

Economic Community of West African States (ECOWAS): A Regional Integration Analysis

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In 1975, the 15 countries that comprise the Economic Community of West Africa States (ECOWAS) formalized a trade agreement to integrate their economies to make it easier for them to trade with each other and thus promote economic growth and development. Since then, the evidence suggests that intra-regional trade has not changed much. In this paper, we examine the factors hindering trade using data from 2000, 2010, and 2020 and a modified version of the gravity equation. The results of our study suggest that economic factors are primarily responsible for intra-ECOWAS trade and that policies designed to improve transportation infrastructure and reduce administrative barriers could significantly improve intra-ECOWAS trade.

Keywords: international trade, trade agreements, trade, integration, economic growth

INTRODUCTION

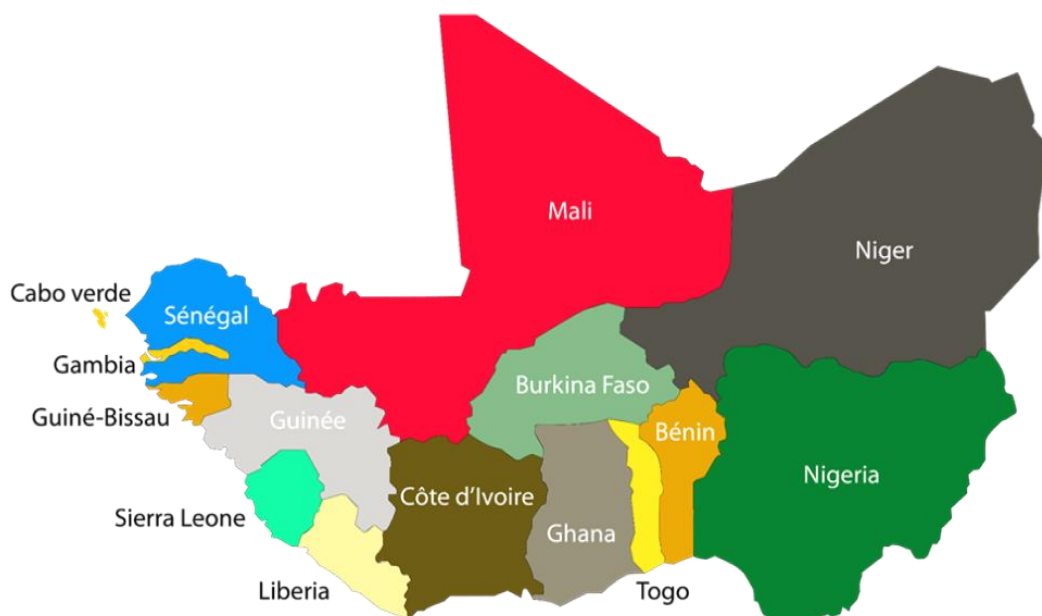
It is almost an article of faith in trade literature that open economies grow faster than closed ones. Balassa (1978), in a paper on exports and economic growth, concluded that export-oriented policies lead to better growth performance than policies favoring import substitution. A comprehensive paper by Sachs and Warner (1995) concluded that between 1970 and 1989, developing countries that were open grew by more than 2% compared to those that were closed. A later study by Wacziarg and Welch (2008) also concluded that between 1950 and 1998, countries that liberalized their trade regimes experienced higher growth rates than before liberalization. The reasons for such improved performance are that trade lowers the cost of inputs and, thus, the cost of production. Furthermore, competition from trade forces producers to be more efficient by adopting innovative production methods. Trade can lead to greater capacity utilization and the exploitation of economies of scale. More importantly, the competition from trade could spur technological improvements, lead to structural changes, and reallocate resources from less productive sectors of the economy to more productive ones.

A second article of faith is that geography often dictates countries' trading partners; the closer countries are to each other, the easier it is to trade. The intuition behind this assertion is so strong that it probably does not require any theoretical justification. Still, it has gained strong theoretical underpinnings in the gravity model equations beginning with Isard (1954) and Tinbergen (1962). This explains why trade blocs often begin with contiguous countries: the European Union (EU), the Association of Southeast Asian Nations (ASEAN), and the North American Free Trade Union (NAFTA).

The Economic Community of West African States (ECOWAS) was formed in 1975 to take advantage of the countries' proximity to each other to promote trade and, thus, growth in the region. In June 2007, the Heads of State, the highest governing authority, established Vision 2020 and, years later, Vision 2050 to create "a borderless, peaceful, prosperous and cohesive region." All of this is to promote regional economic integration.

ECOWAS, as presently constituted, comprises 15 countries: Benin, Burkina Faso, the Republic of Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo (See Map of ECOWAS below). As of 2021, the community's total population is a little over 407 million, with a contiguous land area of about five million square kilometers.^{1,2,3} Nigeria is the most populous (52% of the total regional population) and has the largest economy.

**FIGURE 1
GEOGRAPHIC MAP OF ECOWAS**



A free trade area was formed in 1990, and a common external tariff (CET) was adopted in January 2015. Adopting a CET was intended to boost trade. Except for the island country of the Republic of Cabo Verde, all the countries share borders with one or more member countries.

Intra-ECOWAS trade has hovered around 10%; it was 8.37% in 2020. In the most comparable trading block, the ASEAN, intra-block trade was above 30% in the same year.⁴ As Songwe (2019) observes, the low intra-African trade is a good reason to expect trade to be a "key driver of growth in Africa."

For historical reasons, intra-African trade is extremely low compared to other regions. Trade was almost exclusively with Europe during the colonial era, which ended in the mid-twentieth century. Another critical factor contributing to the low intra-African trade is that goods produced by the countries in the region tend to be non-differentiated; trade requires product differentiation. Most of the major exports in the region are raw or intermediate products that are not in heavy demand from other countries in the region. For example,

between 2000 and 2020, less than 20% of the intra-ECOWAS exports were consumer or capital goods. Inefficient transportation and other artificial trade barriers, such as excessive bureaucratic hurdles, impede trade within the continent and the region.

Worldwide, about 80% of all trade is seaborne. A publication by USAID on prospects for economic growth in the region suggests that the region has some of the highest travel costs per kilometer of any region in the world. These are due to trade barriers- administrative barriers, formal and informal checkpoints, generally bad road networks, cumbersome border and customs clearances, and opaqueness in requirements, making it difficult for border crossers to know precisely what is required of them. The Trade Facilitation West Africa (TFWA) was initiated to help mitigate some of these barriers.

Despite the many obstacles to trade, between 2000 and 2020, Intra-ECOWAS' exports increased from a little over US\$3.0 billion to US\$9.7 billion. Four countries accounted for virtually all the regional exports: Nigeria (~30%), Cote D'Ivoire (~27%), Senegal (~14%), and Ghana (~9.49%). The four countries are the biggest economies in the region.

Although Nigeria exports the most to the region, its share of exports has remained low, averaging 5.36% between 2000 and 2020. Ghana, the second-biggest economy in the region, also averaged 9.97%. Over the same period, Cote d'Ivoire's exports to the region were about 22%.

Furthermore, the large volume of raw materials and intermediate products exported outside the region suggests room for the production of consumer goods for the regional market.

Despite the low intra-ECOWAS trade and the likelihood that, in the short run, there might be some trade diversion, prospects for trade creation are good in the long run. The Economic Community of West Africa has five of the seven fastest-growing economies in Sub-Saharan Africa- Senegal, Niger, Cote D'Ivoire, Benin, and Togo. A regional group that removes trade barriers could accelerate growth. Senegal and Togo are among the region's highest capital and consumer goods exporters; each country's total exports include 35% of consumer and capital goods.

This paper examines the factors impeding regional trade in ECOWAS. We use the modified gravity model of international trade, discussed later in the methodology section.

PRELIMINARY READING OF THE DATA

Although intra-ECOWAS trade is low compared to other regions and has not increased much over the 20 years from 2000 to 2020, some countries in the community have significantly increased exports to the region. As mentioned above, Nigeria, Cote D'Ivoire, Ghana, and Senegal are the biggest intra-ECOWAS exporters, but Togo, Gambia, and Senegal have shown the most improvements over the period. Admittedly, Togo and Gambia are relatively small economies compared to Nigeria, Cote d'Ivoire, and Ghana. Senegal, however, is the fourth-largest economy in the region and, therefore, could represent what is possible.

TABLE 1
PERCENTAGE OF EXPORTS TO ECOWAS -2000-2020

Country	Percentage of Exports	Trend
Togo	58.29	Positive
Gambia	43.02%	Positive
Senegal	34.58%	Positive
Niger	32.93%	Positive
Sierra Leone	29.93%	Negative

Source: Calculated from WTO Data

Togo has shown the highest increase in exports to the region by percentage. Between 2000 and 2020, its exports to the sub-region averaged about 58% of its total exports, increasing from about 34% in 2000 to 69.64% in 2020. The primary destinations of these exports were Burkina Faso, Benin, Ghana, Cote d'Ivoire, and Nigeria. Consumer and intermediate goods comprised the bulk of the exports (69% in 2000 and 53%

in 2010 and 2020). To Burkina Faso, Togo has been exporting cement, plastic lids, and concentrated milk. To Benin, Togo has been exporting petroleum coke, beauty products, and plastic lids, and to Ghana, fake hair, refined petroleum, and flavored water.

Gambia’s regional export destinations were mainly Senegal and Guinea and comprised mostly of capital, intermediate, and consumer goods.

Senegal is the largest of the best-performing countries. In 2000, 22% of its exports were to ECOWAS; by 2020, it had increased to about 38%, averaging about 35% yearly. Its major export destinations are Mali, Cote d’Ivoire, Guinea, Gambia, Guinea-Bissau, Burkina Faso, and Benin. In 2000, The country’s exports to these seven countries were intermediate and capital goods (52%). In 2010 and 2020, exports of the same goods increased to roughly 70%.

Niger presents an interesting case. In 2000, its exports to its primary destinations, Nigeria, Benin, Burkina Faso, Mali, and Ghana, were mainly raw materials. In 2020, the exports had changed to consumer goods (mostly refined petroleum), and the destinations were Mali and Burkina Faso.

Table 2 below also shows average exports to the region by the best performers and their destinations. Togo, Senegal, and Niger are benefitting from exporting to neighboring countries. Except for Senegal, which has a GDP per capita of \$1,640, above the ECOWAS average of \$1,447, all the others have GDP per capita in the lower half of the distribution; indeed, Niger and Sierra Leone occupy the 14th and 15th positions respectively among the 15 countries.

There is a clear indication that the countries that have shown the most improvement in the region are those producing manufactured or semi-manufactured goods (consumer and intermediate products).

**TABLE 2
EXPORT DESTINATIONS OF BEST PERFORMERS**

Togo	Export Destination	Average 2000–2020		Language	Contiguous	Destination
		Value (US\$s)	GEXP/GIMP			Landlocked
1	Burkina Faso	93,466,630	0.90	✓	✓	✓
2	Benin	83,170,333	0.51	✓	✓	
3	Ghana	73,183,179	0.35		✓	
4	Niger	53,300,317	1.17	✓		
5	Nigeria	43,971,851	0.24			
Gambia	Export Destination	Value (US\$s)	GEXP/GIMP	Language	Contiguous	Landlocked
1	Mali	12,64,898	0.98			✓
2	Senegal	7,279,861	0.60		✓	
3	Guinea	7,097,450	0.94			
4	Guinea-Bissau	2,592,614	0.60			
5	Cape Verde	287,316	1.19			

Senegal	Export Destination	Value (US\$)	GEXP/GIMP	Language	Contiguous	Landlocked
1	Mali	346,722,501.19	1.63	✓	✓	✓
2	Cote D'Ivoire	76,519,746.33	0.64			
3	Gambia (The)	70,357,856.24	1.66		✓	
4	Guinea	70,229,528.10	1.57	✓	✓	
5	Guinea-Bissau	46,833,925.67	1.97		✓	
Niger	Export Destination	Value (US\$)	GEXP/GIMP	Language	Contiguous	Landlocked
1	Nigeria	129,202,387.81	0.20	✓	✓	
2	Benin	35,375,015.29	0.44	✓	✓	
3	Burkina Faso	34,074,911.00	0.77	✓	✓	✓
4	Mali	27,528,233.29	0.86	✓	✓	
5	Ghana	15,305,428.71	0.30			
Sierra Leone	Export Destination	Value (US\$)	GEXP/GIMP	Language	Contiguous	Landlocked
1	Cote D'Ivoire	11,127,543.26	0.30			
2	Guinea	8,522,550.57	0.74		✓	
3	Guinea-Bissau	3,773,813.17	0.54			
4	Ghana	2,174,340.67	0.37	✓		
5	Liberia	2,125,794.00	0.83	✓	✓	

Note: GEXP/GIMP- Ratio of exporting countries GDP per capita to the destination country's GDP Per capita.

LITERATURE REVIEW

In attempting to understand the pattern of trade in a globalized world, economists have frequently used the gravity model. This was first presented in 1962 by Jan Tinbergen, who proposed that the size of bilateral trade flows between countries can be approximated by employing the 'gravity equation,' derived from Newton's theory of gravitation. While planets are attracted to each other in proportion to their sizes and proximity, so are countries.

Relative size is determined by current GDP, and economic proximity is determined by trade costs – the more economically 'distant' the greater the trade costs. The gravity model suggests that relative economic size attracts countries to trade with each other while greater distances weaken the attractiveness. Initially, the gravity model was seen as an empirical model with no rigorous grounding in trade theory.

The stability of the gravity equation and its ability to explain bilateral trade flows led to the development of theories that could incorporate the model. The model is now seen as the workhorse of trade theory, especially in forecasting the impact of changes in trade policy on trade costs. The model is flexible, and over the years, a range of relevant variables, including cultural and political differences between trading nations, have been incorporated into the model to explain trade flows better, hence the modified gravity equation.

One example of the incorporation of relevant variables into the original model was by Frankel and Romer (1999). They argue that the geographic characteristics of a country have significant effects on trade, which may be uncorrelated with other determinants, such as income. While some fault the paper because the methodology used does not allow for precise estimations and may need qualifications to apply to other situations, the paper's conclusion that geography is a powerful determinant of trade is very plausible. It has always been the case that countries with navigable rivers and access to seaports have an easier time transporting goods than those without. Munim and Schramm (2018), suggest that port infrastructure is particularly important in trade. They also note, quoting other sources, that over 80% of all trade is seaborne. Thus, countries without access to navigable waterways and good port infrastructure will bear higher costs in trade and or trade less.

Martinez-Zarzosa and Nowak-Lehman (2003) analyzed the determinants of trade flows between Mercosur and the European Union and forecast trade potential between the two blocs using a modified gravity equation. Their model included dummy variables for a common language and common borders and infrastructure variables for both exporter and importer countries. The study concluded that the incomes of both the exporting and importing countries positively affect bilateral trade. They also concluded that bigger countries imported more than smaller countries; the population of exporting countries had a large and negative effect on exports, while the population of importing countries had a large and positive effect.

Chaney (2013) thoroughly reviews papers using the gravity equation to explain bilateral trade and concludes that the model is stable over time and across different samples of countries and methodologies. While there have been a lot of discussions about the theoretical justification for distance, his findings suggest that as long as individual firms engage in direct communication with their clients and suppliers, and as long as information permeates through these direct interactions, one should expect that aggregate trade would be proportional to country-size and inversely to distance, just as Tinbergen had suggested.

Dada and Adekele (2015), in a paper on integration and intra-regional trade in ECOWAS, use a modified gravity equation and conclude that real GDP, population size, openness, and language positively influence intra-regional trade while distance negatively influences trade, just as the model suggests.

Ibok and Atayero (2022) mention the twin problems of colonial legacy, which have impeded intra-African trade: the ties to colonizing countries in Europe socially, politically, and economically, and the division of countries into language blocks (Anglophone, Francophone, and Lusophone) which hampers communication and reduces trade. This would also suggest that we should see more trade between countries with common colonial legacies, especially if they are contiguous. In the ECOWAS region, there are eight (8) Francophone countries, five (5) Anglophones, and two (2) Lusophones. Nigeria and Ghana are the two biggest economies in the region; both are Anglophones and are surrounded by Francophone countries. Cote D'Ivoire, the second or third largest economy (Ghana and Cote D'Ivoire are perennial contenders for second position) and a Francophone, has Anglophone Ghana to the east and Anglophone Liberia to the west, and Guinea, Mali, and Burkina Faso, all Francophone, to the north. One would expect, based on the discussions, that trade between Cote D'Ivoire, which has the Atlantic Ocean as its southern border, and the French-speaking neighbors to the north would be greater than trade between Ghana and Nigeria, which Francophones Togo and Benin separate.

THE MODEL: MODIFIED GRAVITY EQUATION

The gravity model of international trade proposed by Isard (1954) and Tinbergen (1962) has proven helpful in explaining trade flows between two countries. Although the model has been criticized because it lacks a strong theoretical microeconomic foundation, the relationship it describes "is one of the most stable relationships in economics." (Bergijk and Brakman,2010). The idea that large and nearby economic entities would interact with each other more than small, far-away ones is almost so obvious as to need no explanation. Over the years, however, many economists, including Anderson (1979), Bergstrand (1984,1985), Evenett (2002), and Chaney (2013), have proposed some economic theoretical foundations for the original physical proposition.

The original formulation considered the GDPs of the two countries and the distances separating their commercial centers. Symbolically, the trade flows between any two countries can be explained by the following equation:

$$EXPC_{ij} = \frac{GDP_i^\alpha GDP_j^\beta}{D_{ij}^\delta} V_i \quad (1)$$

where: $EXPC_{ij}$ is a measure of the trade flows between country i , and country j .

GDP_i is the GDP of a country i

GDP_j is the GDP of a country j , and

D_{ij} is the distance between the commercial centers of i and j .

V_i is a vector of all other factors not specifically mentioned

The exponents, α , β , δ , are coefficients to be estimated.

Following the discussion in the literature review, we include other variables to capture spatial and/or geographic characteristics. The full list of variables in our model is as follows:

1. The dependent variable is exports per capita from country i to country j , (EXPC)

Explanatory Variables

2. GDP/Capita exporting country (GEXP) +
3. GDP/Capita importing country (GIMP) +
4. Population density exporting country (DENS) +
5. Distance from trading partner (the commercial center, DIST) -
6. Openness Importing country (OPIM) +
7. Openness Exporting country (OPEX) +
8. Landlocked 1,0 (LLOC)
9. Contiguity 1,0 (CONT) +
10. Common Language 1, 0 (LANG) +
11. Interactive Contiguity*Language (CONT*LANG)?

The variables can be separated into economic, geographic, cultural, and other factors.

Economic Factors

1. GDP of exporting and importing countries
2. GDP/Capita importing country
3. Openness of the countries
 - a. Openness of the exporting country
 - b. Openness of the importing country

Geographic Factors

4. Distance between commercial capitals: This variable could be geographical or economic. A longer distance means higher transportation costs.
5. Population density: The more densely populated a country is, the more it will export to other countries. Keesing and Sherk (1971) suggest that densely populated small developing countries could experience successful export specialization in manufacturing industries other than those based on proximity to natural resources.
6. Landlocked: Whether a country has access to a seaport could significantly affect its ability to trade. In ECOWAS, three countries are landlocked, Mali, Burkina Faso, and Niger. This is a dummy variable.
7. Contiguity of trading partners. This is a dummy variable.

Cultural/Other Factors

8. Common language: A common language also captures institutional factors left in place by colonizers, predisposing countries to trade with each other, such as a common currency (CFA, in French West Africa). This is a dummy variable.
9. Contiguity*Common language: The closer countries are to each other, the more likely they are to trade, and if they have a common language, it could enhance trade. We add a dummy variable to capture the interaction between contiguity and a common language.

RESULTS

Data for the study came from various sources, including the African Statistical Yearbook, the World Bank, and the IMF. We estimate a modified gravity equation for three different years: 2000, 2010, and 2020. The dependent variable is the log of exports per capita. Independent variables include economic variables: the GDP per capita of the exporting and importing countries and the openness of the exporting and importing countries. The coefficient is expected to be positive for the importing country since higher-income countries tend to have higher consumption levels. We expect that if a country has a higher income per capita, it will produce more consumer goods and would export more; we therefore expect a positive sign. The geographic factors are the population density of the exporting country, the distance separating the commercial centers, and contiguity. We expect more densely populated countries to export more. The rationale is that densely populated areas will produce more goods, and economies of scale can be achieved by seeking broader markets. A higher degree of openness will increase exports. A landlocked country may have fewer export opportunities in general. On the other hand, a landlocked country may be more likely to trade with its close neighbors due to proximity. We also expect countries with the same official language to be more likely to trade. Similarly, contiguous countries should have higher levels of trade. Finally, we expect the distance between any two countries to have a negative coefficient due to higher transportation costs. The results are summarized in Tables 3 and 4 below.

**TABLE 3
CORRELATION MATRIXES**

Correlation Matrix 2000										
	<i>EXPC</i>	<i>GEXP</i>	<i>GIMP</i>	<i>DENS</i>	<i>OPEX</i>	<i>OPIM</i>	<i>LLOC</i>	<i>CONT</i>	<i>LANG</i>	<i>DIST</i>
<i>EXPC</i>	1.00									
<i>GEXP</i>	0.36	1.00								
<i>GIMP</i>	0.17	-0.05	1.00							
<i>DENS</i>	0.07	0.21	-0.03	1.00						
<i>OPEX</i>	0.02	0.24	-0.03	-0.47	1.00					
<i>OPIM</i>	0.11	0.03	0.20	0.05	-0.06	1.00				
<i>LLOC</i>	0.01	0.27	0.29	-0.27	0.28	0.26	1.00			
<i>CONT</i>	0.30	-0.14	-0.10	-0.01	-0.12	-0.15	-0.22	1.00		
<i>LANG</i>	0.04	-0.15	-0.10	-0.04	-0.21	-0.23	-0.25	0.14	1.00	
<i>DIST</i>	-0.16	0.07	0.09	0.03	-0.06	0.04	0.03	-0.52	0.13	1.00

Correlation Matrix 2010

	<i>EXPC</i>	<i>GEXP</i>	<i>GIMP</i>	<i>DENS</i>	<i>OPEX</i>	<i>OPIM</i>	<i>LLOC</i>	<i>CONT</i>	<i>LANG</i>	<i>DIST</i>
<i>EXPC</i>	1.00									
<i>GEXP</i>	0.22	1.00								
<i>GIMP</i>	0.10	0.03	1.00							
<i>DENS</i>	-0.05	-0.15	0.10	1.00						
<i>OPEX</i>	0.03	0.04	-0.06	-0.28	1.00					
<i>OPIM</i>	-0.06	0.04	0.14	0.11	-0.13	1.00				
<i>LLOC</i>	0.04	0.26	0.31	0.15	0.12	0.20	1.00			
<i>CONT</i>	0.25	-0.16	-0.17	0.06	0.01	-0.04	-0.20	1.00		
<i>LANG</i>	-0.01	-0.19	-0.19	-0.06	0.02	0.02	-0.26	0.16	1.00	
<i>DIST</i>	-0.24	0.07	0.18	-0.10	-0.07	0.05	0.05	-0.55	0.08	1.00

Correlation Matrix 2020

	<i>EXPC</i>	<i>GEXP</i>	<i>GIMP</i>	<i>DENS</i>	<i>OPEX</i>	<i>OPIM</i>	<i>LLOC</i>	<i>CONT</i>	<i>LANG</i>	<i>DIST</i>
<i>EXPC</i>	1.00									
<i>GEXP</i>	0.11	1.00								
<i>GIMP</i>	0.00	-0.08	1.00							
<i>DENS</i>	-0.08	-0.28	0.04	1.00						
<i>OPEX</i>	0.01	-0.09	-0.04	-0.46	1.00					
<i>OPIM</i>	0.00	0.00	0.00	0.04	-0.13	1.00				
<i>LLOC</i>	-0.09	0.22	0.26	-0.21	0.08	0.09	1.00			
<i>CONT</i>	0.25	-0.04	-0.11	-0.06	0.09	0.04	-0.09	1.00		
<i>LANG</i>	0.21	-0.13	-0.12	-0.03	0.07	-0.02	-0.19	0.09	1.00	
<i>DIST</i>	-0.17	0.01	0.17	-0.03	0.04	0.10	0.00	-0.52	0.05	1.00

**TABLE 4
REGRESSION RESULTS**

Dependent Variable: Log of Exports per capita (EXPC)

	2000	2010	2020
CONSTANT	-53.993 (16.924)	-44.520 (19.176)	-16.307 (21.934)
LOG(GEXP)	2.695*** (0.494)	2.207*** (0.442)	1.645** (2.795)
LOG(GIMP)	1.737** (0.443)	1.002** (0.416)	0.866* (0.502)
LOG(OPEX)	-0.444 (1.232)	1.810* (0.987)	0.553 (0.985)
LOG(OPIM)	1.061 (0.718)	-0.351 (0.988)	-0.875 (0.796)
LOG(DENS)	-0.366 (0.261)	0.022 (0.227)	0.049 (0.220)
LOG(DIST)	-0.977** (0.341)	-1.560*** (0.384)	-1.539*** (0.447)

LLOC	-0.806 (0.529)	-1.153** (0.536)	-0.619 (0.671)
CONT	1.362 (0.773)	0.795* (0.903)	-.0233 (1.089)
LANG	1.112** (0.505)	1.907*** (0.540)	1.633** (0.627)
CONT*LANG	0.245 (0.894)	-.081 (1.013)	1.472 (1.296)
Standard errors in parentheses			
R ²	.420	.391	.305
Observations	121	128	113
Prob (F-statistic)	0.000	0.000	0.000
Significance levels	*90%	**95%	***99%

For the year 2000, we find that GDP per capita for both the importing and exporting countries positively affects exports. The distance variable has the expected negative sign. In addition, a common language also facilitates more trade between countries. The sign for a common language is positive and significant.

The 2010 data results are similar to those of 2000. The GDP per capita of importing and exporting countries is positive and significant. The distance variable is negative and significant. The openness variable is positive and significant for the exporting country but not for the importing country. Having a common language positively affects exports per CapitalOne significant difference is that being landlocked negatively affects exports.

For 2020, the exporting country's GDP per capita is positive and significant, as in 2000 and 2010. However, while positive, the importing country's GDP per capita is not as significant as in 2000 and 2010. Distance continues to be negative and significant. The common language variable is also positive and significant.

If we think of distance as not strictly geography but also as an economic factor, in the sense that the farther away a country is, the more costly it is to trade, we can conclude that generally, bilateral trade depends more on economic factors than geographic factors. The significant factors are the GDPs of the importing and exporting countries, the distances separating them, and whether or not they share a common language. It should also be noted that a common language can be seen as an economic factor, not just a cultural one. A common language can lower trade costs and thus promote trade between two countries.

SUMMARY AND CONCLUSION

The article examines the factors promoting trade in the ECOWAS region. The study's results strongly indicate that economic factors are responsible for intra-ECOWAS trade. Despite hurdles, intra-ECOWAS exports increased from \$3.0 billion in 2000 to \$9.7 billion in 2020. The study uses a modified gravity model, finding that economic factors like GDP per capita and openness significantly impact bilateral trade, outweighing the negative effects of distance. Common language emerges as a favorable trade influencer. There are barriers to trade that are not easy to quantify. A significant portion of trade is still done by land. The road infrastructure is poor. Crossing barriers by road is subject to delays, uncertainties, and harassment from officials. Based on our findings, economic factors are primarily responsible for intra-ECOWAS trade, and policies aimed at improving transportation infrastructure and reducing administrative barriers could go a long way toward increasing trade among ECOWAS members.

ENDNOTES

1. Source: <https://worldpopulationreview.com/country-rankings/ecowas-countries> 10/19/2021
2. The contiguous area excludes the Republic of Cabo Verde or Cabo Verde, about four thousand square kilometers.

3. See map in Figure 1
4. ASEAN. "Share of intra-ASEAN trade in goods in the ASEAN region 2020, by country." Chart. November 16, 2021. Statista. Accessed February 26, 2024. <https://www.statista.com/statistics/1300416/asean-share-of-intra-asean-trade-in-goods-by-country/>

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