Domestic Resource Structure and Commodity Components of Trade in ECOWAS Sub-Region

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Abstract
This study examined domestic resource structure and commodity components of trade in ECOWAS. The diversity in the nature and scale of economies of ECOWAS member states" economies emphasizes the gains that can be achieved through increased trade regionally and internationally. However, ECOWAS products show little product diversification with a heavy reliance on extractive products such as petroleum, natural gas and a few agricultural commodities with little value addition of regional products that affects the extent of trade. This study used descriptive analysis and facts of primary exports of ECOWAS countries. The study showed that percentage annual change of intra-ECOWAS trade is above 10 percent in most years as against results in earlier studies of intraregional trade and trend similar patterns with extra-ECOWAS trade. Thus, while the lack of potential for increased trade within the ECOWAS region is frequently mentioned as an explanation of the lack of success of ECOWAS, the potential for intra-ECOWAS trade is greater than is usually thought. This study recommends that there have to be some realistic policies which would combat the incidence of smuggling. Actors and actions that explain formal and informal trade dynamics need to be taken into account when designing and implementing policies to effectively promote intra-regional trade and value chain development.

Keywords: *Domestic resources, commodity components, ECOWAS, trade*

1.0 Introduction

In recent decades, there has been a drive towards economic union all over the world, more especially in developing countries. This need is driven mainly due to the limited scale of national markets that acts as an obstacle to production of local products and also to access bigger markets. Bigger markets provide more customers and makes it more attractive for local and international investors to build factories and offer services (creating jobs and increasing returns on their product) than a series of small market with fewer consumers. Under economic integration, countries can also use natural advantages more effectively and provide certain goods and services more effectively than others, thereby allowing a regional division of labour. It also promotes efficiency through competition leading to lower costs and hence a greater ability to compete beyond the regional market. These facts have been supported in several studies. For instance, Deen-Swarray, Adekunle and Odularu (2011) assert that regional integration is vital for the building of markets, the creation of robust and diverse economies as well as increasing opportunities for growth and attracting investment finance.

Indeed, there is no simple test that indicates when a country is ready to pursue closer economic integration with its neighbours. Strong trade linkages provide the starting point. Equally important is the fact that the patterns and commodity components of a country‘s

international trade behaviour and profile are shaped by the specific resource characteristics of the domestic economic landscape. Thus, the nature of products is vital to the extent of trade within and between regions or countries. The ECOWAS countries are located in the West African region in Africa and are mostly endowed with agricultural and natural resources, which are potentials for development. According to Famoriyo and Adegeye (1984), the consciousness that economic cooperation could be an importance in accelerating economic development had led to the formation of Economic Community of West African States (ECOWAS). To this end, ECOWAS countries have long-standing commercial activities that connect each other. Over the decades, these existing trade relationships have been formalized and improved into important cross border trade along key corridors, and serve as the main source of livelihoods for many traders and other businesses.

Thus, ECOWAS regional trade policy is developed along the lines of boosting exports to member countries and to the rest of the world. The diversity in the nature and scale of economies of ECOWAS member states' economies emphasizes the gains that can be achieved through increased trade regionally and internationally. However, Torres and Seters (2016) argues that ECOWAS products show little product diversification with a heavy reliance on extractive products such as petroleum, natural gas and a few agricultural commodities such as cocoa, rubber and cotton. Similarly, Maur and Shepherd (2015) opine that value addition of regional products are lacking in the region.

In the same vein, Ezekwesili (2011), also found that the effect of integration on regional trade in the ECOWAS sub region has not been satisfactory, as the majority of the objectives of the regional trade integration in this sub region have not been realized. Likewise, using the trade ratio method, Torre, Kelly and Foroutan (1992) in Ezekwelisi (2011) discover that regional efforts have not significantly affected intraregional trade and conclude that the share of intraregional trade flows of the member states of ECOWAS is small (in all cases, below 10 percent) and at best stagnant. Iqbal and Khan (2002) in Ezekwesili (2011) also used two methods of measuring the impact of ECOWAS on intraregional trade: the trade ratio, a measure of the share of intraregional trade in total trade and the gravity model, a measure of trade between two countries. Results from both methods show a lack of significant increase in intraregional trade between the Western African nations.

Thus, an informed analysis of ECOWAS countries domestic resource structure and trade is necessary to have understanding of the extent of trade of a country with other countries. Several studies have been conducted regarding intra-ECOWAS trade and member countries trade with developed countries. However, literature on domestic resource structure, commodity components of ECOWAS countries and trade are scanty. It is against this backdrop that this study is undertaken to fill the gap.

2.0 Literature review

Mancal and Barros (2018) posit that the overall pattern of international agricultural transactions in the ECOWAS sub region is dominated by extra-regional transactions with insignificant intra-regional trade on agricultural products. The study also contend that commercial agricultural production of the ECOWAS countries is focused mainly on extra-regional trade which is justified by the regional divergence between supply and demand. Similarly, Rolland and Alpha (2011) stated that Africa's agricultural products are exported globally, but the most commonly exported commodities are cash crops. In the case of extra-regional trade in West Africa, Torres and Seters (2016) contend that trade flows are driven by the raw material needs of its trading partners which are industrialized that buys raw materials from the region and sells industrialized products. According to the World Bank (2015), food supply to the region is imported in large scale despite its great agricultural potentials.

Ezekwesili (2011) used gravity model to evaluate the effects of currency union on intra-regional trade of member countries of ECOWAS. The panel data used includes bilateral

observations for fourteen years spanning 1994 through 2006 for 16 countries. Controlling for determinants and deterrents of trade, he found the presence of a currency union three times as likely to increase intra-regional trade between ECOWAS member countries. In addition, he found that the effect on trade creation has been steadily falling since 1994. In contrast, using a multivariate trade model Deme (1995) finds that the impact of ECOWAS on trade flow of its member countries from 1975 to 1991 is positive and that regional integration has succeeded in increasing trade flow between several members of ECOWAS. For instance, Cote d'Ivoire, Gabon, Mali, Mauritania, Niger, Sierra Leone, and Togo appear to be significantly impacted by ECOWAS. Foroutan and Pritchett (1993) use an augmented gravity model to compare potential trade in Sub Saharan African countries to current trade. Their study concludes that regional integration of Sub Saharan African countries positively affects bilateral trade in this region.

Velde (2006) argues that because intra-regional trade in Africa covers only a small percentage of total trade, any trade (and hence economic) effect of lower tariffs is likely to be small. Gasiorek and Holmes (2008) argue that an alternative approach could be to foster deeper integration through the harmonization of trade rules and standards and institutional co-operation. New regionalism moves beyond static trade creation benefits and emphasizes the potential dynamic trade and welfare gains from reductions in administration, transaction costs and the elimination and/or harmonization of other types of non-tariff barriers (NTBs). The reduction of non-tariff barriers and harmonization of other non-tariff measures (NTMs) such as standards and customs clearings procedures constitute a deeper form of integration, with the potential for more dynamic gains in terms of trade creation if harnessed correctly.

Zannou (2010), examined determinants of intra – ECOWAS trade flows using the gravity model and found that remoteness and enclosure reduce the volume of intra – community trade while proximity (geographical, linguistic or monetary) increases it. Also, economic and demographic dynamics are sources of more increased trade within ECOWAS. The same applies to stability of exchange rates and the openness of national economies. Okoh (2011) in her study sought to determine the extent of integration between the Nigerian cocoa market and those of her major trading partners in the Economic Community of West African States (ECOWAS). The results showed that the Nigerian cocoa market and those of other ECOWAS-member countries are co-integrated and the residuals are stationary. This, therefore, suggests that the law of one price (LOP) holds in the ECOWAS cocoa market. Nigeria and other ECOWAS members have gained from the existence of market integration in the ECOWAS sub region. The study recommends that Nigeria needs to intensify her efforts at utilizing the opportunities of expanded markets in the ECOWAS sub region for further agribusiness development.

The low level of intra-regional trade in ECOWAS, according to Shams (2003), is explained by the high dependence of most member countries on exports of primary commodities and by a trade liberalization scheme that has strict rules of origin. Access to the regional market is especially difficult for those firms and sectors in their early stages of development, given the low degree of internal integration. Such firms have to rely on imported inputs, and the content of domestic value added in their products is often too small to satisfy the rules of origin. Domestic resource structure in this study refers to natural endowments of particular country or region that are potentials for sustainable development while commodity component is the product made available for international trade transactions.

2.1 Theoretical framework

The theoretical framework used in this study is the Prebisch-Singer hypothesis (Prebisch, 1950; Singer, 1950) which argues that over the long run the price of primary commodities declines relative to the price of manufactured goods, causing the terms of trade to deteriorate in countries that export primary products and import manufactured ones. The theory is adopted due to the fact that primary commodities are sourced from domestic resources and constitutes commodity components of ECOWAS countries that affects the extent to which goods are traded

within and without ECOWAS region that ultimately affects the prices of these commodities. For Appleyard and Field Jr (2014) assert that the global dynamics of international trade reveals a reduced chance of gain for developing countries whose trade is focused on commodities.

3.0 Methodology

This study used descriptive analysis and facts of primary exports of ECOWAS countries sourced from ECOWAS handbook on international trade and World Trade Organization Economic, Research and Statistics Division. The reality of ECOWAS regional trade is often engrossed with missing data and are not adequately captured by official data (Maur & Shepherd, 2015; Engel & Jouanjean, 2013). Also, there is discrepancy across the years, import and export flows, exporters and product categories, as well as data misreporting. Thus, in this study data from several sources were utilized (i) World Trade Organization Economic, Research Division 2011 (ii) ECOWAS Handbook on International trade 2006 (iii) Ecowas Commission Annual Report 2010 (iv) www.ecotis.ecowas.int. Data sourced is from period 1990-2016. The analysis used tables and graphs to indicate country-specific resource structure and commodity components and data to investigate annual percentage change in intra and extra ECOWAS.

4.0 Discussion

Table 1: Principal Primary Exports of ECOWAS Countries

Country	Principal Exports
Benin	Cotton (ginned, seed, tissue), Cashew nuts, Clothes, Palm Products, Crude oil
Burkina Faso	Cotton, Cattle ,Cotton grains, Livestock, Gold
Cote d'Ivore	Cocoa beans, Coffee, Ginned Cocoa, Timber, Petroleum Products, Pineapples, Fish, Palm Oil
Cape Verde	Fish and Crustaceans, Hides and skin, calcado, vestuaqrios, Tourism
Ghana	Cocoa beans, Timber, Pineapples, Diamond, Gold, Mangenese Oil, Tourism
Guinea	Bauxite, Aluminia, Gold, Diamond, Coffee
Guinea Bissau	Cashew nuts, Groundnuts, Palm Kernel, Sawn Lumber, Peanuts, Fish, Shrimps, Timber, Logs.
Liberia	Rubber, Logs, Cocoa beans, Plywood and Sawn Timber
Mali	Live animals, Cotton, Gold, Pearls, Cereals, Hides and Skin
Niger	Uranium, Cattle, Sheep, Goats, Niebe, Onions, Cameline, Cowpeas, Onion, Fish
Nigeria	Cocoa beans, Crustaceans, Palm Kernel, Hides and Skin, Crude Petroleum, Cashew nuts, Limited Industrialization
Senegal	Cocoa beans, Coffee, Diamonds
Sierra Leone	Diamonds, Rutile (Titanium Ore)
Togo	Phosphates of Calcium, Cotton Seed, Cotton Carded, Cocoa beans, Cement (not pulverized)

Sources: (i) ECOWAS – How regional integration works in West Africa. A handbook for journalists. (ii) Central Intelligence Agency, World Fact book. (iii) ECOWAS Handbook on International Trade (2008)

Table 1 show export components of ECOWAS Countries. Practically all the countries within the sub-region are agricultural and other natural resource export-oriented economies. The major exports of some countries are shown in table 1. Major crops grown include grains (sorghum, millet, maize, rice) and root crops (yams, cassava, and potatoes). Among export crops, cocoa, coffee, palm oil and groundnuts are the most important. Livestock is produced mainly in the savannah areas of the sub region with a lot of inter-state trade in livestock in the Community especially in the north-south direction from Niger, Upper Volta into Nigeria, Ghana and Cote d'Voire.

The information in this table leads to several conclusions: nearly all ECOWAS member states are concentrating their export efforts on one or very few products; of these products, all are raw-materials, produced either through agriculture or mining and ECOWAS member states have little industrial capacity which can add value to raw materials (Nigeria's industrial capacity is focused on assembly of imported parts and not manufacture). Consequently, around 80–90% of all ECOWAS member state exports go to countries which use the raw materials they produce, mostly the United States, the European Union and emerging countries including China and India. Therefore, the prospect of regional integration to deliver trade benefits in member states of ECOWAS with similar products is bound to be limited. Their raw materials are either also produced by other member states – making them competitors on international markets – or do not meet consumption needs in their economies.

Figure 1: ECOWAS intra and extra imports and exports

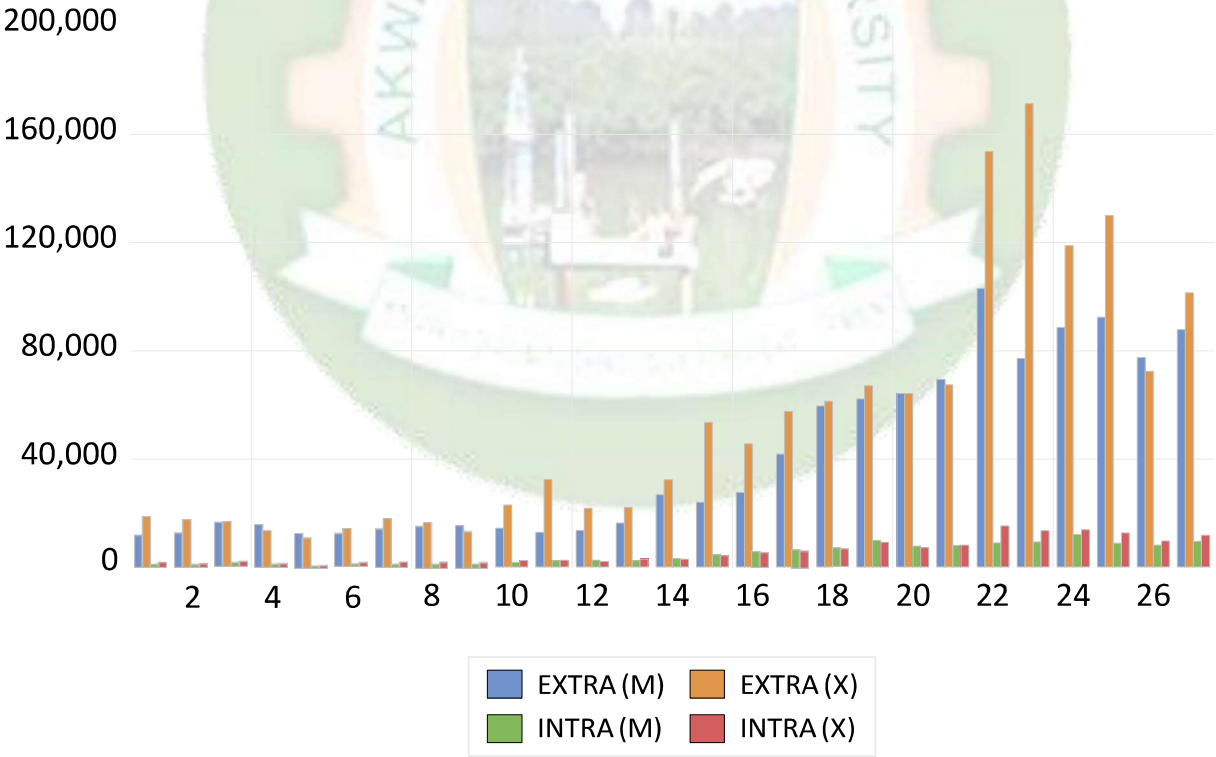


Figure 1: World and Inter-ECOWAS trade (US$)

Figure 1 presents total world trade and intra ECOWAS total trade (imports and exports). It is observed that exports and imports of global trade is higher than intra-ECOWAS trade as a result of the large scale in world trade. Thus, intra-ECOWAS trade is low relative to trade with Rest of the World and shows no obvious trend over time. This perhaps can be explained by the nature of products and the existence of barriers, which limits intra trade in the sub region as

pointed out in the literature. In this view, goods are bought in national markets rather than buying from markets in other member countries in the sub region.

More so, empirical evidence on the effectiveness of regional trade agreements in promoting intra-African trade is limited. Although some increases in intra-regional trade flows have been recorded, these are not large enough to confirm that intra-ECOWAS trade has been beneficial to all members. Indeed, national economies are targeting world markets rather than regional ones. Moves towards regional integration since 1994 and the introduction of the Common External Tariff (CET) in the WAEMU area in 2000 have brought about a slight upturn in intra-community trade which remains, however, low.

Fig 2: Percentage annual change in Extra and Intra imports

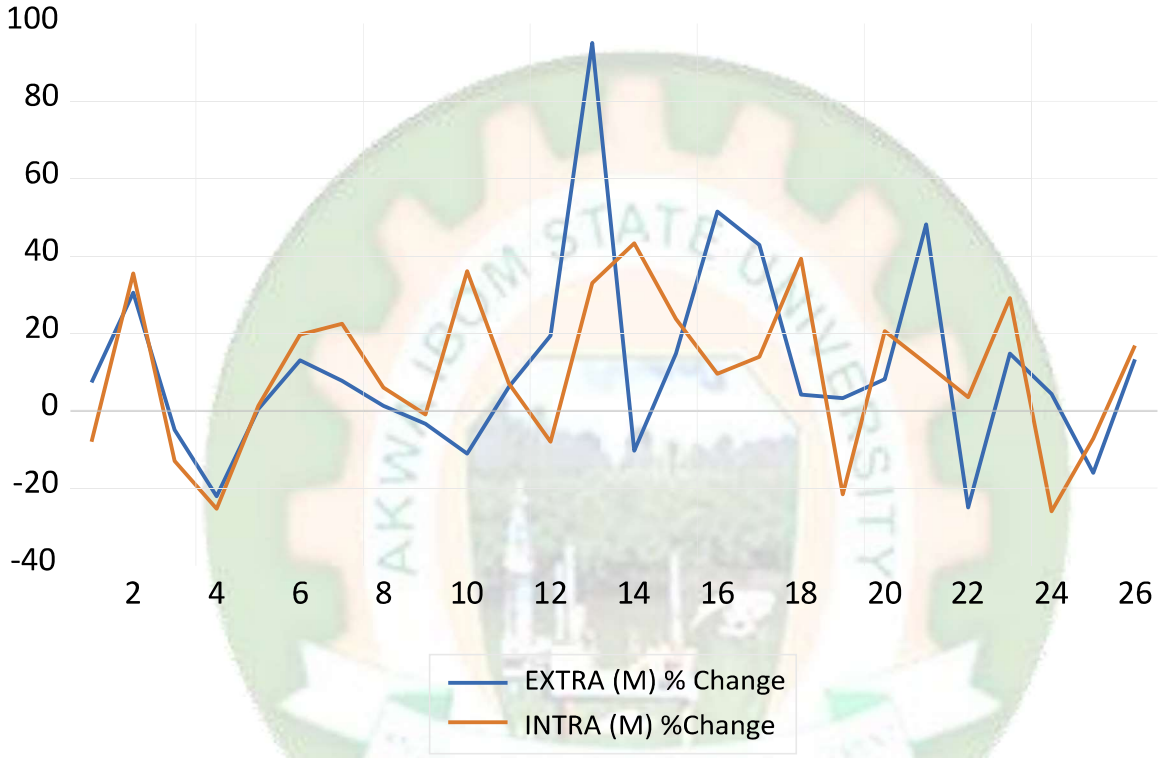


Figure 2 presents graph of percentage annual change of extra and intra ECOWAS trade on import.

It is observed that there is no consistency in in the extent of trade in the annual changes in intra and extra imports of ECOWAS countries. For instance, the trend shows that in 1991, intra import trade was lower than extra import trade. This position change in 1992 when it became higher than extra trade on import. The following years followed a similar pattern, in some cases, intra import trade higher than extra imports while in other years, the trend shows extra import trade higher than intra import trade. Percentage annual change is above 10 percent in most years as against earlier studies which argued that intraregional trade flows of the member states of ECOWAS is small (in all cases, below 10 percent) and at best stagnant (Torre, Kelly & Foroutan;1992, Iqbal & Khan; 2002).

Fig 3: Percentage annual change of intra and extra and exports

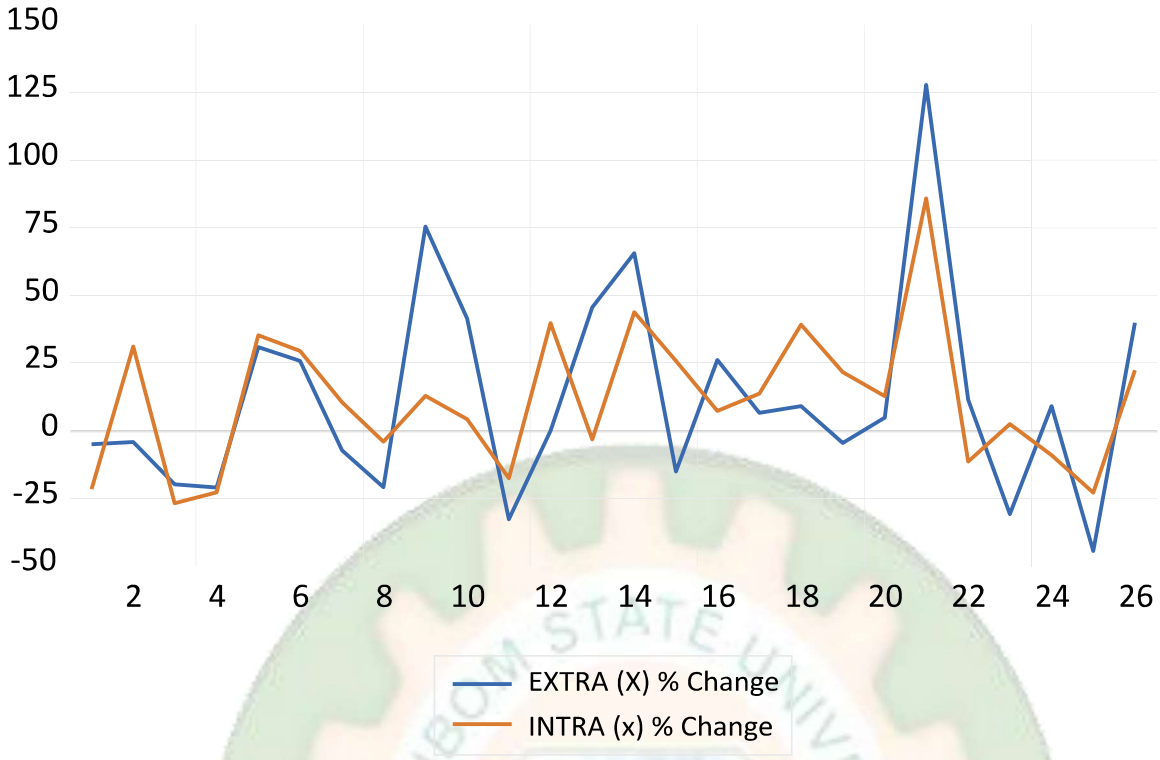


Figure 3 presents graph of percentage annual change of extra and intra ECOWAS trade on export.

It is observed that there is no consistency in in the extent of trade in the annual changes in intra and extra imports of ECOWAS countries. For instance, the trend shows that in 1991 intra export trade was higher than extra export trade though on a negative trend. This position change in 1992 when it became lower than extra trade on export. The following years followed a similar pattern, in some cases, intra export trade higher than extra exports while in other years, the trend shows extra export trade higher than intra export trade. Between 1999 and 2004, intra trade on exports grew more than extra export trade except in 2001 and 2002. Percentage annual change is above 10 percent in most years as against earlier studies which argued that intraregional trade flows of the member states of ECOWAS is small (in all cases, below 10 percent) and at best stagnant (Torre, Kelly & Foroutan;1992, Iqbal & Khan; 2002).

Conclusion and Recommendations

The study showed that despite gradual integration the export of similar primary commodities, little diversified dominates export trade, and the import of industrialized products and food items constitute a limiting factor on benefits of trade. The volume of exports is very concentrated on one or two commodities in ECOWAS countries. However, intra ECOWAS trade also grew in the period of study as the annual change in import and export intra trade scaled up to 75 in 2004 while intra export trade also scaled up 125 in 2011. Thus, while the lack of potential for increased trade within the ECOWAS region is frequently mentioned as an explanation of the lack of success of ECOWAS, evidence abounds that the potential for intra-ECOWAS trade is greater than is usually thought. It is known that for many West African countries a significant volume of unofficial trade (over 80%) is done through the informal sector. Therefore, this study recommends that there have to be some realistic policies which would combat the incidence of smuggling. Actors and actions that explain formal and informal trade dynamics need to be taken into account when designing and implementing policies to effectively promote intra-regional trade and value chain development.

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Appendix: ECOWAS import and export trade

ECOWAS IMPORT AND EXPORT TRADE (US$)

Year	EXTRA (M)	INTRA (M)	TOTAL (M)	EXTRA (X)	INTRA (X)	TOTAL (X)
1990	11868	1452	13320	18623	2113	20736
1991	12739	1334	14073	17723	1661	19384
1992	16693	1808	18501	17008	2180	19188
1993	15856	1572	17428	13649	1600	15249
1994	12346	1172	13518	10799	1237	12036
1995	12394	1186	13580	14152	1675	15827
1996	14007	1418	15425	17820	2170	19990
1997	15092	1736	16828	16550	2399	18949
1998	15292	1840	17132	13118	2304	15422
1999	14572	1819	16391	23026	2604	25630
2000	12961.4	2473.6	15435	32602.1	2714.9	35317
2001	13756.4	2695.6	16452	21969.9	2241.9	24211
2002	16430.1	2477.9	18908	22187.1	3135.9	25323
2003	26838.5	3293.1	30131.6	32336.4	3037.2	35373.6
2004	24056.4	4718.7	28775.1	53580.5	4366.1	57946.6
2005	27601.2	5835	33436.2	45647.5	5497.5	51145
2006	41782.9	6391.8	48174.7	57605.1	5901.6	63506.7
2007	59665.6	7281	57946.6	61441.5	6716.7	68158.2
2008	62192.3	10142	72334.3	67087.8	9355.2	76443
2009	64201.7	7950.3	74125	64231.7	7312	71543.7
2010	69430	8113	77543	67408.9	8256	75664.9
2011	102892.6	9091.88	111984.48	153638.7	15345.96	168984.66
2012	77209.06	9401.64	86610.7	171278.2	13621.68	184899.88
2013	88591.46	12141.45	100732.91	118908.5	13973.89	132882.39
2014	92359.83	8979.45	101339.28	129954.5	12716.87	142671.37
2015	77487.77	8324.12	85811.89	72430.5	9811.4	82241.9
2016	87798.56	9723.91	97522.47	101414.2	12018.89	113433.09

Sources (i). World Trade Organization Economic, Research Division 2011 (ii) ECOWAS Handbook on International trade 2006 (iii) Ecowas Commission Annual Report 2010 (iv) www.ecotis.ecowas.int retrieved 22/01/22