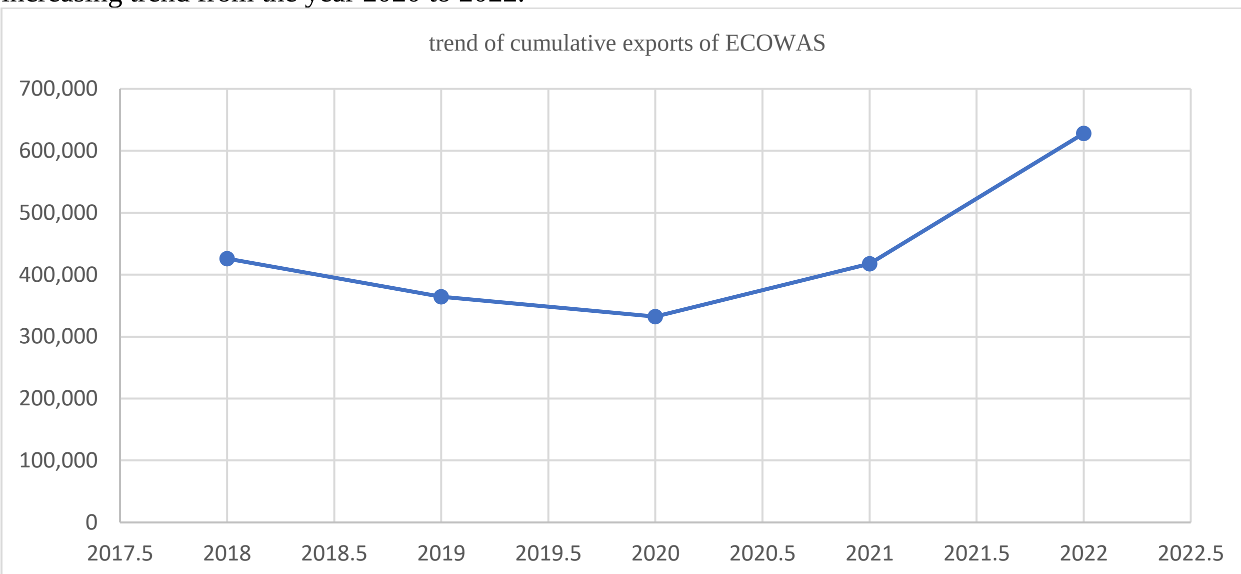

Figure 2: Trend of exports of ECOWAS countries to ECOWAS
Source: Generated based on International Trade Center data

List of Importing Markets from ECOWAS for Product Exported by Burkina Faso

To get more insight as to which countries will be affected most should the three countries exit; table 3 presents information on the worth of products in Dollars imported by ECOWAS members from Burkina Faso between 2018 and 2022. For exports or supply of Burkina Faso to the ECOWAS region, Côte d'Ivoire is the highest importer, followed by Mali, Ghana, Togo, Niger and the least importer is Cape Verde.

Table 3: Statistics of importing ECOWAS countries for goods exported by Burkina Faso in Dollars

Importers	Exported value in 2018	Exported value in 2019	Exported value in 2020	Exported value in 2021	Exported value in 2022	Total	Positions in terms of highest imports
World	3,269,734	3,261,124	4,381,069	5,062,869	4,548,742	20,523,538	
ECOWAS Aggregation	425,964	364,374	332,317	417,771	628,003	2,168,429	
Mali	17,763	23,882	41,164	78,573	302,558	463,940	2nd
Côte d'Ivoire	207,431	178,385	125,239	182,461	168,454	861,970	1st

Ghana	100,515	88,763	59,168	50,332	52,754	351,532	3rd
Togo	61,444	27,111	35,164	35,319	31,618	190,656	4th
Niger	18,254	30,593	52,579	35,408	30,497	167,331	5th
Senegal	11,466	10,328	11,436	12,005	16,502	61,737	6th
Benin	2,408	1,474	2,101	4,702	10,196	20,881	8th
Guinea	5,209	3,277	5,260	7,200	10,107	31,053	7th
Liberia	1,082	0	103	9,465	4,236	14,886	9th
Sierra Leone	25	417	7	571	713	1,733	11th
Nigeria	47	82	47	33	361	570	12th
Guinea-Bissau	55	0	19	92	7	173	13th
Cape Verde	13	12	15			40	14th
Gambia	252	50	15	1,610		1,927	10th

Source: International Trade Center (2024)

Trend of Goods Supplied by Burkina Faso to ECOWAS from 2018-2022

The graph shows an increasing trend in the imports of goods supplied by Burkina Faso in ECOWAS. The increasing trend is seen to start from the year 2020

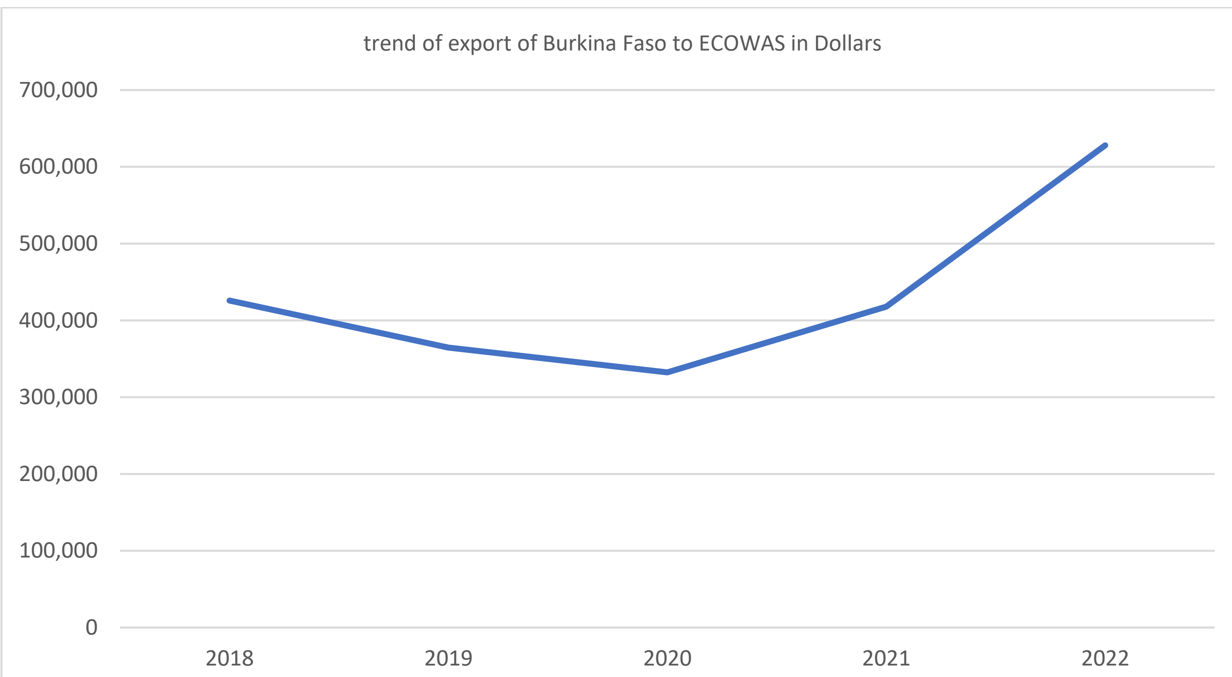

Figure 3: trend of exports of Burkina Faso to ECOWAS

Source: Generated based on International Trade Center data

List of Importing Markets from ECOWAS for Products Exported by Mali

The chronology of imports by members from Mali reveal the first five highest importers as Senegal, Côte d'Ivoire, Burkina Faso, Guinea and Niger. The least importer here is Guinea-Bissau as presented in table 4.

Table 4: Statistics of importing ECOWAS countries for goods exported by Mali in dollars

Importers	Exported value in 2018	Exported value in 2019	Exported value in 2020	Exported value in 2021	Exported value in 2022	Total	Positions in terms of highest imports
World	3,624,307	3,642,251	3,989,356	4,173,796	3,904,608	19,334,318	
ECOWAS Aggregation	368,124	405,482	283,233	396,525	223,040	1,676,404	
Senegal	125,994	97,401	92,368	134,798	67,740	518,301	1st
Burkina Faso	87,926	100,654	62,251	62,897	49,879	363,607	3rd
Côte d'Ivoire	100,457	154,399	69,252	116,171	47,068	487,347	2nd
Guinea	17,527	25,383	23,830	31,293	39,356	137,389	4th
Ghana	3,503	4,939	10,240	11,613	7,017	37,312	6th
Togo	2,084	2,891	3,168	2,153	5,362	15,658	8th
Niger	11,380	15,372	17,423	34,517	4,452	83,144	5th
Benin	17,130	1,447	834	96	736	20,243	7th
Liberia	1,118	2,028	872	1,980	665	6,663	9th
Gambia	143	492	761	667	359	2,422	11th
Nigeria	839	361	2,201	250	348	3,999	10th
Sierra Leone	12	92	6	76	53	239	12th
Guinea-Bissau	11	23	27	14	5	80	13th

Source: International Trade Center (2024)

Trend of Goods Supplied by Mali to ECOWAS from 2018-2022

Trend of export or supply from Mali is fluctuating as shown in figure 4. 2018 to 2019 witnessed an increasing trend, a decreasing trend from 2019 to 2020, an increasing trend again from 2020 to 2021 and a decrease from 2021 to 2022.

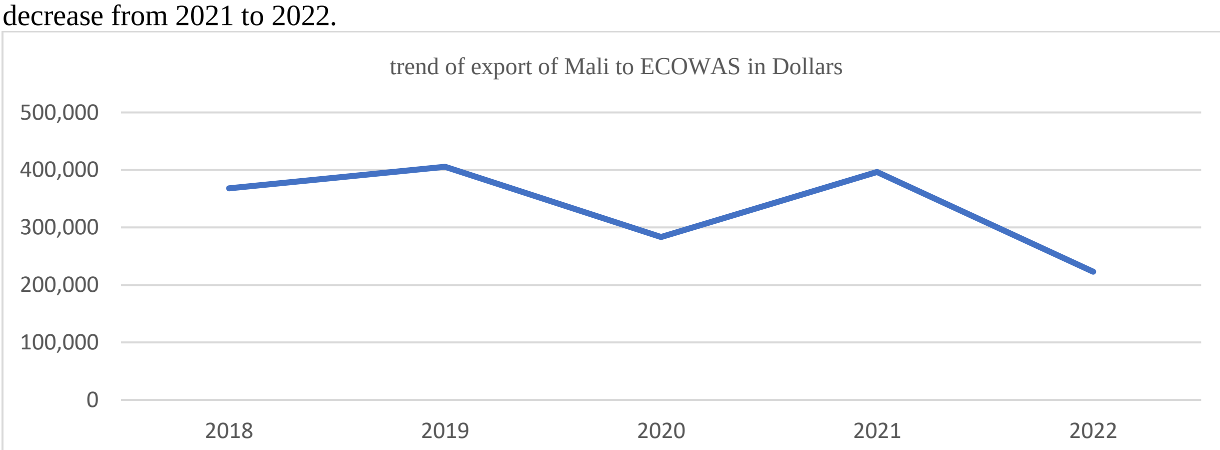

Figure 4: trend of exports of Mali to ECOWAS
Source: Generated based on International Trade Center data

List of Importing Markets from ECOWAS for Products Exported by Niger

From table 5, it can be seen that, for goods exported by Niger, the first five highest importers are Nigeria, Mali, Burkina Faso, Ghana and Benin. The least importer from Niger is Liberia per the available data for the period.

Table 5: Statistics of importing ECOWAS countries for goods exported by Niger in Dollars

Importers	Exported value in 2018	Exported value in 2019	Exported value in 2020	Exported value in 2021	Exported value in 2022	Total	Positions in terms of highest imports
World	889,679	854,318	1,247,237	633,014	446,135	4,070,383	
ECOWAS Aggregation	427,641	399,152	259,043	340,984	196,462	1,623,282	
Mali	61,228	100,312	108,222	137,897	79,506	487,165	2nd
Nigeria	235,931	199,517	40,510	63,391	67,988	607,337	1st
Burkina Faso	58,167	35,784	78,210	91,433	16,233	279,827	3rd
Benin	62,686	3,242	10,722	8,580	16,146	101,376	5th
Ghana	1,376	53,865	15,754	33,115	12,551	116,661	4th
Côte d'Ivoire	942	1,681	1,048	2,934	2,121	8,726	7th
Togo	7,126	2,768	1,814	479	1,099	13,286	6th
Guinea	64	141	100	51	487	843	10th
Senegal	97	1,343	2,446	288	251	4,425	8th
Sierra Leone	0	5	12	2,804	80	2,901	9th
Cape Verde	24	21	30			75	12th
Gambia	0	473	175	2		650	11th
Liberia	0	0	0	10		10	13th

Source: International Trade Center (2024)

Trend of Goods Supplied by Niger to ECOWAS from 2018–2022

The graph represents the trend of exports of Niger to ECOWAS. The graph depicts a downward trend in exports over the five year period. It is an indication that, the value of exports from Niger has decreased year on year over the stated period

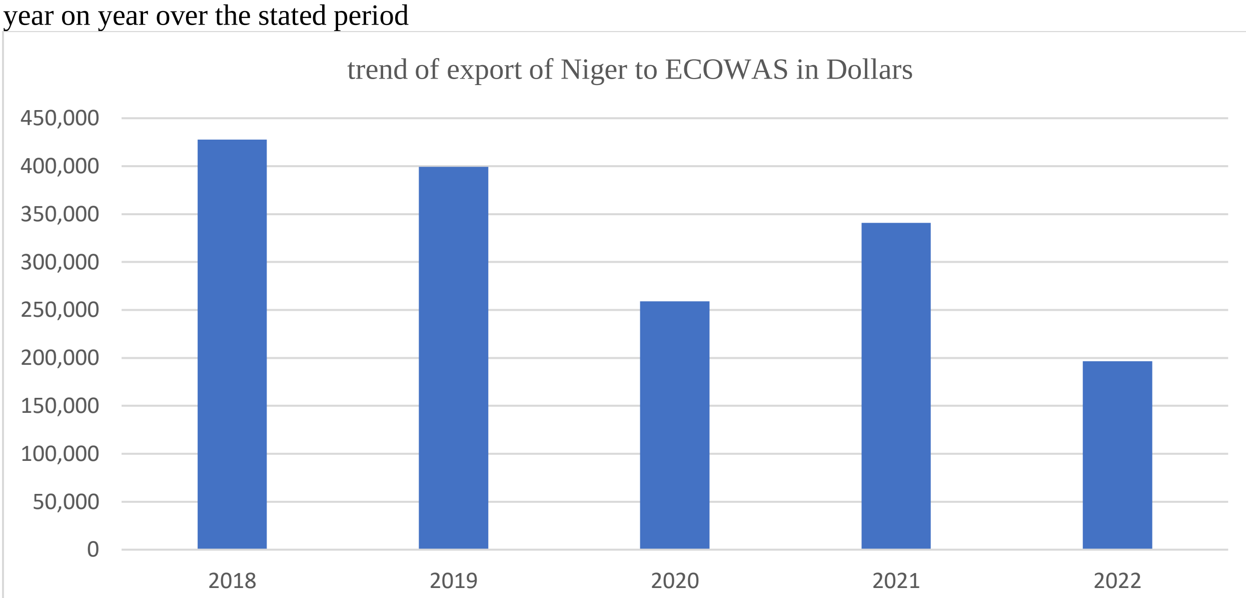

Figure 5: Trend of exports of Niger to ECOWAS

Source: Generated based on International Trade Center data

3. METHODOLOGY

3.1 Study Context and Design

The study was conducted on ECOWAS with concentration on three countries; Burkina Faso, Mali and Niger, who announced their intention to exit from the bloc. ECOWAS is a trading bloc consisting of fifteen (15) members with the aim to promote economic integration and cooperation among members, fostering a common market and enabling free movement of goods, services, capital and people. The three exiting countries are landlocked and rely on neighboring countries for their international trading activities. With the announcement of their intended exit, discussions have been ongoing on how the move will affect security, economic, regional politics, trade and others. The study employed an exploratory qualitative design. The researchers explored and followed conversations and reports online regarding the exit. Google search engine and AI tools such as Perplexity AI were used which directed us to web pages that related to the subject of study. Since the study's concentration was on logistics, attention was given to pages that discussed such and trade.

3.2 Data Collection

Data were gathered from online sources, including news websites, academic articles and reports from international trade and logistics organisations. The search was conducted using specific words and statements related to the topic such as "ECOWAS", "Mali", "Niger", "Burkina Faso", "exit", "logistical implications", "implications of separations in ECOWAS", logistical implication of the exit of the three countries from ECOWAS. The search engines employed were google, google scholar, Artificial Intelligence tools (perplexity AI and ChatGPT). Searching for the keywords and statements above led to websites where the necessary data were collected. Data were collected from fifteen (15) websites which are duly cited.

3.3 Data analysis

The Data gathered were coded using Atlas.ti; a software for analysing qualitative data. The coding was done using flat coding with predefined codes relevant to the study's themes-logistical cost, flow and schedules. Analysis was done under the themes to identify the potential impacts on logistics due to the exit.

4. RESULTS

The study explored how the exit of the three countries from ECOWAS would impact logistics in terms of cost, flow and schedules. These themes formed the codes for analysis. Therefore, the following tables present the source documents and the occurrences of the codes or themes from the source documents.

4.1 Logistical cost

Table 6: logistical cost

Source documents	cost	TOTALS:
P 1: An Africanist Perspective.rtf	3	3
P 2: citinewsroom.rtf	3	3
P 3: Credendo.rtf	5	5
P 4: DW.rtf	0	0
P 5: Ecofin agency.rtf	3	3
P 6: ETK.rtf	4	4
P 7: Mahir M.rtf	4	4
P 8: Saidu N pmnews.rtf	3	3
P 9: The Conversation.rtf	2	2

P10: the EastAfrican.rtf	1	1
P11: The exchange Africa.rtf	0	0
P12: The Ghana Report.rtf	0	0
P13: thebftonline.rtf	3	3
P14: Ugandan Business News.rtf	0	0
P15: Voice of Africa.rtf	0	0
TOTALS:	**31**	**31**

Source: Generated based on primary documents

Table 6 quantifies the occurrences of logistical cost across the various source documents. It is seen that, a total of 31 references were made from 10 of the documents. 5 documents made no reference to cost though issues of the exit were discussed. This is an indication that the reintroduction of tariffs, taxes and other barriers for the exiting countries would significantly increase cost of transportation and general cross-border logistics activities.

4.2 Logistical Flow

Table 7: Logistical flow

Source documents	**Flow**	**TOTALS:**
P 1: An Africanist Perspective.rtf	4	4
P 2: citinewsroom.rtf	4	4
P 3: Credendo.rtf	2	2
P 4: DW.rtf	2	2
P 5: Ecofin agency.rtf	2	2
P 6: ETK.rtf	4	4
P 7: Mahir M.rtf	6	6
P 8: Saidu N pmnews.rtf	2	2
P 9: The Conversation.rtf	5	5
P10: the EastAfrican.rtf	3	3
P11: The exchange Africa.rtf	2	2
P12: The Ghana Report.rtf	3	3
P13: thebftonline.rtf	2	2
P14: Ugandan Business News.rtf	0	0
P15: Voice of Africa.rtf	0	0
TOTALS:	41	41

Source: Generated based on primary documents

Table 7 also captures the occurrences of relating to the flow of logistics. This theme had 41 total occurrences across 13 reference documents, indicating that, the seamless movement of goods and persons would be disrupted the countries exit.

4.3 Logistical Schedules

Table 8: logistical schedules

Source documents	Schedules	TOTALS:
P 1: An Africanist Perspective.rtf	1	1
P 2: citinewsroom.rtf	3	3
P 3: Credendo.rtf	2	2
P 4: DW.rtf	1	1
P 5: Ecofin agency.rtf	2	2
P 6: ETK.rtf	3	3
P 7: Mahir M.rtf	5	5
P 8: Saidu N pmnews.rtf	2	2
P 9: The Conversation.rtf	2	2
P10: the EastAfrican.rtf	3	3
P11: The exchange Africa.rtf	2	2
P12: The Ghana Report.rtf	1	1
P13: thebftonline.rtf	1	1
P14: Ugandan Business News.rtf	0	0
P15: Voice of Africa.rtf	0	0
TOTALS:	**28**	**28**

Source: Generated based on primary documents

Logistical schedules recorded 28 references across 13 of the source documents. Majority of the mentions emanated from source document 7 (Mahir M.) followed by document 2 and 10 (citinewsroom rtf) and (the EastAfricn rtf). The conversations indicate that increased border controls and customs procedures would disrupt delivery timelines and delays in supply chains.

5. DISCUSSION

ECOWAS as a common market eliminates trade taxes and tariffs, adopts a common external tariff and allows free movement of goods, services, capital and labour among countries. This is evident in the policies of ECOWAS as reported by Cecchi (2024) in Credendo that "*ECOWAS ensures free circulation of people and goods between member states, reduces customs duties and promotes regional economic integration (e.g. with common regulations)*. This report further stated how the exit would have a negative economic impact. With the intended departure, Opalo (2024) reported in the Africnistperpective how higher cost of movement would be applied to Sahalian migrant workers both in the trading bloc and Europe. Ecofin Agency (2024) also stated how the three countries will face surges in international trade beyond ECOWAS and in other transactions. the ETK (2024) stated that; *the exit may have an impact on commodity prices if the three countries continue to transport their goods through other ECOWAS member countries, and they may find themselves in extreme economic isolation*. Mahir (2024) stated how the withdrawal would affect trade and regional connectivity, focusing on the reintroduction of tariff barriers and restrictions on free movement leading to the disruptions in supply chains and increased costs. The bftonline reported how the efforts of the ECOWAS Trade Liberalisation Scheme (ETLs) will be rendered useless.

It is evident that discussions on the exit highlight a major impact on cost. Taxes and tariffs will be re-implemented for the exiting countries and the remaining ECOWAS members. This affects both sides, however, the impact will be greater on the three exiting countries because they are more dependent on the remaining ECOWAS members for even exports and imports intended beyond ECOWAS.

Uninterrupted flow of goods is a key hallmark for logistics. The trading policy for ECOWAS enables free flow of goods and persons among member countries as reiterated by Cecchi (2024) in Credendo. With the intended exit, it is evident that the smooth flow of both goods and persons will be interrupted. Following conversations, it is common in the statements of reporters and panellists as to how free flow would be hindered. Mohammed (2024) in Citinews for instance, reported hindrance to logistical freedom and how it will become necessary to apply for things concerning ECOWAS. The Africanistperspective also reported that, the free movement which would no longer exist would lead to increased commodity prices and shortages. Mahir (2024) gave insight on how migration in the region could be disrupted. Individual's ability to seek greener pastures and security in other countries would greatly be hindered making life unbearable for those who depend on intra-regional mobility. Generally, being landlocked, these countries' trade flow with other countries beyond ECOWAS could also be disrupted and the impact would be dire on the exiting countries until they explore other trading policies or agreements with neighbouring countries.

In relation to logistical schedules, discussions are centred on the hassle transporters would go through at the borders. For instance Ecofin reported "*this withdrawal is likely to impact trade corridors, especially for economic stakeholders in these countries.* Again the Ghana Report submitted by Agyapong (2024) reported how *"the departure of these countries could create more hurdles in doing business".* The intended exit would impact schedules in regional trade and transportation as border checks between the exiting and the remaining ECOWAS members would become more stringent and time–consuming. Increased border controls and the need for new customs procedures would lead to significant delays. Goods previously moving seamlessly through the countries would face unpredictable hold-ups, disrupting just-in-time delivery systems and increasing lead times. The unpredictability would ripple through supply chains, causing delays in manufacturing, distribution and retail, ultimately affecting market availability and economic stability in the broader region.

5. CONCLUSION AND REOMMENDATIONS

Based on the Heckscher-Ohlin theory which considers the resource endowment of each country, it is clear that Burkina Faso, Mali, and Niger will be at the losing end should their exit be finalised. Being the 6th, 7th, and 8th highest importers from ECOWAS for the last five years, coupled with their landlocked nature will make them more vulnerable. Dependency on ECOWAS ports such as Tema in Ghana, Abidjan in Côte d'Ivoire, and Lomé in Togo is crucial for their imports and exports. The exit will disrupt logistical networks, transportation cost will increase with unpredictable transit times due to reintroduction of border checks and custom procedures. Moreover, the imposition of tariffs and non-tariffs barriers on exportations and importations will erode their comparative advantage. Since the countries are already challenged by less developed logistics infrastructure, they could face greater economic isolation and strain. This will potentially make their economies more vulnerable and less attractive to international partners.

The remaining ECOWAS countries who are endowed with diverse resources might experience some initial disruptions. However, they are better positioned to diversify their trade routes and partners, mitigating the long-term impact of the separation. The rest of the members will be able to adjust quickly as the resources they supply to ECOWAS markets are not totally absent in the ECOWAS region. With generally better logistics performance indices, the remaining members are better equipped to manage the reintroduction of border controls and tariffs. Their relatively superior logistics infrastructure means they can adapt more effectively to the changes, ensuring continued efficiency in their supply chains.

Based on the key findings, the following recommendations were made:

a. The ECOWAS trading bloc is of great benefit to all member countries no matter the quantum of trade of a particular member. As the decision is yet to finalised, it is recommended that ECOWAS and the exiting countries should resolve the issues of contention at least for humanitarian reasons. Citizens of the Sahalian countries are widely spread in other ECOWAS countries and should the exit take place, the restrictions and other requirements will make their stay a difficult one as they seem to be the vulnerable ones in countries such as Ghana. For security reasons, ECOWAS should be mindful of future impacts and be attentive to the expressions of the three countries while being apt on its responsibilities.

b. The exiting countries should explore bilateral and preferential trade agreements with neighbouring countries, especially Ghana, Côte d'Ivoire and Togo. Negotiations should be geared towards securing access to their ports. This will help reduce tariffs, transit cost, and time, enabling logistical flow. Overall, it will help mitigate or reduce the impact of their exit from the trading bloc.
c. Beyond ECOWAS, the exiting countries could also explore opportunities within the African Continental Free Trade Area (AfCFTA), which will mean still getting access to most of the African countries.
d. To the remaining countries who are dependent on the exiting countries for some products, it is important to start investing to produce those products in their home countries. As much as the exiting countries will bear more of the disruptions, if investment is not done now, costs will escalate, with disruptions in flows of such commodities.

ACKNOWLEDEGEMENT

We acknowledge the support of our various Universities in our academic exploits**.**

DECLARATION OF INTEREST STATEMENT

The Authors declare no conflict of interest.

AUTHOR CONTRIBUTION STATEMENT

Sophia Dauda conceptualized and designed the study, collected and analyzed the data, and led the writing of the manuscript. Clement Nangpiire contributed to the study design and data analysis, as well as reviewing and editing the manuscript. Abdul-Aziz Mustapha assisted in the study design and data collection, and also reviewed and edited the manuscript. All authors read and approved the final version of the manuscript before submission.

REFERENCES

Akther, T., Voumik, L. C., & Rahman, M. H. (2022). The pattern of international trade between Bangladesh and USA: Heckscher–Ohlin and Rybczynski analysis. *Modern Supply Chain Research and Applications*, *4*(3), 162–176. https://doi.org/10.1108/MSCRA-03-2022-0011

Cecchi, R. (2024, January). *Burkina Faso, Mali and Niger: Military juntas announce withdrawal from ECOWAS*. Credendo. https://credendo.com/en/knowledge-hub/burkina-faso-mali-and-niger-military-juntas-announce-withdrawal-ecowas

Dada, E. A. (2015). An empirical analysis of integration and intra-regional trade in ECOWAS. *Journal of African Development*, *17*(1), 97–116.

Ecofin Agency. (2024, January). *ASS-exit: Mali, Burkina Faso, and Niger forge a new path, initiating departure from ECOWAS*. https://www.ecofinagency.com/public-management/2901-45166-ass-exit-mali-burkina-faso-and-niger-forge-a-new-path-initiating-departure-from-ecowas

Economic Community of West African States (ECOWAS). (n.d.). In *ThoughtCo*. Retrieved February 23, 2024, from https://www.thoughtco.com/economic-community-west-african-states-ecowas-43900

ECOWAS. (2016). *Trade*. https://old22.ecowas.int/?page_id=370

Encyclopedia. (n.d.). *Trading blocs*. In *Encyclopedia.com*. Retrieved February 23, 2024, from https://www.encyclopedia.com/finance/finance-and-accounting-magazines/trading-blocs

Eurostat Statistics Archive. (2011). *ECOWAS – EU trade and investment statistics*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive%3AECOWAS-EU_-_trade_and_investment_statistics

FasterCapital. (n.d.). *Trading blocs: Paving way for regional economic integration*. Retrieved February 23, 2024, from https://fastercapital.com/content/Trade-blocs--Paving-the-Way-for-Regional-Economic-Integration.html

Festus, E. E. (2021). *Logistics and trade flows in selected ECOWAS countries: An empirical verification*. arXiv:2108.06441 [econ.GN]. https://doi.org/10.48550/arXiv.2108.06441

International Trade Center (ITC). (2024). *Trade statistics*. https://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=1%7c562%7c%7c%7c8%7cTOTAL%7c%7c%7c2%7c1%7c1%7c2%7c2%7c1%7c2%7c1%7c1%7c1

Joshi, R. (2022). *6 inland waterways and dry ports in Mali*. Marine Insight. https://www.marineinsight.com/know-more/dry-ports-in-mali/

Klein, A. L. (2023). *Top 5 ports to watch in West Africa*. Energy Capital & Power. Retrieved March 22, 2024, from https://energycapitalpower.com/top-5-ports-to-watch-in-west-africa/

Kumar, V. (2018). *Trade blocs - International business operations*. In *ebooks.inflibnet.ac.in*. Retrieved February 23, 2024, from https://ebooks.inflibnet.ac.in/mgmtp08/chapter/trade-blocs/

Logistics Cluster. (2022). *Logistics capacity assessments (LCAs)*. World Food Programme (WFP). Retrieved March 22, 2024, from https://dlca.logcluster.org/export/4553

Mahir, M. (2024). *Understanding the implications of Mali, Niger, and Burkina Faso's departure from ECOWAS*. LinkedIn. https://www.linkedin.com/pulse/understanding-implications-mali-niger-burkina-fasos-departure-mahir-vg7ke/

Mohammed, H. (2024). *Burkina-Mali-Niger must reconsider decision to exit ECOWAS – Analyst*. Citinewsroom. https://citinewsroom.com/2024/01/burkina-mali-niger-must-reconsider-decision-to-exit-ecowas-analyst/

Nitsche, B., Mensah, H. K., Straube, F., & Barigye, V. (2024). Leveraging the potential of the African Continental Free Trade Area. *Logistics, 8*, 25.

Nsouli, S. M. (Ed.). (2004). *The new partnership for Africa's development: Macroeconomics, institutions, and poverty*. International Monetary Fund.

Okafor, C. (2024). *Analysis: Exiting ECOWAS and its implications for Niger, Mali, Burkina Faso and West Africa*. Premium Times. Retrieved March 4, 2024, from https://www.premiumtimesng.com/news/headlines/665494-analysis-exiting-ecowas-and-its-implications-for-niger-mali-burkina-faso-west-africa.html

Quaye, D. (2024). *Burkina Faso, Mali and Niger exit from ECOWAS-economic and security implications*. Business Financial Times. https://thebftonline.com/2024/02/22/burkina-faso-mali-and-niger-exit-from-ecowas-economic-and-security-implications/

Rushton, A., Croucher, P., & Baker, P. (2017). *The handbook of logistics and distribution management* (6th ed.). Kogan Page.

Salawu, Y. O., & Ghadiri, S. M. (2022). Roles of trade logistics to the development of international trade: A perspective of Nigeria. *Journal of Transport and Supply Chain Management, 16*(0), a764. https://doi.org/10.4102/jtscm.v16i0.764

StudySmarter. (n.d.). *Monetary union: Benefits & key factors*. Retrieved February 23, 2024, from https://www.studysmarter.co.uk/explanations/macroeconomics/economics-of-money/monetary-union/

Uexkull, E. V. (2011). *Regional trade and employment in ECOWAS*. International Labour Organisation (ILO). https://www.oecd.org/site/tadicite/48707550.pdf

World Bank. (2020). *Logistics Performance Index 2020*. Retrieved from https://www.worldbank.org/en/publication/logistics-performance-index

Kalu, I. (2022). *Empirical test of the Heckscher-Ohlin theory in Nigeria*. Afribary. Retrieved from https://afribary.com/works/empirical-test-of-the-heckscher-ohlin-theory-in-nigeria

Prakash, S., & Anand, S. D. (2023). *Empirical investigation of Heckscher-Ohlin theory on India's foreign trade*. In *Taylor & Francis*. https://www.taylorfrancis.com/chapters/edit