

## THE CHANGE OF FOREIGN TRADE STRUCTURE OF AFRICAN COUNTRIES IN THE CONTEXT OF INCREASING REGIONALIZATION IN THE WORLD ECONOMY<sup>1</sup>

*Growing interest of international and Russian business with the cooperation with modern Africa and the strengthening of the developing countries' positions in the world brought us to explore the foreign trade of African countries. This research aims to identify trends and new segments for the development of economic relations. We hypothesise that, despite the difficulties in national development, African countries have managed to create areas of successful development by changing their foreign trade structure under the influence of regionalization. The research is based on statistics gathered from international organizations, including the United Nations Economic Commission for Africa, African Development Bank Group, and foreign trade statistics from Côte d'Ivoire. We used the academic literature in the field of foreign trade as the methodological base. The article analysed all types of foreign trade structures (geographical, territorial, organizational, and commodity ones) simultaneously at the global, regional, and country levels. As a result of the analysis at the global level, we created a classification of African countries, which identified groups with positive changes in foreign trade structure. Thus, such countries can become leaders in the modern international cooperation. The analysis at the regional level determined some regional integration groups belonging to the category of "growth platforms". The main research result at the country level (on the example of Côte d'Ivoire) is the authors' typology of internal districts. It allowed us to identify "core-regions" and "growing regions" and offer them as perspective points of interaction. These results can be used for economic cooperation with Africa in the framework of implementing the decisions of the "Russia-Africa" summit and economic forum (October 24, 2019, Russian Federation).*

**Keywords:** foreign trade, foreign trade structure, international cooperation, regionalization, integration groups, developing countries, modern Africa, Republic of Côte d'Ivoire

### Introduction

Recently, there has been a significant change in the balance of power in the world economy: while the share of developed countries in the world's gross domestic product (GDP) is declining, the share of developing countries, on the contrary, is increasing [1, p. 122]. In the group of developing countries, the African continent is of main interest. On one hand, Africa is the region with the greatest concentration of socio-economic development problems (inflation, hunger) characterised by the contradictory nature of current changes [2, 3]. On the other hand, many countries on this continent are moving towards economic growth and strengthening their positions in the world economy [4, 5]. Experts estimate that "Africa's GDP is expected to reach USD 29 trillion by 2050 and will exceed the combined GDP of the U. S. and Eurozone for 2012"<sup>2</sup>.

However, it is difficult to assess the essence of the changes occurring in these countries based only on the available data [6]. More research is needed to consider the impact of new trends and factors, including the strengthening of regional integration processes in Africa.

For Russia, relations with modern Africa are of strategic importance. The "Russia-Africa" Summit and Forum, held on October 23 and October 24, 2019 in Sochi, Russia, set the goal of finding ways to systemically develop the entire complex of Russian-African cooperation<sup>3</sup> (including trade and economic relations) and establishing new cooperation areas.

The article studies changes in the sectoral and regional structure of African foreign trade, taking into account the regionalisation of the world economy, as well as to identify segments for fruitful international cooperation.

<sup>1</sup> Diabaté V., Kholina V. N., Frolova E. D. Text. 2020.

<sup>2</sup> Саммит и экономический форум «Россия-Африка» ["Russia-Africa" summit and economic forum]. Retrieved from: <https://summitafrica.ru> (Date of access: 20.10.2019)

<sup>3</sup> Ibid.

## **Literature review, key terms and concepts**

Scientists studying Africa explore various aspects of economic development [2–4]. In particular, they are seeking new mechanisms to deepen integration cooperation within the BRICS [7], trying to identify current trends and factors of economic growth, as well as prospects associated with the processes of modernisation [2]. The effects of globalisation for developing countries, including Africa, are the most debated question [3, 9]. The assessment of these effects revealed both positive (e.g., a slight reduction in inequality, the emergence of potential growth segments in goods and services even in low-growth countries [10, p. 8]) and negative effects (including “growing inequality in the distribution of global incomes, ... mistrust between the elite and the rest of the community [11, p. 1815], political contradictions, and ethnic and armed conflicts [12]).

Regional integration is considered the main tool for promoting internal growth and poverty reduction. The concept of “regionalisation” in modern scientific literature is interpreted in two ways. Regionalisation-1 is the process of consecutive changes in the spatial division of society (at the micro-level). Regionalisation-2 is the process of intensification of interactions between countries with similar socio-economic development, and the formation of regional integration (meso- and macro-level). This statement requires an analysis of foreign trade structure not only at the level of the countries of the African continent, but also separately at the level of regional integration associations.

The most developed form of international economic relations is foreign trade. Since it is characterised by a variety of forms and methods of interaction of certain elements of the national economy with different countries, it is appropriate to examine foreign trade as a complex multi-level territorial and economic system [19, 20]. International practice recognizes the following types of foreign trade structures: geographical (reflecting the ratio of trade flows between individual countries and groups), organisational (reflecting trade flows between countries, belonging to various integration associations), and commodity (reflecting foreign trade flows for certain goods or groups of goods). The majority of authors describe the structure of foreign economic activity of the regions within the country as territorial [20, 21]. In this paper, considering the clarification of the concept of “regionalisation-1”, we will use the term “territorial-regional structure”.

## **Methodological approach**

Based on this theoretical platform, the study of foreign trade of modern Africa will be conducted simultaneously at three levels: global, regional, and the level of the individual country (in terms of interior of the country). We will examine it from the perspective of its structures (geographical, territorial, organisational, and commodity).

First, it is necessary to establish a set of indicators for the analysis. Although new measurements are needed to determine the exact contours of the new global economy [11, p. 15], according to A.F. Darrat [22, p. 277], it is still impossible to ignore the classic variables, including “the role of exports in economic development”, as they are the basis of the set of variables. In addition to the traditional indicators (export and import), the set includes the degree of openness of the economy (export and import quotas), changes in customs duties, the share of countries in international trade [23, 24], etc. (presented in Table 1).

It is essential to correctly interpret the results. Based on the existing proposals [19, 20, 23, 24], we suggest the following parameters.

1. There are no universal indicators and parameters for assessing the openness of the economy; the economy is considered relatively open if the export quota is more than 10 % of GDP (the national economy is identified as fully open when a quota exceeds 35 %).

2. An increase in the import quota also means an increase in the openness of the country’s economy. However, it is not a uniquely positive characteristic because it shows a high dependence on the world market: the greater the share of strategically important industries in the structure of manufacturing, the less open is its economy. The share of imports in GDP exceeding 30 % indicates the necessity to rectify the situation immediately.

3. Along with the benefits (expansion of the resource base, accelerated development of specialisation and cooperation, etc.), there are also negative consequences of openness, for example, an increase in the vulnerability of the national economy to external factors and the threat of destruction of non-competitive industries (sometimes strategically significant).

Set of key indicators for examining Africa's foreign trade structure

Type of structure	The level of the continent and subregions	The level of regional integration associations	The level of a separate country
General (macroeconomic) indicators	Share in world trade; foreign trade turnover and its dynamics; openness of the economy (share of exports and imports in gross domestic product (GDP)); change in customs duties (average increase)	Export concentration indexes (share of exports of a certain type of product in total exports); import concentration index; share of integration associations in world exports	Share of the country's regions in exports and its change; the level and dynamics of export and import concentration; openness of the national economy
Commodity	Commodity turnover structure, specialisation (commodity groups); diversification of export and import (including the share of manufactures)		
Geographical	Dynamics of export and import with countries (groups of countries) of other continents; share of major trading partners; leading partners in foreign trade		
Territorial-regional	—	—	Export and import of regions of the country with other countries of the world and their dynamics; share of regions in export and import
Organisational	—	Volume and share of groups in foreign trade; level of involvement in intra-regional trade (share of domestic imports-exports)	—

Source: Compiled by authors.

4. The structure of exports (imports) of goods or services is the share of certain groups of goods (services) in total exports (imports). An increase in the share of raw material exports and an increase in the share of manufactured goods imports indicate a deterioration in the structure of foreign trade and a decrease in its efficiency.

5. Customs duties on export goods: usually manufacturers argue for an increase in customs duties, justifying the request by equalising competitive conditions in the national market (including production modernisation in the country). However, consumers prefer the reduction of customs duties, stating the possibility of purchasing additional imported equipment to expand the variety of production and reduce production costs.

6. The Export Concentration Index (the share of exports of a limited number of key commodities in a country's total exports) shows how wide or narrow is the range of exported goods. The value of the indicator close to 1 indicates the maximum concentration of exports on one or two key commodities, low diversification and vulnerability of the country's economy. On the contrary, a value close to 0 means a wide range of exported goods, a high level of diversification (the index does not exceed the value of 0.06 for the leading European countries, and 0.04 for Russia). The Import Concentration Index is interpreted similarly: a value close 1 indicates a high concentration.

However, according to V.B. Kondrat'ev [10], sometimes it is necessary to use different interpretations of well-known indicators. In particular, this depends on the assessment of world trends. First, there is a decline in integral indicators, for example, the growth rate of global GDP has decreased from 6 % in the 1960s to 3 % in 2015. Despite the increase in foreign direct investment in the absolute values, their share in total investment decreased. The dynamics of international trade shows an interesting trend: in 1960–2008, the ratio of trade to GDP increased by 35 percentage points, and by only 0.2 in the next five years [10].

The methodology for analysing foreign trade structure and its dynamics consists of three stages based on the three levels of the study (Table 1).

Stage 1. To assess Africa's inclusion in the global economy by studying the geographical, commodity structure of Africa's foreign trade as a whole. We focused on calculating the absolute, relative, and structural indicators presented in Table 1. They include Africa's share of international trade (share of total world trade), position in the rankings, change in the absolute values of export and import volumes, their share in world exports and imports and dynamics, analysis of changes in customs duties, major trading partners, openness of the economy of African countries (share of exports in GDP, share of imports in GDP), and commodity structure of exports and imports. At this stage, it is necessary to identify the features of foreign trade of subregions, namely, their share in world trade and dynamics. The final step, which allows international business to see segments for future cooperation, is the classification of African subregions according to the degree of participation (high, medium, low).

Stage 2. To study foreign trade structure at the level of African regional integration associations. Here, we examine general characteristics of integration associations and their peculiarities in modern Africa, calculate their share in world trade, analyse the concentration of exports and imports, as well as changes in intra-regional trade and its commodity structure. The result of Stage 2 (as well as Stage 1) is the classification focused on associations with stable and growing shares in intra-regional trade considered as segments for cooperation with international business.

Stage 3. To examine foreign trade structure at the country level, namely, analyse the territorial and commodity structures of foreign trade at the micro-level (units of administrative division/districts). The analysis is conducted based on the same indicators (Table 1) with further classification of the districts according to the following variables:

- the dynamics of the change in the share in exports (with intervals: below 5 % or low, 5–10 % or average, more than 10 % or high); all the districts were divided into three groups: “reduction in the share in the country's exports”, “growth of the share in the country's exports” and “a stable share in the country's exports”;

- the commodity export structure (i.e. the identification of specialised export areas with a predominance of certain groups of goods in the export structure);

- the types of the commodity export structure (districts with diversified, mono-commodity, or stable structure).

This approach (completing each phase with classification) will allow international businesses to select the most favourable and mutually beneficial approach for strategic cooperation.

## Data

The study is based on statistical publications from the World Bank, the International Monetary Fund<sup>4</sup>, the World Trade Organization<sup>5</sup>, the United Nations Conference on Trade and Development (UNCTAD)<sup>6</sup>, and the Food and Agriculture Organization of the United Nations (FAO)<sup>7</sup>. Additionally, we used the analytical data of international commodity associations (e.g., The International Cocoa Organization [ICCO] and the UN Economic Commission for Africa (UNECA)), major regional African organisations, including the West African Economic and Monetary Union, and the African Development Bank Group.

Official documents and foreign trade statistics of Côte d'Ivoire<sup>8</sup> were widely used. In this case, it was necessary to recalculate national statistics. In particular, the export potential of the regions was assessed through production volumes based on the data on yield and area of export crops.

## Results and Discussion

The results of **Stage 1** “A Study of Africa's Foreign Trade Structure (at the global level)”:

1. Africa's share in world trade in the study period was low (approximately 3 %), despite a significant increase in absolute indicators: foreign trade increased 4-fold to \$843 billion, while the share in world exports even declined [5].

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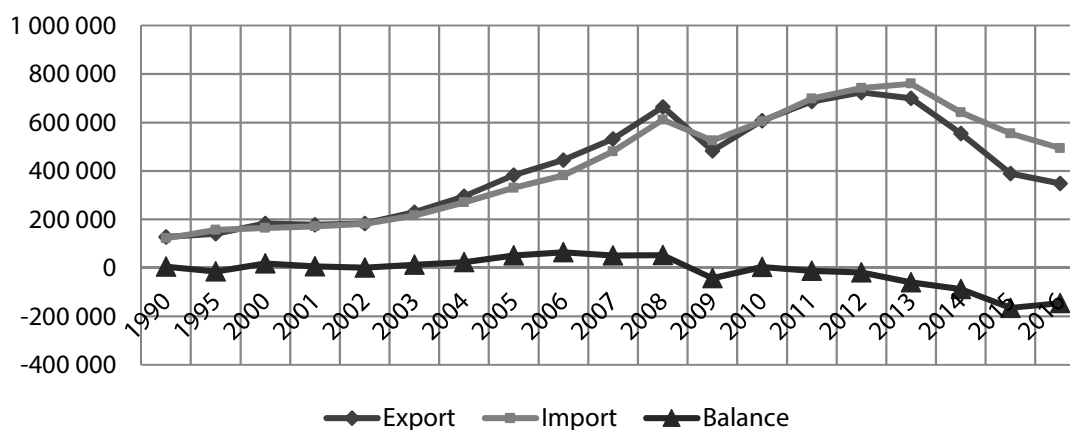
<sup>4</sup> The World Bank. Retrieved from: <https://www.worldbank.org/> (Date of access 20.10.2019).

<sup>5</sup> IMF. Research. Retrieved from: <https://www.imf.org/en/Research> (Date of access 20.10.2019).

<sup>6</sup> UNCTAD. Retrieved from: <https://unctadstat.unctad.org/EN/> (Date of access 20.10.2019).

<sup>7</sup> Food and Agriculture Organization of the United Nations (FAO). Retrieved from: <http://faostat.fao.org> (Date of access: 15.07.2017).

<sup>8</sup> Indice GINI — Cote d'Ivoire. Retrieved from: <http://donnees.banquemondiale.org/indicateur/SI.POV.GINI?locations=CI> (Date of access: 20.10.2019); Direction generale de la decentralisation et du developpement local Retrieved from: <http://www.dgddl.interieur.gouv.ci/?page=suite&id=87> (Date of access: 20.10.2019).



**Fig. 1.** The dynamics of imports, exports, and trade balance in Africa in 1995–2016, million U.S. dollars (Source: Own elaboration based on the data of the United Nations Conference on Trade and Development (UNCTAD). *Developing countries: Africa. Trade indicators*, 2017. Retrieved from: <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=90759> (Date of access: 11.04.2019))

2. Considerable changes occurred at the level of African subregions. In 1990–2016, North Africa had the highest share in world trade, despite a slight decline in the 2010s due to political instability (“the Arab Spring”). South Africa moved to third place, while West Africa moved to second place. After analysing the variable “the dynamics of the share in world trade” [5], we identified the following groups of subregions in Africa:

- Group 1 includes subregions with an increase in the share in world trade (East and South Africa);
- Group 2 comprises subregions with a decline in the share in world trade (North, Central and West Africa).

3. Before 2012, the volume of exports gradually increased and exceeded the volume of imports (with a short-term decline in 2008) (Figure 1), mainly due to the increase of global prices on raw materials and export volumes.

However, in some years (2009, 2011–2016) the trade balance was negative, due to both global processes in the world economy and the decline in demand from Africa’s main trading partners during the global financial and economic crisis.

4. The degree of openness of Africa’s economy in imports for 1990–2016 increased from 19 % to 22 % with a maximum 29 % in 2008 (the level of 30 % is critical); the degree of openness of African countries in exports during the same period decreased from 21 % to 16 % (which corresponds to the “average degree of openness”).

5. According to the analysis of the geographical structure of foreign trade, main trading partners of Africa are China, the United States, and the European Union (EU) (Table 2). The geographical structure is very dynamic: the share of traditional partners (EU, USA, and Japan) has decreased, and China has become the main trading partner of most African countries since the 2000s. This situation occurred due to weak diversification of export goods, problems with infrastructure, and high tariff and non-tariff restrictions (“hidden protectionism”).

Some authors consider China’s dominance as a threat to international business.

6. The commodity import structure is changing slowly: machinery and equipment (32 %) and manufactured goods (17 %) remain the main imports, while raw materials (including non-food raw materials and mineral fuels) dominate exports (more than 60 %).

7. Analysis of the rate of increase in the average customs duties applied to African exports (calculations for 54 countries based on the World Bank statistics for 1994–2016<sup>9</sup>) shows opposite tendencies, as tariffs were reduced in some countries and increased in others [5]:

- customs duty rate increased in nine countries, where initially they were quite low (the leader in tariff growth was Swaziland: in the period 2001–2016, the duties grew from 3.56 % to 9.5 %);
- customs duties in 45 (out of 54) African countries have almost halved (duties of Côte d’Ivoire were reduced only by 13 %);

<sup>9</sup> The World Bank: Tariff rate. Retrieved from: <http://donnees.banquemondiale.org/indicateur/TM.TAX.MRCH.SM.AR.ZS> (Date of access: 20.10.2019)

Africa's main trading partners and volume of trade, 1990–2016

Partner country (or group of countries) in foreign trade	Indicators of foreign trade			
	Exports		Imports	
	Share, %, 2016	Share's change (1990–2016)	Share, %, 2016	Share's change (1990–2016)
EU	35	17 % reduction	32	1.5-fold decrease (from 50 % in 1990)
China	11	Almost 23-fold increase (from 0.5 % in 1990 to 4.4 % in 2003 and up to 11 % in 2016)	18	18-fold increase (from 0.1 % in 1990)
United States	6	2-fold decrease	5 %	No changes
Reference: Russia	1	No changes	1.5–2	2-fold increase

Source: own elaboration based on data from the UNCTAD statistics website. Africa Trade Information, 2017. Retrieved from: <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=90759> (Date of access: 11.04.2019).

— there is much in common for all African countries: devaluation of the national currency, withdrawal of export permits, and abolition or reduction of export duties.

*Stage 1 conclusions:* while the observed measures have actually led to the integration of African countries into the world economy, they did not facilitate the access of African products to the world market. We consider the level of its integration as insufficient, the main reason being that these countries are not ready to compete in the global market.

**Stage 2.** The first integration association in Africa was established in 1959 (“The Conakry Declaration”) by the Presidents of the Republic of Guinea and Ghana [8]. In 1990–2010s, there were already 14 integration associations with different degrees of success<sup>10</sup>. A very interesting feature of subregional integration in modern Africa (in the second half of the 20th and the beginning of the 21st centuries) was the participation of states with different political regimes. Moreover, even conflicts between members of associations (for example, between Mali and Burkina Faso, Sierra Leone and Liberia, Senegal and Mauritania, etc.) have not hindered the work of the following integration groups: Community of Sahel–Saharan States (CEN-SAD), Economic Community of West African States (CEDEAO), and West African Economic and Monetary Union (UEMOA). 27 African countries are members of two regional groups, 18 countries belong to three associations, and one country participates in four integration groups. This situation, accompanied by the growth of trade between member countries, indicates an increase in regionalisation in Africa.

The importance of these associations in Africa's economy significantly differs. Thus, to analyse foreign trade, we distinguished two groups of associations. Group 1 plays a leading role in the economic development of modern Africa and includes seven associations: the Common Market for Eastern and Southern Africa (COMESA), Economic Community of West African States (CEDEAO), Economic Community of Central African States (CEEAC), South African Development Community (SADC), Community of Sahel–Saharan States (CEN-SAD), Intergovernmental Authority on Development (IGAD), and Arab Maghreb Union (UMA). Group 2 (less important associations) includes the West African Economic and Monetary Union (UEMOA), Economic and Monetary Community of the Central African States (CEMAC), East African Community (EAC), and others.

The analysis of foreign trade structure for these integration associations demonstrated the following results. First, the share of any integration association in world trade does not exceed 2 %. It depends on both the stage of the economic cycle (for example, during the financial and economic crisis of 2008–2009, the share of SADC and UMA in exports decreased to 0.06 and 0.24 percentage points, respectively), and world prices on raw materials (the decline in world prices in 2013–2016 resulted in a decline in the share of seven African key integration groups in world exports). From 1990 to 2012, the share of six regional integration associations in world exports increased (with the exception of UMA whose share fell by 0.042 percentage points due to political instability, namely the “Arab Spring” in 2010). Second, foreign trade structure of all integration associations are characterised by high

<sup>10</sup> Economic Development in Africa Report 2009: strengthening regional economic integration for Africa's development//United Nations. New York and Geneva, 2009. 126 p. Retrieved from: [http://unctad.org/en/Docs/aldcafrica2009\\_en.pdf](http://unctad.org/en/Docs/aldcafrica2009_en.pdf) (Date of access: 23.03.2018).

Characteristics of foreign trade structure of integration associations: concentration index (1995–2016)

Index	Value	Study results
Export Concentration Index	Range 0.95–0.84 (average world level is 0.05–0.09; average for developing countries is 0.3–0.14; the value is 0.4 for Russia)	Exports in Africa as a whole are monotonous. However, in the context of the integration associations, there is a big differentiation. Group 1, which includes SADC, IGAD and COMESA had an index below 0.3. In Group 2, (CEN-SAD and UMA), the index ranges from 0.3 to 0.5. Main exports were mineral fuels and lubricants (more than 43 %), food and live animals (15 %), organic fuels (15 %), and machinery and transport equipment (14 %). Group 3 (whose export concentration index is 0.5–0.8) includes associations with the least diversified exports and a limited group of export products such as CEDEAO and CEEAC. The exports were dominated by only two commodities: mineral fuel and lubricants (the share is 61 % in CEDEAO, and 79 % in CEEAC). Important exports in CEDEAO were food and live animals (14 %) and raw materials
Import Concentration Index	Range 0.04–0.12 (world average value as well as the index value for developing countries is 0.05–0.10)	The import structure is typical for the less developed regions of the world: the predominance of manufacturing (over 64 %), food products (over 6 %), and oil and petroleum products (more than 5 %). An increase in the share of manufacturing and petroleum products was noted. In several integration groups, there was a tendency towards a decrease in the share of food products in imports, reflecting the positive results of self-sufficiency

Source: own elaboration based on data from the UNCTAD statistics website. Africa Trade Information, 2017. Retrieved from: <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=90759> (Date of access: 11.04.2019).

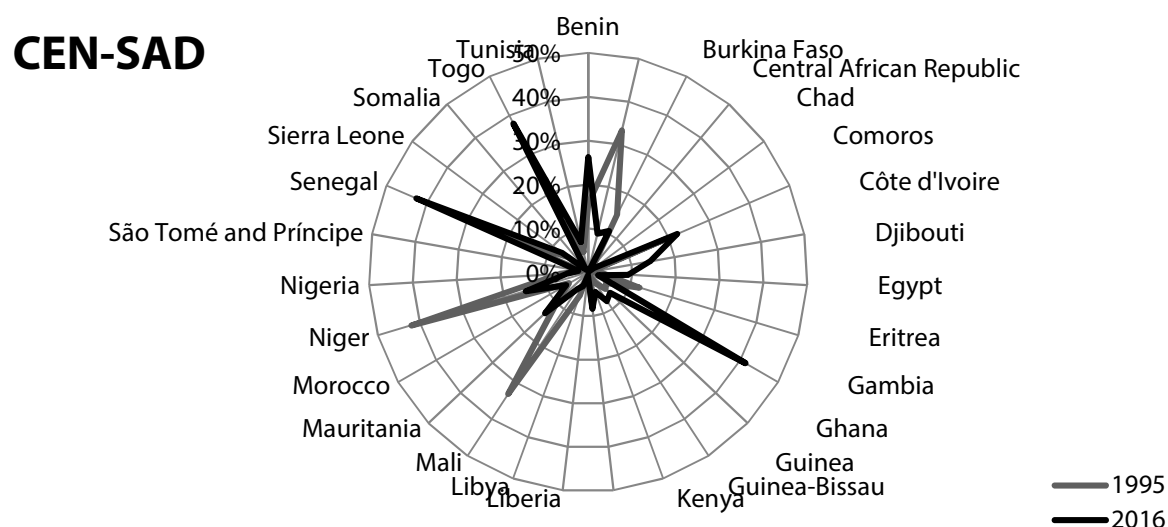
concentrated. The results presented in Table 3 confirm this conclusion. The “value” column indicates the calculated value of the index, and the global average for comparison.

The analysis of intra-regional trade showed the following results.

1. During 1995–2016, there was a significant increase in intra-regional turnover: 4-fold in CEN-SAD and CEDEAO; 5-fold in IGAD and SADC. The most significant growth was noted in COMESA.

2. There are different patterns in individual countries within regional associations (Figure 2 shows an example of CEN-SAD in terms of exports). In this case, it is better to analyse groups of countries. The first group consists of the countries with an increase in the share of domestic imports and exports within regional associations (including Ghana, Senegal). The second group comprises the countries with a decrease in the share (including Niger, Mali).

3. Based on the analysis of intra-regional trade in 1995–2016, we have distinguished two groups of regional economic communities (Table 4) with stable and growing shares of intra-regional trade in total trade.



**Fig. 2.** Intra-regional trade (export) of CEN-SAD member countries, 1995–2016, % (Source: own elaboration based on data from the UNCTAD statistics website. Africa Trade Information, 2017. Retrieved from: <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=90759> (Date of access: 11.04.2019))

**Classification of regional economic associations by the share of intra-regional trade in its total volume and their characteristics**

Indicator	Group 1. Economic communities with a stable share	Group 2. Economic communities with a growing share
Regional Associations	CEEAC, CEN-SAD, UMA, and CEDEAO	SADC, COMESA, and IGAD
The share of intra-regional trade in total trade and its change for 1995–2017	Unchanged and remains at 3–8 %	Doubled from 6 % to 12 %
Change in the commodity structure of intra-regional trade	Unchanged due to significant barriers to the free movement of goods and labour	Changed: the share of manufactured goods increased (for example, its share in SADC increased to 60 %, while the average value in Africa is 13 %)

Source: Own elaboration.

4. We have identified two types of integration associations according to the dynamics of the commodity structure of intra-regional trade. Type 1 consists of the integration associations in which one product dominated the trade structure (for example, the product-leader in CEDEAO, CEN-SAD, and UMA was mineral fuel and lubricants (30 %), and machinery and transport equipment (20 %) in SADC). Type 2 includes the associations, where the leader-product was changed.

Therefore, regional economic integration positively influences intra-regional and inter-regional trade. However, the pace of development of intra-regional trade lags behind those declared: for example, only seven regional integration associations have implemented the idea of creating a free trade zone. The customs union operates, but not as effectively as planned, in only three integration associations (COMESA, CEDEAO and CEEAC).

*Stage 2 conclusions:* the analysis shows that the share of Africa's regional integration associations in world trade is small but tends to increase. There are strong obstacles to intra-regional trade development (its share in total trade is no more than 20 %), including a similar economic structure. Key associations have tended to increase the share of intra-regional trade, which confirms the real development of regionalisation in Africa. This will allow countries in the region to benefit from regional integration and globalisation by protecting the interests of the integration groups in general and each member country in particular, collectively advocating for reducing tariff and non-tariff barriers.

**Stage 3.** Using the example of the districts of Côte d'Ivoire, we analysed the territorial and commodity structure of foreign trade at the micro-level. We chose Côte d'Ivoire for a detailed study of foreign trade structure at the micro-level due to various reasons. First, the country is part of several subregional integration associations. Second, despite long periods of political instability, the country actively participates in the international division of labour and has good foreign trade indicators (provides 1/3 of the world cocoa bean market). In 1995–2016, the degree of openness of the economy has almost doubled (from 20 % to 36 %) and trade turnover has quadrupled (from \$5 billion to \$20 billion). Simultaneously, during the study period, the country's share in world trade did not exceed 0.1 %, there was a trade surplus with all regions of the world except Asia. Côte d'Ivoire uses different export trading regimes, for example, for regional integration markets in Africa, the United States, and the EU there is a non-reciprocal preferential treatment (such as zero or low duties on imports and exports), as well preferential treatment for WTO member countries.

The key feature of Côte d'Ivoire foreign trade is an average concentration of exports (0.3) that is higher than the global average (0.05–0.09). This fact means that the country earnings depend on exports from a limited number of goods, and as a result, on the changing situation in world commodity markets. The main share of the country's exports were food and live animals, and non-food raw materials and mineral fuels (although the export of fuel in value has increased 6-fold). Simultaneously, a lower degree of concentration and a wider range of goods are characteristic for imports (the index fluctuated from 0.13 to 0.25 during 1995–2016). The import structure is dominated by mineral fuels (growth from 16 % to 22 % due to price fluctuations in the world market), vehicles, machinery, equipment (20 %), food products, and animals (16 %).

Despite the importance of the geographical and commodity structure of foreign trade at the micro-level, the key issue is the analysis of the territorial-regional structure. The examination of participation

The typology of districts of Côte d'Ivoire by the indicators reflecting participation in world trade (an excerpt)

Nº	Criteria	Types	Results and key factors	
1	By the dynamics of the change in the share in exports	Type 1. Districts with a declining share in exports	Subtype 1.1. Districts with a decrease from high to average shares (only 4) Subtype 1.2. Districts with a decrease from average to low shares (only 3, including Comoé) (similarly for other subtypes)	Reduction in the production and export of cocoa, coffee and cotton; decline in world market prices for cotton and coffee; cessation of gold production and exports (Comoé)
		Type 2. Districts with a stable share in exports	3 districts (Vallée du Bandama, Denguélé, Lagunes) have stable low shares	A stable share of key exported goods, including cashews (Vallée du Bandama, Denguélé) and palm oil (Lagunes)
	The values of more than 10 % are considered high, 5–10 % are average, below 5 % are low	Type 3. Districts with an increased share in exports	Subtype 3.1. Districts with an increase within the average level (only Gôh-Djiboua) Subtype 3.2. Districts with an increase from middle to high shares (only Bas-Sassandra) Subtype 3.3. Districts with a constant growth of concentration (only Abidjan)	Rising world market prices for cocoa; expansion of arable land, production, exports of cocoa and coffee (Gôh-Djiboua, Abidjan); increase in gold production and exports (Gôh-Djiboua); increase in export potential of Abidjan: exports of cement, oil, petroleum, and chemical products
2	By commodity export structure	Type 1. Districts with the change to diversification	4 districts: Montagnes, Comoé, Woroba, Savanes	Rising prices for cocoa, lower prices for cotton and coffee; increase in gold production and exports (Montagnes) and manganese (Savanes); growth in banana exports (Montagnes, Woroba)
		Type 2. Districts with a stable commodity export structure	4 districts: Autonomous District of Yamoussoucro, Lacs, Denguélé, Vallée du Bandama	Rising prices for cocoa and cashews and declining prices for cotton and coffee
		Type 3. Districts with the change to narrow specialisation	6 districts: Autonomous District of Abidjan, Zanzan, Lagunes, Gôh-Djiboua, Sassandra-Marahoué, Bas-Sassandra	Rising prices for cocoa and cashews and declining prices for cotton and coffee; growth of oil production and exports (Abidjan), gold (Zanzan); decline in banana exports (Zanzan) and palm oil (Lagunes)

Note: Type 3 is based on the product structure of exports (identification of specialised export areas), and subtypes were formed by the predominance of the export of a certain product, for example, cocoa and coffee for subtype 3.1; oil for subtype 3.4.

of regions of the country (districts) in foreign trade resulted in the creation of the typology of the districts by several indicators (Table 5), as well as their classification in accordance with the level of participation.

During the study period, Autonomous District of Abidjan (0.7 % of the area, yet 20 % of the population) was the country's leader in terms of participation in foreign trade (the main exporter of the country, the core-region): its share in exports increased from 26 % to 42 %. The district plays a leading role in foreign economic activity and in the entire economy of the country: Abidjan is an oil exporter, an exclusive exporter of cement (4/5), seafood, and chemical products.

The "growing areas" group includes districts important for foreign trade located in the south-west of the country (Sassandra-Marahoué, Bas-Sassandra, Montagnes) and Gôh-Djiboua, which have

accounted for 50 % of the country's exports in 1990–2000 and 43 % in 2001–2013. These districts specialise in the export of natural rubber, cocoa, and pineapple.

The group of depressed areas includes the districts Comoé, Woroba, Savanes, Lagunes, Denguélé, Zanzan. They account for three-quarters of the country's area, but have relatively small and decreasing shares in the country's export potential. During the study period, the production of export goods declined by 9 % (from 24 % to 15 %) due to political unrest (the civil war of 1999–2010) and changes in world market prices for main export goods, such as cotton and cashews.

Thus, we can conclude there are the territorial disparities of the country's participation in foreign trade that, unfortunately, lead to the polarisation of the economic space, and sharp contrasts in the level and quality of life, which threaten the territorial integrity of the country.

As one of the solutions to this problem, we propose to modify the foreign trade activities of the country's regions. It is possible to create two clusters: a "coffee and cocoa cluster" for the production and processing of coffee and cocoa (in Sassandra-Marahoué, a south-west district) and a "cashew cluster" (in the north-west districts Woroba, Lagunes, Denguélé and Savanes) for the production and processing of cashews. This approach will allow developing the country's export potential and involve remote areas to the global and regional economy.

*Stage 3 conclusions:* territorial and socio-economic disparities between the regions of Côte d'Ivoire have been growing largely due to export specialisation. The most developed region (the "core-region") is the capital district of Abidjan, where the majority of industrial enterprises and export potential are concentrated. "Semi-peripheral regions" include the districts of Bas-Sassandra, Yamoussoucro, and Vallée du Bandama. The rest of the districts have a level of socio-economic development lower than the national average ("peripheral regions").

We have discovered the linear correlation-regression between exports, foreign trade, and the GDP of Côte d'Ivoire that showed determination and correlation ratios of 0.78 and 0.85 (Fisher's correlation coefficient is 86.71). It is necessary to note that the calculations of P. Zahonogo [25] for a group of countries south of the Sahara indicate the nonlinearity of similar dependencies.

The economic growth of Côte d'Ivoire is accompanied by the modernisation of transport, job creation, the construction of schools, health centres, and the provision of drinking water. The Coffee and Cocoa Council and the Cotton Producers Organisation (IVOIRE COTON) play a key role in financing these projects.

## Conclusion

We conducted the analysis of changes in African foreign trade in terms of the main types of its structures (commodity, geographical, territorial-regional, organisational), and simultaneously at the three levels (continent, regional associations, and a separate country) on the set of indicators. Based on the analysis and classifications proposed, we formulated the following conclusions about the features and prospects of interaction for international business.

While the level of African integration into the world economy cannot be considered sufficient (the share in world trade is less than 3 %, exports and imports are undiversified), positive changes can be observed in some segments. For example, in 2000 there were 12 countries in Africa with an average Human Development Index (HDI), while in 2016 there were already 24 such countries (the number of countries with low level of HDI decreased from 34 to 29<sup>11</sup>).

On the one hand, Africa needs to attract foreign investment and will focus on achieving this goal. On the other hand, there is a real competition: instead of the EU and the United States, now China is the main trade partner of African countries, as its share in trade with Africa is approximately 35 % (the share of the Russian Federation is 2 %).

Some countries on the continent have taken advantage of regionalisation (there are 14 integration associations in modern Africa). Thus, there have been positive results such as the growth of intra-regional trade, the creation of a customs union, and export diversification. This fact allows considering integration associations COMESA, CEDEAO, CEN-SAD, and SAD (indicated in descending order of achieved results) as points of growth. Therefore, the member-countries should be regarded as priority for cooperation. For example, Angola is a member of two successful groups (COMESA and SAD). The

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<sup>11</sup> Human Development Reports. Retrieved from: <http://hdr.undp.org/fr/data> (Date of access: 23.09.2019).

Republic of South Africa may be of interest for business as a member of SAD and part of South Africa, which is a subregion with rapid economic changes.

Based on the classification of the districts in Côte d'Ivoire, we suggest considering Abidjan district ("core-region") a prospective partner for international cooperation, as it is a leading exporter of cocoa, coffee, and gold, and the main producer of cement and chemical products. The creation of a "cocoa-coffee cluster" in the south-west of the country (Sassandra-Marahoué district) and a "cashew cluster" in the north-west will allow improving the territorial-regional structure of the country.

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