

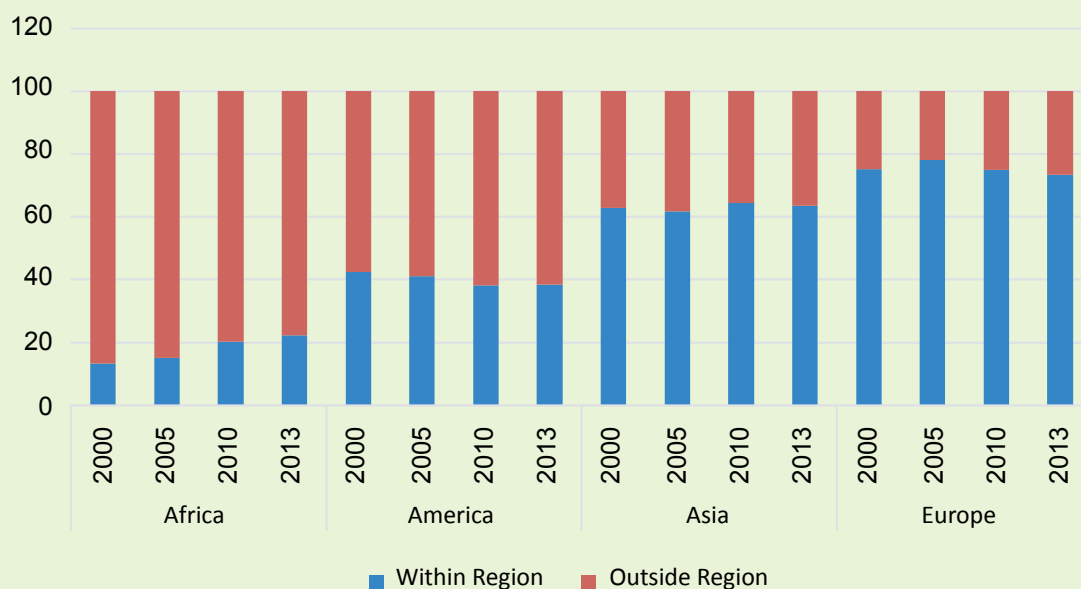
3. REGIONAL TRADE PATTERNS ACROSS AFRICA

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Deepening intra-regional trade among African countries, and especially Africa's main regional economic communities (RECs), is essential in building Africa's resilience to international market shocks. Aware of this reality, African leaders have positioned economic integration as a central issue in almost all African roundtables or political discussions. Important efforts have been made through several regional trade agreements, such as the creation of free trade areas, customs unions, and economic and monetary unions. More recently, the 2012 African Union Summit primarily focused on boosting intra-African trade. Even if those agreements have generally had a positive impact on intra-African trade, trade within the RECs is still very low compared with intra-regional trade elsewhere in the world (see Chapter 2, this

volume). For agricultural commodities, trade among African countries as a share of Africa's total trade ranged from 13 to 20 percent during 2000-2013, whereas it generally hovered around 40 percent among North, Central and South American countries, 63 percent among Asian countries, and 75 percent among European countries during the same timeframe (Figure 3.1). Many factors could explain such low levels of intra-regional trade in Africa. Obstacles to increasing performance of intra-regional trade in Africa include weak productive capacity, lack of trade-related infrastructure and services, the limited role of the private sector in regional integration initiatives, low levels of diversification of traded products, the small size of consumer markets, and the quality of institutions (see Chapter 2, this volume).

Figure 3.1. The value of intra-regional agricultural trade as a share of total agricultural trade of world regions, 2000, 2005, 2010, and 2013



Source: Authors' calculations based on CEPII (2015).

Note: Africa, America, Asia, and Europe refer to all countries for which data were available for the selected region. America includes countries of North, Central and South America

This chapter presents an in-depth analysis of the state of intra-African trade in agricultural commodities for the 1998–2013 period. The analysis (a) assesses Africa’s current intra-regional trade performance; (b) explores the level and direction of regional trade, the in-

tra-regional trading role of each REC, and each country’s contribution to intra-regional trade; (c) examines the main agricultural products traded; and (d) presents the trends in the unit values of imports and exports.

Africa’s Overall Trade Performance

During 1998–2013, the export of all goods by African countries to the rest of the world grew rapidly, by an average of 14.6 percent per year (Table 3.1)⁵. Imports of these products from the rest of the world also grew significantly during this period, but to a lesser degree (12.0 percent per year on average). The trends were similar among individual RECs. The countries of the Economic Community of Central African States (ECCAS) recorded the largest average increase of overall exports (21.5 percent) and imports (16.6 percent). Regarding the trade balance, only the countries of the Common Market for Eastern and Southern Africa (COMESA) recorded a negative average trade

balance with the rest of the world during 1998–2013; their average normalized trade balance was –10.6 percent.

Agricultural trade among the RECs showed positive average yearly growth during 1998–2013 (Table 3.1). However, for all African countries and each REC, average growth in imports was greater than average growth in exports. Consequently, the normalized trade balance for agricultural products was negative in several cases (Africa, ECCAS, and COMESA). African agricultural exports to the rest of the world represent about 10 percent of their total exports to these destinations.

Table 3.1. Growth in trade between regional economic communities and the rest of the world, 1998–2013

All products (%)				Agricultural products (%)			
Regional economic community	Export Growth	Import Growth	Normalized trade balance	Export Growth	Import Growth	Normalized trade balance	Average agricultural share
ECOWAS	16.5	12.8	7.2	7.2	12.9	1.1	13.1
ECCAS	21.5	16.6	36.3	4.0	16.0	–46.6	2.3
COMESA	14.1	12.3	–10.6	8.3	11.8	–15.3	14.5
SADC	15.0	13.4	8.7	6.3	12.2	19.5	10.4
Africa	14.6	12.0	4.3	7.1	11.5	–10.9	9.8

Source: Authors’ calculations based on CEPII (2015).

Note: COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community. The average agricultural share (the last column) is calculated as the average share of agricultural products in exports from each regional economic community to the rest of the world during 1998–2013.

⁵ Note that the trade data discussed in the section exclude intra-regional trade

Key Exported Commodities across Africa

Exports in Africa are concentrated around very few products (Table 3.2). For example, at the HS4 level⁶, the top-5 African export commodities to the rest of the world represent about 62.4 percent of total exports, whereas the top-20 products account for 75.4 percent. In terms of agricultural exports, the composition is less

concentrated. In fact, the top-5 agricultural products represent 34.3 percent of total agricultural exports, whereas the top-20 account for 68.6 percent of total agricultural exports. At REC level, results show that, on the whole, both agricultural and total product exports were concentrated.

Table 3.2. Concentration of exports by regional economic communities, 2010-2013

Regional economic community	All products (%)			Agricultural products (%)		
	Top 5	Top 10	Top 20	Top 5	Top 10	Top 20
ECOWAS	83.9	88.7	92.7	71.3	83.9	93.4
ECCAS	90.2	94.1	97.7	80.7	90.7	96.2
COMESA	62.2	68.1	75.3	40.0	58.2	73.0
SADC	48.6	60.9	69.2	40.7	59.8	75.9
Africa	62.4	68.7	75.4	34.3	48.8	68.6

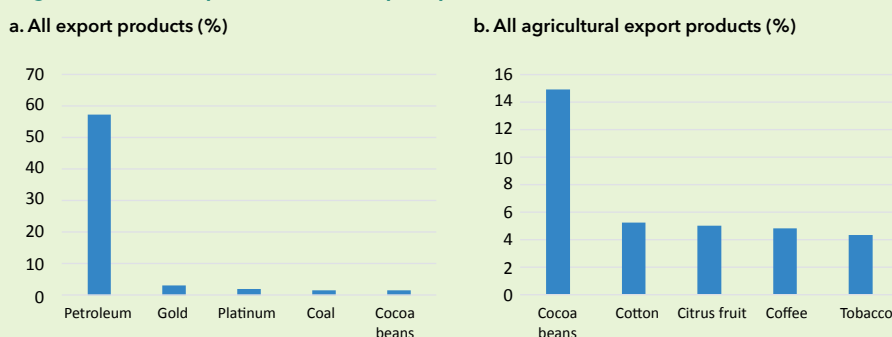
Source: Authors' calculations based on CEPII (2015).

Notes: The concentration of exports is calculated as the top export products' share of total exports at the HS4 level. COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community

The top-five export commodities from Africa during 1998-2013 are reported in Figures 3.2 through 3.6. Both Africa-wide and at the REC level, petroleum was the largest export commodity, with an average share of total exports varying from 28.2 percent for the countries of the Southern African Development Community

(SADC) to 87.5 percent for ECCAS countries (Figure 3.2). The other top commodities included gold, platinum, coal, wood, cobalt, natural rubber, aluminum, copper, cotton, coffee, and cocoa beans. The top agricultural commodities were cocoa beans, cotton, bananas and plantains, coffee, tea, sugarcane, and tobacco.

Figure 3.2. The top-five African export products, 1998-2013

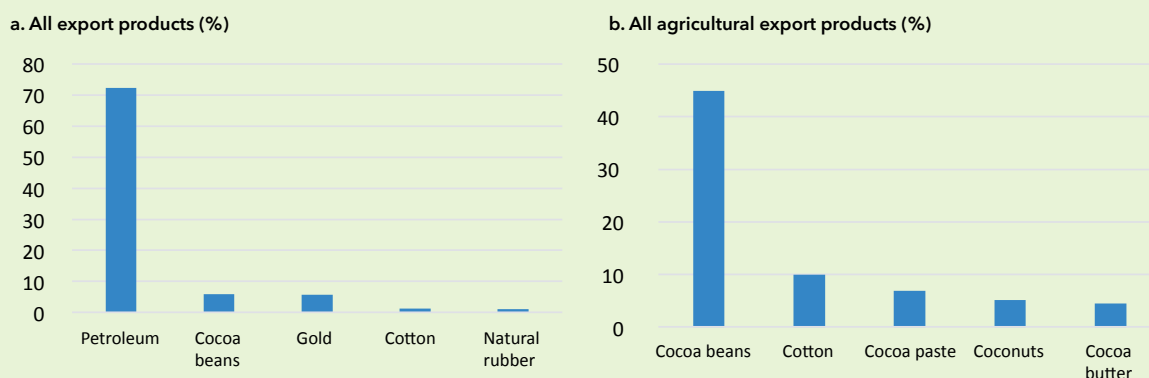


Source: Authors' calculations based on CEPII (2015).

Note: The top-five export products are calculated as their share of total exports; the top-five agricultural export products are calculated as their share of all agricultural exports. "Petroleum" includes three HS4 products: 2709 (petroleum oils and oils obtained from bituminous minerals, crude), 2710 (petroleum gases and other gaseous hydrocarbons), and 2711 (petroleum oils and oils obtained from bituminous minerals, other than crude).

⁶ The Harmonized System (HS) is an international nomenclature for the classification of products that allows participating countries to classify traded goods on a common basis for customs purposes.

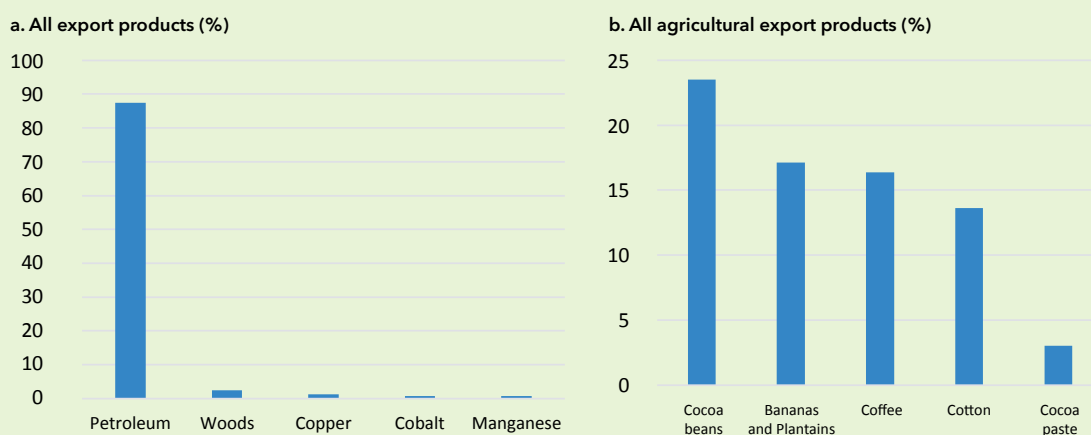
Figure 3.3. The top-five export products from the ECOWAS region, 1998-2013



Source: Authors' calculations based on CEPII (2015).

Note: The top-five export products are calculated as their share of total exports; the top-five agricultural export products are calculated as their share of all agricultural exports.

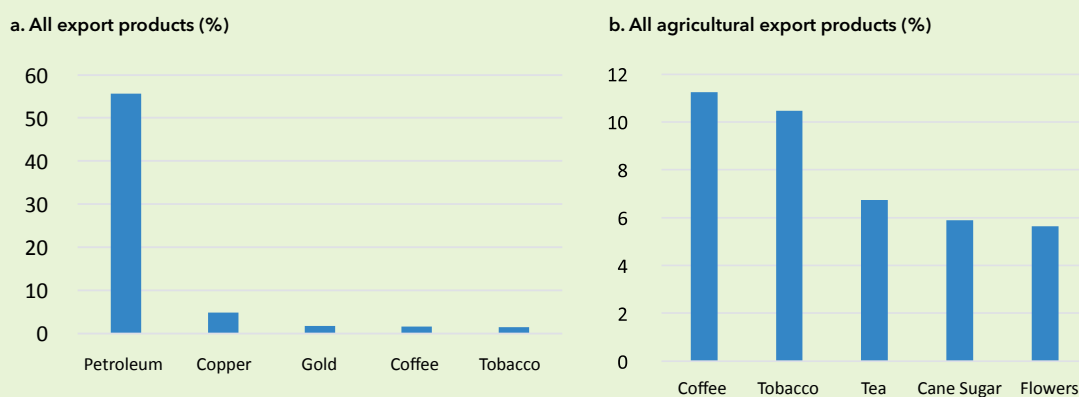
Figure 3.4. The top-five export products from the ECCAS region, 1998-2013



Source: Authors' calculations based on CEPII (2015).

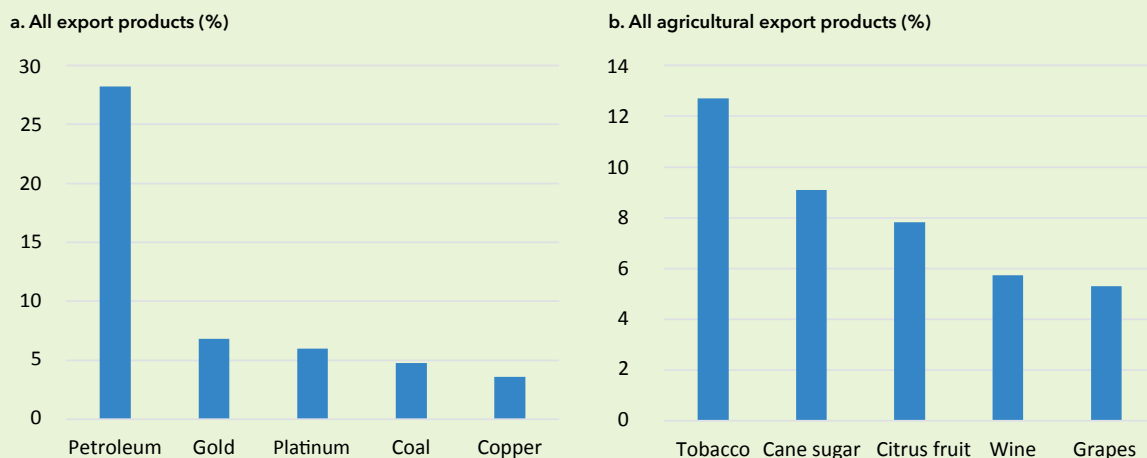
Note: The top-five export products are calculated as their share of total exports; the top-five agricultural export products are calculated as their share of all agricultural exports.

Figure 3.5. The top-five export products from the COMESA region, 1998-2013



Source: Authors' calculations based on CEPII (2015).

Note: The top-five export products are calculated as their share of total exports; the top-five agricultural export products are calculated as their share of all agricultural exports.

Figure 3.6. Top five export products from the SADC region, 1998–2013

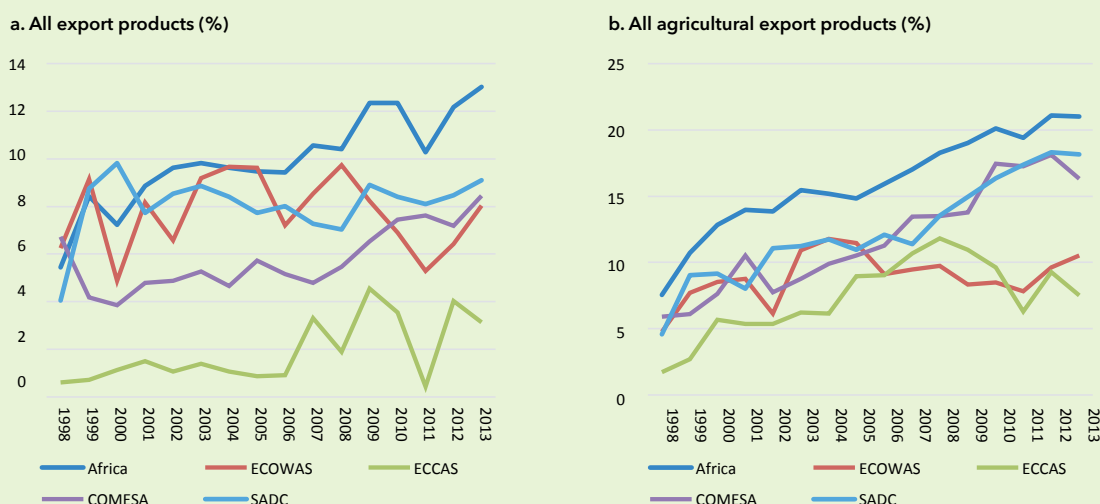
Source: Authors' calculations based on CEPII (2015).

Note: The top-five export products are calculated as their share of total exports; the top-five agricultural export products are calculated as their share of all agricultural exports.

Trends in Africa-Wide and Intra-Regional Agricultural Trade

This section focuses on trends in intra-regional agricultural trade among African countries. Before analyzing trends in the volume and value of trade, the discussion focuses on the evolution of intra-regional trade shares of both agricultural and all commodity exports for each REC (Figure 3.7).⁷ Africa-wide, the share of trade within Africa grew throughout the 1998–2013 period. Initially, the shares were around 5 percent for all products and 8 percent for agricultural products, but by the end of the period

they reached about 13 and 20 percent, respectively. Results are similar for individual RECs. The SADC region recorded the largest share of intra-regional trade during 1998–2013 (an average of 8.1 percent for all commodities and 12.4 percent for agricultural commodities). The ECCAS region had the lowest intra-regional trade share for the period, averaging 1.9 percent for all commodities and 7.3 percent for agricultural commodities.

Figure 3.7. Comparative evolution of the share of intra-regional trade across Africa, 1998–2013

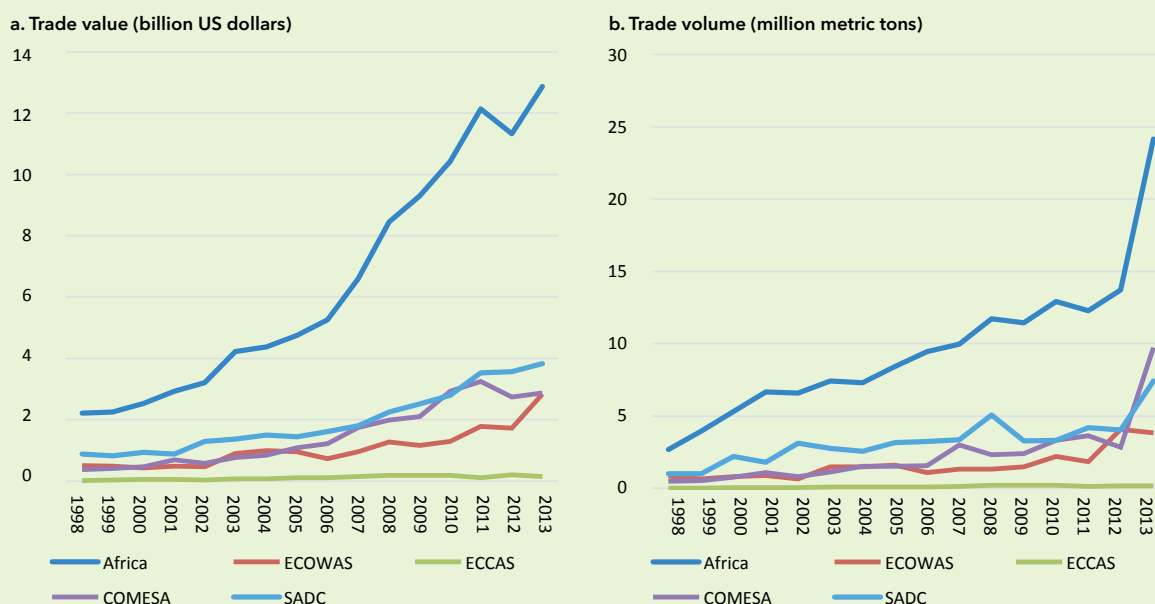
Source: Authors' calculations based on CEPII (2015).

Note: The top-five export products are calculated as their share of total exports; the top-five agricultural export products are calculated as their share of all agricultural exports.

The value of intra-African agricultural trade grew rapidly, from \$2.2 billion in 1998 to \$12.8 billion in 2013 (Figure 3.8). Overall yearly growth during this period was around 12 percent. Looking at two subperiods—before and after the international crisis—trade in agricultural products increased from 11.5 percent per year on average during 1998–2006 to 13.6 percent per

year during 2007–2013. In terms of volume, trade in agricultural products across Africa grew at an average yearly rate of 15.8 percent for the entire period, which is higher than the nominal trade growth rate, indicating that, in general, growth in agricultural trade among African countries during the selected periods was not accompanied by price increases.

Figure 3.8. Agricultural trade within each regional economic community, 1998–2013

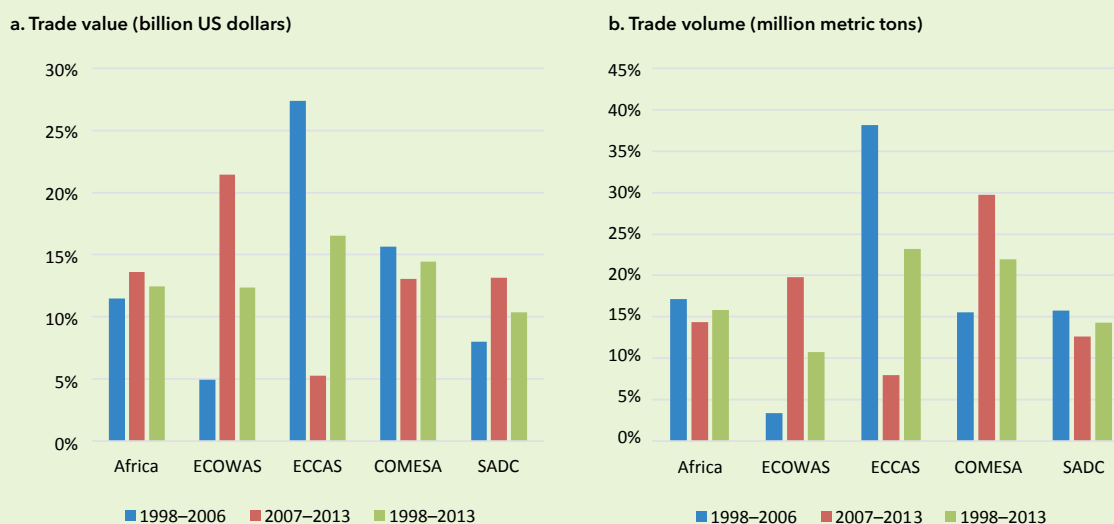


Source: Authors' calculations based on CEPII (2015).

Notes: COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community.

The value of agricultural trade within the ECOWAS region grew by an average annual rate of 12 percent and hence increased from \$494 million in 1998 to \$2.84 billion in 2013. Despite this significant growth, however, agricultural trade among ECOWAS countries was highly erratic. In fact, growth was negative in seven years within the considered period. The largest decrease occurred in 2006 (23 percent), and the largest increase in 2003 (95

percent). A large gap in growth occurred over the two subperiods. During 1998–2007, the yearly growth rate averaged 5 percent, whereas it rose to 21 percent during 2007–2013. The agricultural trade volume grew by 11 percent annually overall, compared with 12 percent for nominal trade. Increased trade among the countries of the ECOWAS region was accompanied by a slight rise in commodity prices.

Figure 3.9. Average yearly growth in trade within each regional economic community, 1998–2013

Source: Authors' calculations based on CEPII (2015).

Notes: COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community

Agricultural trade among ECCAS countries exhibited the highest overall growth in terms of value; the yearly growth rate was 17 percent, resulting in an increase from US\$14 million in 1998 to \$147 million in 2013. Trade within the ECCAS region rose significantly between the two subperiods under study. During 1998–2006, trade within this REC grew by an average of 27 percent, but fell to 5 percent during 2007–2013. Obviously, the 2007/2008 food crisis dampened agricultural trade among ECCAS members. The volume of agricultural trade among these countries followed the same pattern. Moreover, average growth in the volume of trade was higher than average growth in the value of trade. In fact, average growth in trade volume (nominal trade value) among ECCAS countries was 38 percent (27 percent) during 1998–2006, 8 percent (5 percent) during 2007–2013, and 23 percent (17 percent) for the entire period. Consequently, it can be concluded that, on average, trade in agricultural products within ECCAS was not associated with price increases.

As for the other RECs, agricultural trade within the COMESA region grew significantly, from \$379 million in 1998 to \$2.87 billion in 2013, representing a yearly growth rate of 14 percent.

Whereas the ECOWAS and ECCAS regions recorded major differences between the two subperiods, the difference in the rate of growth between the two subperiods was relatively small for the COMESA region (less than 3 percentage points). Across the entire 1998–2013 period, the volume of agricultural trade among COMESA countries rose significantly (by 22 percent overall).

The value of trade in agricultural commodities among SADC countries grew at the lowest yearly rate (10 percent), and the nominal value increased from \$871 million in 1998 to \$3.82 billion in 2013. During 1998–2006, the value of agricultural trade rose by 8 percent per year, compared with 13 percent during 2007–2013. In terms of value, agricultural trade within the SADC region rose after the international food crisis, but the trends in the volume of trade differ between the two subperiods. The average increase in trade volume was higher during 1998–2006 (16 percent) compared with 2007–2013 (13 percent). Hence, the nominal increase in trade among SADC countries was essentially the result of a price effect. Nevertheless, for the entire 1998–2013 period, the volume of intra-regional trade grew by 14 percent, which is higher than growth in terms of value (10 percent).

The Direction of Agricultural Trade within African and Intra-Regional Markets

The focus of this section is an examination of which RECs and countries had the highest intra-regional trade performance during 1998–2013. To begin, the average value of regional imports and exports during 2010–2013 is presented (Table 3.3).

Table 3.3. Value of trade in agricultural products within and across Africa by region, 2010–2013 average

Exporting region	Importing region					
	Africa	ECOWAS	ECCAS	COMESA	SADC	SSA
US dollars (billions)						
Africa	11.69	2.93	1.73	5.26	4.07	9.53
ECOWAS	2.40	1.91	0.13	0.06	0.09	2.13
ECCAS	0.30	0.01	0.16	0.15	0.08	0.27
COMESA	4.50	0.10	0.54	2.94	1.67	3.39
SADC	4.46	0.30	0.96	2.60	3.43	4.29
SSA	9.28	2.47	1.53	4.09	3.91	8.39

Source: Authors' calculations based on CEPII (2015).

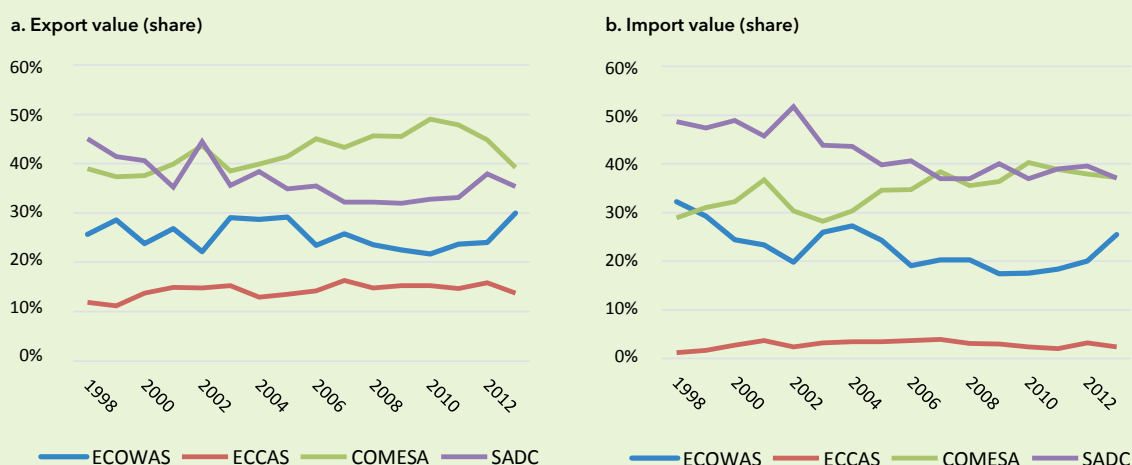
Notes: Intra-regional trade is indicated by the values shown in bold font and shading. COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; SADC = the Southern African Development Community; and SSA = Africa south of the Sahara.

One interesting statistic is the ratio of trade within each of the four RECs to the total trade of each REC within Africa as a whole. This shows how one REC's trade across Africa is concentrated in that REC; it can be seen as an indicator of participation in intra-African trade. Simply put, the lower the ratio, the more the REC under consideration contributes to intra-African integration. Results show that ECOWAS had the highest concentration of trade within the REC during 2010–2013, with a ratio of 0.79, followed by SADC with 0.77, COMESA with 0.65, and finally ECCAS with 0.52. Therefore, ECCAS member countries contribute the most to trade integration within Africa, followed by COMESA. To a larger extent, SADC and ECOWAS tend to trade within their respective blocs. For example, ECOWAS's intra-regional agricultural trade represented around 80 percent of its total trade within Africa during 2010–2013, on average.

As destinations or origins of intra-African trade, COMESA (42 percent of exports and 34 percent of imports) and SADC (37 percent of exports and 42 percent of imports) are the

dominant regions, whereas ECCAS (14 percent of exports and 3 percent of imports) ranks last (Figure 3.10).

Notably, the patterns for COMESA and SADC are opposite. In fact, COMESA gained in its share of both imports and exports over the considered period, whereas SADC countries lost ground. COMESA's export share rose from an average of 40 percent during 1998–2006 to 45 percent during 2007–2013, and the region's import share rose from an average of 32 percent during 1998–2006 to 37 percent during 2007–2013. In contrast, SADC's export share fell from an average of 39 percent during 1998–2006 to 34 percent during 2007–2013, and the region's import share fell from an average of 46 percent during 1998–2006 to 38 percent during 2007–2013.

Figure 3.10. Regional shares of agricultural trade within Africa, 1998-2013

Source: Authors' calculations based on CEPII (2015).

Notes: COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community. Shares sum to greater than 100 percent due to the membership of some countries in multiple RECs.

Many initiatives and political commitments exist within RECs to promote political cooperation and economic integration. As demonstrated, those commitments led to higher levels of intra-regional trade over time. The objective

of the following analyses is to highlight the importance of different countries' imports and exports within their REC. Individual countries' shares in intra-regional imports and exports are presented in Tables 3.4 through 3.7.

Table 3.4. Share of agricultural trade within the ECOWAS region by country, 1998-2006, 2007-2013, and 1998-2013

Country	1998-2006		2007-2013		1998-2013	
	Exports (%)	Imports (%)	Exports (%)	Imports (%)	Exports (%)	Imports (%)
Benin	6.3	5.5	5.9	3.9	6.0	4.5
Burkina Faso	14.8	7.7	4.2	10.2	7.9	9.3
Cabo Verde	0.1	0.1	0.1	0.2	0.1	0.2
Côte d'Ivoire	25.0	15.3	26.8	12.5	26.2	13.5
Gambia	0.5	1.5	1.0	1.5	0.8	1.5
Ghana	3.7	10.3	11.1	8.9	8.5	9.3
Guinea	2.6	2.2	2.0	2.8	2.2	2.6
Guinea-Bissau	0.1	1.1	1.0	0.8	0.7	0.9
Liberia	0.1	0.4	0.1	0.7	0.1	0.6
Mali	17.7	8.4	6.0	9.7	10.1	9.3
Niger	10.9	8.5	17.9	5.8	15.5	6.7
Nigeria	3.0	14.8	6.9	27.6	5.5	23.1
Senegal	8.8	12.2	12.6	9.2	11.3	10.2
Sierra Leone	0.0	0.3	0.0	0.7	0.0	0.5
Togo	6.3	11.7	4.2	5.6	4.9	7.7

Source: Authors' calculations based on CEPII (2015).

Note: ECOWAS = Economic Community of West African States.

Within ECOWAS, Côte d'Ivoire remains the largest exporter of agricultural products, with about 26 percent of intra-regional trade in agricultural commodities. Other important exporters within ECOWAS are Niger (15.5 percent), Senegal (11.3 percent), and Mali (10.1 percent). In terms of destination, Nigeria is the main importer of these commodities (23.1 percent of total intra-regional trade), followed

by Côte d'Ivoire (13.5 percent) and Senegal (10.2 percent). The export performance of some countries deteriorated over time, whereas for other countries it improved. For example, Burkina Faso's export share fell from 14.8 to 4.2 percent between 1998-2006 and 2007-2013, whereas Ghana's export share rose from 3.7 to 11.1 percent between the two subperiods.

Table 3.5. Share of agricultural trade within the ECCAS region by country, 1998-2006, 2007-2013, and 1998-2013

Country	1998-2006		2007-2013		1998-2013	
	Exports (%)	Imports (%)	Exports (%)	Imports (%)	Exports (%)	Imports (%)
Angola	0.6	1.2	0.1	3.2	0.2	2.5
Burundi	2.0	0.8	2.2	3.9	2.2	3.5
Cameroon	50.5	20.8	41.5	11.7	42.7	14.4
Central African Republic	1.6	10.9	0.4	8.6	0.8	9.2
Chad	4.1	11.6	0.1	8.6	1.3	9.7
Republic of the Congo	16.9	18.7	11.7	18.7	13.1	18.5
Democratic Republic of the Congo	0.5	5.2	4.9	21.0	3.4	15.9
Equatorial Guinea	0.1	6.5	0.0	7.1	0.0	7.0
Gabon	22.3	21.5	17.1	13.3	18.0	15.7
Rwanda	1.2	1.8	22.0	3.2	18.1	3.0
São Tomé and Príncipe	0.2	0.9	0.1	0.6	0.1	0.7

Source: Authors' calculations based on CEPII (2015).

Notes: ECCAS = the Economic Community of Central African States.

Among ECCAS member countries, Cameroon recorded the highest share of intra-regional agricultural exports during 1998-2013 (around 43 percent), followed by Rwanda (18.1 percent), Gabon (18.0 percent), and the Republic of the Congo (13.1 percent). In terms of destination, the Republic of the Congo (18.5 percent), the Democratic Republic of the Congo (15.9

percent), Gabon (15.7 percent), and Cameroon (14.4 percent) were the main importing markets for agricultural products. It is worth noting the impressive performance of Rwanda, whose export share rose from 1.2 percent during 1998-2006 to 18.1 percent during 2007-2013 on average.

Table 3.6. Share of agricultural trade within the COMESA region by country, 1998-2006, 2007-2013, and 1998-2013

Country	1998-2006		2007-2013		1998-2013	
	Exports (%)	Imports (%)	Exports (%)	Imports (%)	Exports (%)	Imports (%)
Burundi	0.4	1.4	0.4	1.6	0.4	1.6
Comoros	0.0	0.6	0.1	0.3	0.1	0.4
Democratic Republic of the Congo	0.7	6.8	0.4	9.8	0.5	9.2
Djibouti	2.0	5.8	0.8	3.2	1.2	4.0
Egypt	5.6	22.6	21.1	14.3	17.0	16.6
Eritrea	0.0	0.8	0.1	1.1	0.1	1.0
Ethiopia	7.4	4.0	7.2	1.2	7.2	2.0
Kenya	28.0	13.2	21.1	11.6	22.9	12.2
Libya	0.0	0.2	0.1	10.2	0.1	8.3
Madagascar	1.3	2.5	0.7	2.5	0.8	2.5
Malawi	5.8	4.7	5.0	3.1	5.2	3.6
Mauritius	2.7	4.1	2.4	4.8	2.5	4.7
Rwanda	2.2	3.3	3.2	4.0	3.0	3.9
Seychelles	2.2	0.6	1.3	0.3	1.6	0.4
Sudan	6.4	11.9	2.6	16.6	3.5	13.7
Uganda	13.5	4.9	15.5	4.7	15.0	4.9
Zambia	11.9	6.8	15.5	3.0	14.6	4.0
Zimbabwe	9.9	5.6	2.3	7.6	4.3	7.2

Source: Authors' calculations based on CEPII (2015).

Notes: COMESA = the Common Market for Eastern and Southern Africa

Within the COMESA region, Kenya (22.9 percent), Egypt (17.0 percent), Uganda (15.0 percent), and Zambia (14.6 percent) were the leading exporters of agricultural products during 1998-2013 on average. In terms of imports, Egypt (16.6 percent), Sudan (13.7 percent), and

Kenya (12.2 percent) were the main markets for those products. Showing exceptional performance, Egypt's export share increased four-fold, rising from 5.6 percent during 1998-2006 to 21.1 percent during 2007-2013.

Table 3.7. Share of agricultural trade within the SADC region by country, 1998-2006, 2007-2013, and 1998-2013

Country	1998-2006		2007-2013		1998-2013	
	Exports (%)	Imports (%)	Exports (%)	Imports (%)	Exports (%)	Imports (%)
Angola	0.2	15.1	0.1	11.4	0.1	12.5
Democratic Republic of the Congo	0.1	6.5	0.0	10.7	0.0	9.5
Madagascar	0.8	2.6	0.4	2.7	0.5	2.7
Malawi	4.0	8.1	5.1	5.5	4.7	6.3
Mauritius	1.5	7.7	2.3	6.5	2.0	6.9
Mozambique	4.8	13.3	5.0	13.6	4.9	13.5
SACU	59.9	18.3	57.0	12.6	57.8	14.3
Seychelles	1.2	0.9	1.3	0.6	1.2	0.7
Tanzania	2.1	3.9	3.8	2.9	3.3	3.2
Zambia	10.1	9.6	16.0	8.4	14.2	8.8
Zimbabwe	15.5	13.9	9.2	25.0	11.0	21.7

Source: Authors' calculations based on CEPII (2015).

Notes: SADC = the Southern African Development Community

Within SADC, the countries of the Southern African Customs Union (SACU)—which comprise Botswana, Lesotho, Namibia, Swaziland, and South Africa—constituted the major exporters, with around 57 percent of intra-regional trade in agricultural commodities. In terms of

imports, SACU countries were the second-largest market (14.3 percent) behind Zimbabwe (21.7 percent). Mozambique was the third-largest market for this region's agricultural products, accounting for 13.5 percent of intra-regional trade during 1998–2013.

Changes in Exports and Imports in Intra-African and Intra-Regional Agricultural Markets

The next sections present results on changes in the value and volume of imports and exports between 1998–2006 and 2007–2013. In Figures 3.11 through 3.18, the rate of growth in the average value of trade between the two subperiods is represented on the x axis. The rate of growth of the average volume of trade between the two subperiods is represented

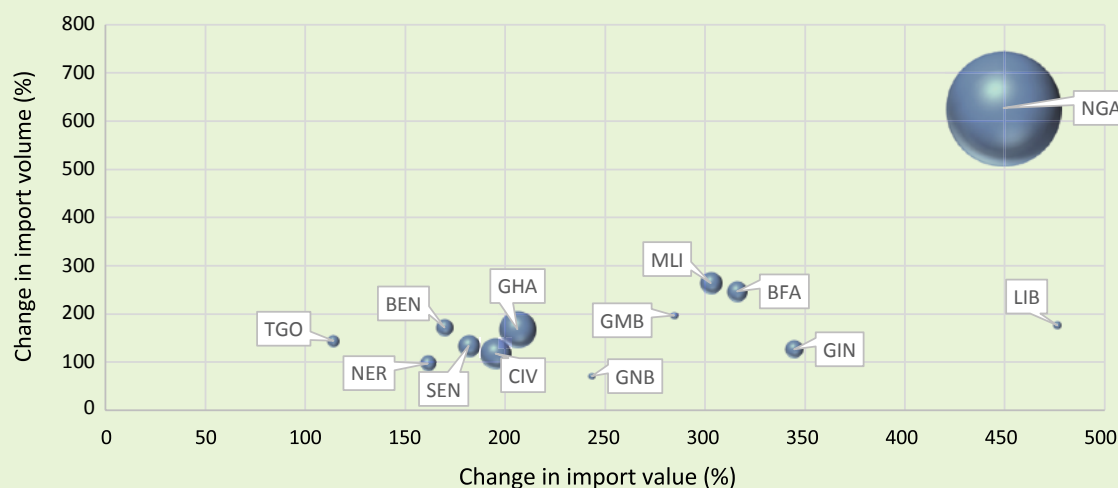
on the y axis. Each circle represents a country, and the size of the circle indicates the country's average GDP during 2007–2013. This type of graph was chosen to capture whether the observed changes in trade stem from a price effect or a volume effect. In addition, the graphs provide an indication of the size of the national economies within each REC.

Economic Community of West African States

In the aggregate, the value and volume of intra-regional trade among ECOWAS countries more than doubled between the subperiods. At the country level, the value of imports at least doubled between the two subperiods for all countries (Figure 3.11). In terms of volume, all the countries of the ECOWAS

region increased the quantity of their agricultural imports from within their REC, at least doubling imports in most cases. Between the two subperiods, the largest increases in imports occurred in Cabo Verde (not shown), Sierra Leone (not shown), Nigeria, Liberia, Burkina Faso, and Mali.

Figure 3.11. Changes in agricultural imports within the ECOWAS region, 1998–2006 to 2007–2013



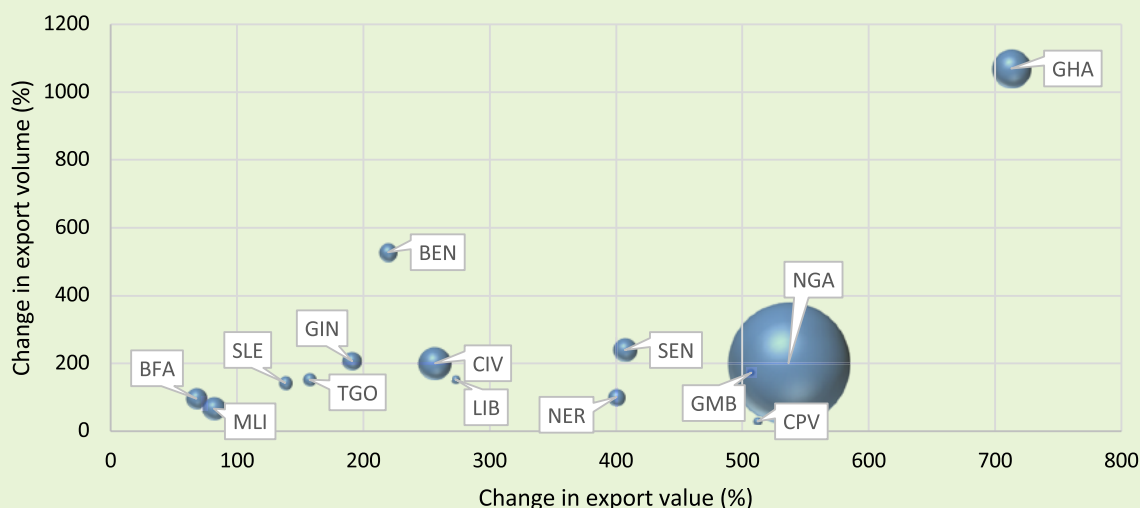
Source: Authors' calculations based on CEPII (2015).

Notes: ECOWAS = Economic Community of West African States. BEN = Benin, BFA = Burkina Faso, CIV = Côte d'Ivoire, GMB = Gambia, GHA = Ghana, GIN = Guinea, GNB = Guinea-Bissau, LIB = Liberia, MLI = Mali, NER = Niger, NGA = Nigeria, SEN = Senegal, and TGO = Togo. The x axis represents the change in the average agricultural import value between 1998–2006 and 2007–2013. The y axis shows the change in the average agricultural import volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod. Cabo Verde and Sierra Leone are omitted from the graph due to very high values.

On the export side, other than Burkina Faso, Mali, and Cabo Verde, the other countries at least doubled their value and volume of average agricultural exports within the ECOWAS region (Figure 3.12). Guinea-Bissau (not shown) experienced sharp increases of over 1,000 percent in the value and volume of its exports, due to low levels during the first period.

Ghana experienced the next-largest growth in exports, with an increase of over 700 percent in terms of value and over 1,000 percent in terms of volume. Nigeria, Cabo Verde, and Gambia also showed export value growth of over 500 percent, and Benin registered similar growth in terms of export volume.

Figure 3.12. Changes in agricultural exports within the ECOWAS region, 1998-2006 to 2007-2013



Source: Authors' calculations based on CEPII (2015).

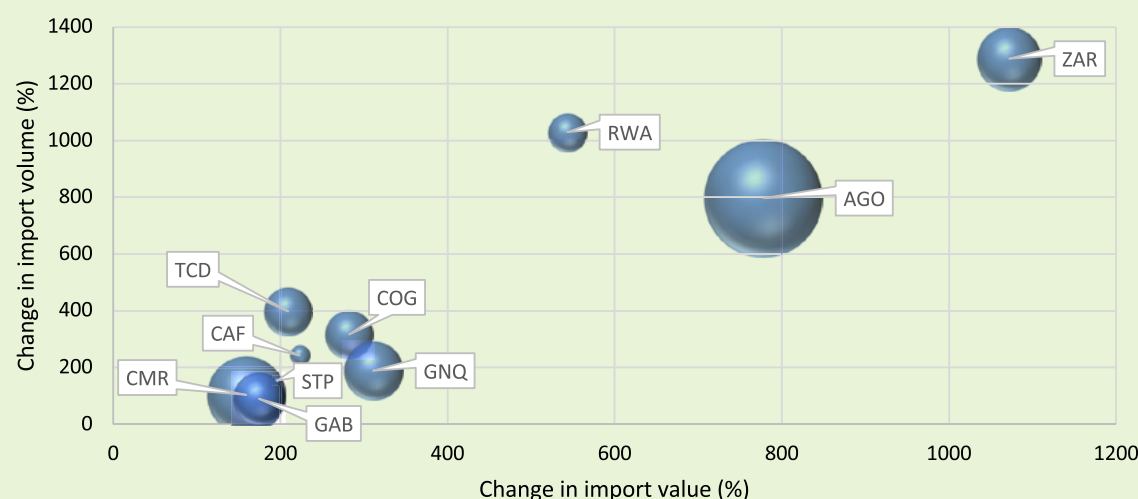
Note: ECOWAS = Economic Community of West African States. BEN = Benin, BFA = Burkina Faso, CPV = Cabo Verde, CIV = Côte d'Ivoire, GMB = Gambia, GHA = Ghana, GIN = Guinea, LIB = Liberia, MLI = Mali, NER = Niger, NGA = Nigeria, SEN = Senegal, SLE = Sierra Leone, and TGO = Togo. The x axis represents the change in the average agricultural export value between 1998-2006 and 2007-2013. The y axis shows the change in the average agricultural export volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod. Guinea-Bissau is omitted from the graph due to very high values

Economic Community of West African States

Average aggregate agricultural trade within the ECCAS region more than doubled in terms of both value and volume between the two subperiods. Without exception, all the countries in the region increased their volume and value of intra-regional agricultural imports

(Figure 3.13). Burundi (not shown) recorded the highest increase in agricultural imports from within ECCAS between the two subperiods, followed by Democratic Republic of the Congo, Rwanda and Angola.

Figure 3.13. Changes in agricultural imports within the ECCAS region, 1998-2006 to 2007-2013



Source: Authors' calculations based on CEPII (2015).

Note: ECCAS = the Economic Community of Central African States; AGO = Angola, CMR = Cameroon, CAF = Central African Republic, TCD = Chad, COG = Republic of the Congo, ZAR = Democratic Republic of the Congo, GNQ = Equatorial Guinea, GAB = Gabon, RWA = Rwanda, and STP = São Tomé and Príncipe. The x axis represents the change in the average agricultural import value between 1998-2006 and 2007-2013. The y axis shows the change in the average agricultural import volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod. Burundi is omitted from the graph due to very high values.

Burundi experienced impressive growth in terms of both the value and the volume of its intra-regional agricultural exports (Figure 3.14). In fact, Burundi's exports rose by 396 percent in value and by 809 percent in volume, on average, between 1998-2006 and 2007-2013. This performance was surpassed only by Democratic

Republic of the Congo and Rwanda (not shown), which both increased their export value and volume by over 2,000 percent. All ECCAS countries showed growth in intra-regional exports between the two periods, with the most modest growth, of less than 50 percent in terms of both value and volume, in Angola and Chad.

Figure 3.14. Changes in agricultural exports within the ECCAS region, 1998-2006 to 2007-2013



Source: Authors' calculations based on CEPII (2015).

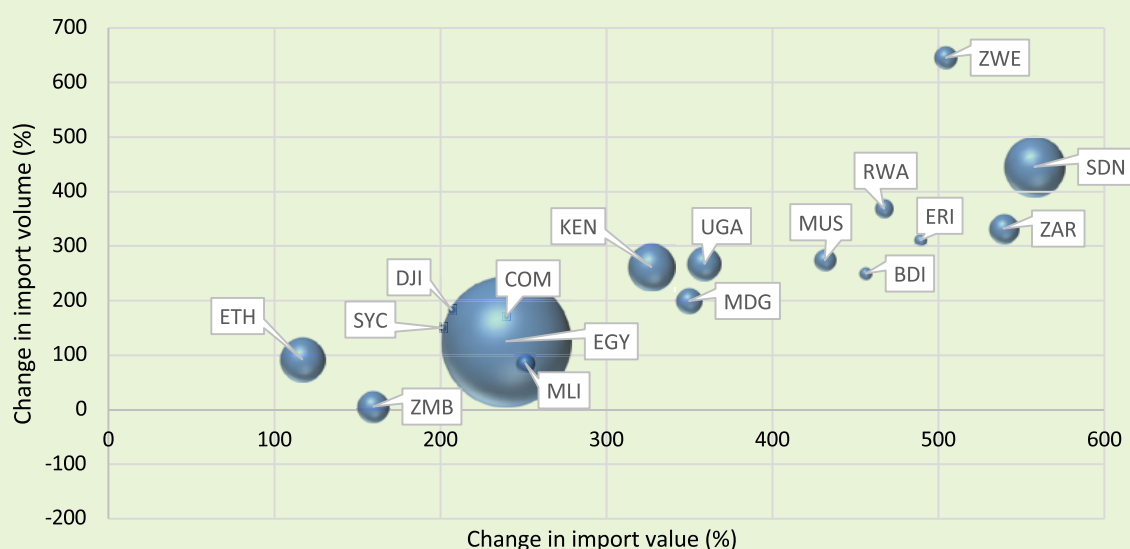
Note: ECCAS = the Economic Community of Central African States; AGO = Angola, BDI = Burundi, CMR = Cameroon, CAF = Central African Republic, TCD = Chad, COG = Republic of the Congo, GNQ = Equatorial Guinea, GAB = Gabon, and STP = São Tomé and Príncipe. The x axis represents the change in the average agricultural export value between 1998-2006 and 2007-2013. The y axis shows the change in the average agricultural export volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod. Rwanda and Democratic Republic of the Congo are omitted from the graph due to very high values.

The Common Market for Eastern and Southern Africa

In the aggregate, agricultural trade within the COMESA region intensified over time, more than tripling in terms of both value and volume. All countries in the region at least doubled the value of their agricultural imports from their neighboring countries (Figure 3.15). Most countries doubled import volumes as well, with the exception of Ethiopia, Malawi, and Zam-

bia. Libya (not shown) was an outlier with exceptional growth in import value and volume, due to very low imports during the first period; the next highest growth in intra-regional agricultural imports was seen in Sudan, which increased its import value more than sixfold, and in Zimbabwe, which increased its import volume more than sevenfold.

Figure 3.15. Changes in agricultural imports within the COMESA region, 1998-2006 to 2007-2013



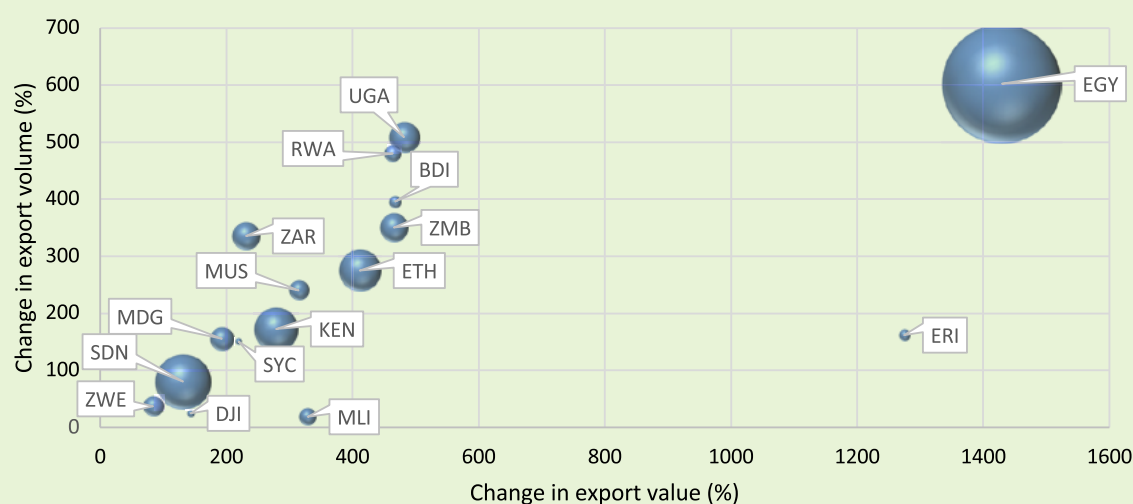
Source: Authors' calculations based on CEPII (2015).

Note: COMESA = The Common Market for Eastern and Southern Africa; BDI = Burundi, COM = Comoros, ZAR = Democratic Republic of the Congo, DJI = Djibouti, EGY = Egypt, ERI = Eritrea, ETH = Ethiopia, KEN = Kenya, MDG = Madagascar, MWI = Malawi, MUS = Mauritius, RWA = Rwanda, SYC = Seychelles, SDN = Sudan, UGA = Uganda, ZMB = Zambia, ZWE = Zimbabwe. The x axis represents the change in the average agricultural import value share between 1998-2006 and 2007-2013. The y axis shows the change in the average agricultural import volume share between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod. Libya is omitted from the graph due to very high values.

All of the COMESA region's countries saw positive growth in intra-regional exports (Figure 3.16), and most countries at least doubled their sales of agricultural commodities in terms of both volume and value, with the exception of Djibouti, Sudan, and Zimbabwe. In Djibouti and Sudan, values doubled, but quantities increased more modestly; in Zimbabwe, import value and volume increased by 84 and 37 percent, respectively. In contrast, intra-regional agricultural trade grew fifteenfold in Egypt in terms of value, such that it became the region's

largest exporter of agricultural products within COMESA, ahead of Kenya, Uganda, and Zambia. Libya (not shown) experienced extremely high percentage growth due to low levels of exports during the first period. Eritrea also showed a very large increase in its export value, while Rwanda and Uganda increased both their value and volume of exports within the region by around sixfold. Compared with the ECCAS region, the countries of the COMESA region trade more within their REC.

Figure 3.16. Changes in agricultural exports within the COMESA region, 1998–2006 to 2007–2013



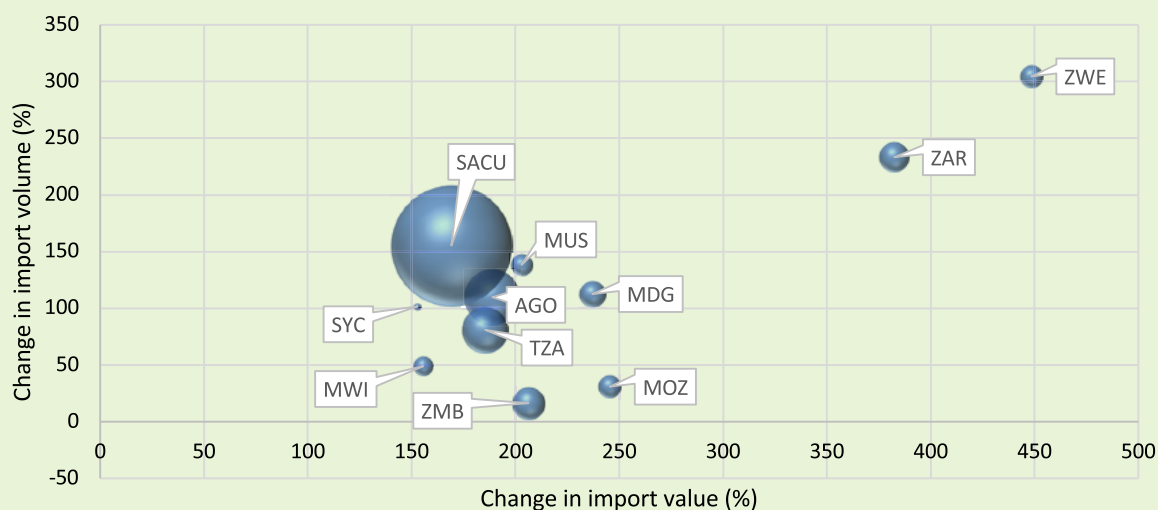
Source: Authors' calculations based on CEPII (2015).

Note: COMESA = The Common Market for Eastern and Southern Africa; BDI = Burundi, COM = Comoros, ZAR = Democratic Republic of the Congo, DJI = Djibouti, EGY = Egypt, ERI = Eritrea, ETH = Ethiopia, KEN = Kenya, MDG = Madagascar, MWI = Malawi, MUS = Mauritius, RWA = Rwanda, SYC = Seychelles, SDN = Sudan, UGA = Uganda, ZMB = Zambia, ZWE = Zimbabwe. The x axis represents the change in the average agricultural export value between 1998–2006 and 2007–2013. The y axis shows the change in the average agricultural export volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod. Libya is omitted from the graph due to very high values.

The Southern African Development Community

In the aggregate, trade within the SADC region more than doubled in terms of value and nearly doubled in terms of volume between 1998–2006 and 2007–2013 (Figures 3.17 and 3.18). It should be noted, however, that the BACI database (CEPII 2015) groups data for South Africa, Namibia, Botswana, Swaziland, and Lesotho within SACU, so data were not available for these individual countries. All SADC countries for which data were available at least doubled the value of their agricultural imports from

within the region. All countries experienced positive growth in import volume, and most countries increased import volume by at least 50 percent. The largest increases in agricultural imports occurred in the Democratic Republic of the Congo, where the value rose by 382 percent and the volume by 233 percent, and in Zimbabwe, where the value increased by 449 percent and the volume increased by 305 percent.

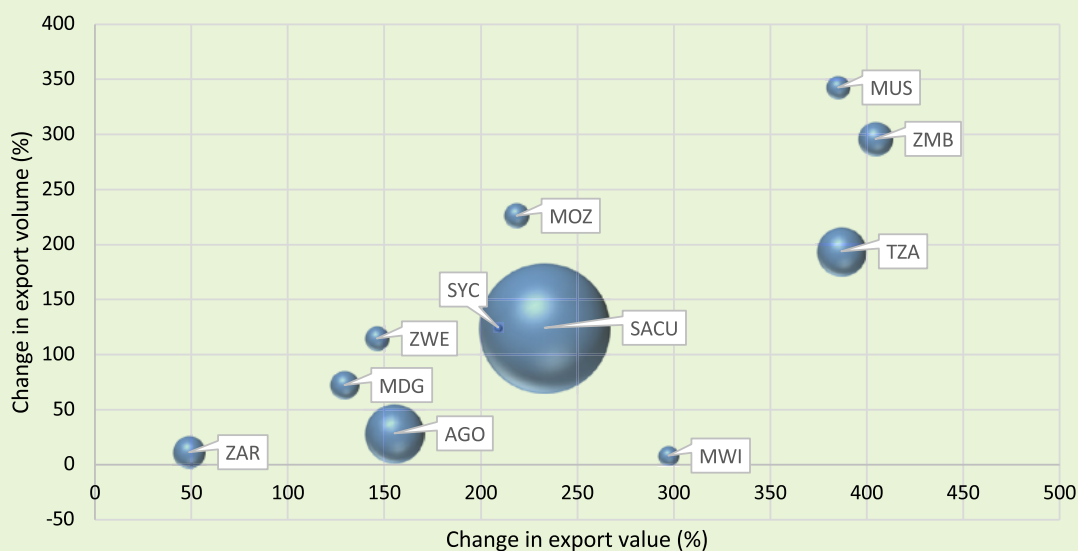
Figure 3.17. Changes in agricultural imports within the SADC region, 1998–2006 to 2007–2013

Source: Authors' calculations based on CEPII (2015).

Note: SADC = the Southern African Development Community; AGO = Angola, ZAR = Democratic Republic of the Congo, MDG = Madagascar, MLI = Malawi, MUS = Mauritius, MOZ = Mozambique, SACU = Southern African Customs Union, SYC = Seychelles, TZA = United Rep. of Tanzania, ZMB = Zambia, and ZWE = Zimbabwe. The x axis represents the change in the average agricultural import value between 1998–2006 and 2007–2013. The y axis shows the change in the average agricultural import volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod.

In terms of exports to destinations within the SADC region, Zambia and Mauritius recorded the highest increases (Figure 3.18). In addition, the value and volume of exports within the region rose for all countries between 1998–2006 and 2007–2013, with all countries except

Democratic Republic of the Congo at least doubling the value of their intra-regional agricultural exports. In terms of volume, all countries except Angola, Democratic Republic of the Congo, Madagascar, and Malawi doubled their agricultural exports between the two subperiods.

Figure 3.18. Changes in agricultural exports within the SADC region, 1998–2006 to 2007–2013

Source: Authors' calculations based on CEPII (2015).

Note: SADC = the Southern African Development Community; AGO = Angola, ZAR = Democratic Republic of the Congo, MDG = Madagascar, MWI = Malawi, MUS = Mauritius, MOZ = Mozambique, SACU = Southern African Customs Union, SYC = Seychelles, TZA = United Rep. of Tanzania, ZAM = Zambia, and ZWE = Zimbabwe. The x axis represents the change in the average agricultural export value between 1998–2006 and 2007–2013. The y axis shows the change in the average agricultural export volume between the two subperiods. The size of each circle represents the country's average GDP during the second subperiod.

Changes in the Composition of Africa-wide and Intra-Regional Agricultural Trade

The discussion of trade composition in this section focuses both on groups of products, in efforts to provide a better overview, as well as a comparison of the ranking of individual traded commodities between the two subperiods under consideration, 1998–2006 and 2007–2013 (Table 3.6). In the aggregate, ce-

reals maintained a relatively stable share of trade among African countries over time, at around 7 percent. Shares of dairy products and other livestock products, fruits and processed food all increased between the two periods. In contrast, trade in coffee and oilseeds fell slightly over time.

Table 3.8. Changes in the composition of trade in agricultural commodities within Africa by group, 1998–2006 to 2007–2013

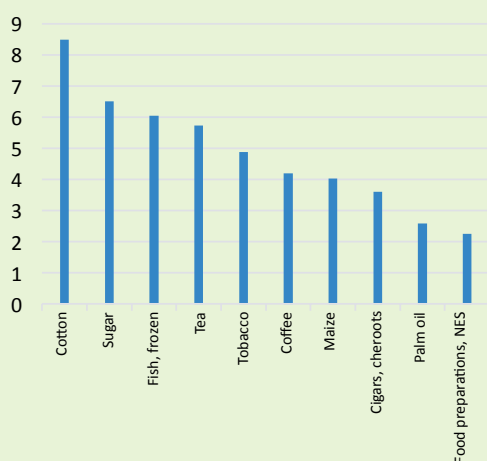
Commodity group	Africa		ECOWAS		ECCAS		COMESA		SADC	
	1998–2006 (%)	2007–2013 (%)	1998–2006 (%)	2007–2013 (%)	1998–2006 (%)	2007–2013 (%)	1998–2006 (%)	2007–2013 (%)	1998–2006 (%)	1998–2006 (%)
Cereals	6.9	6.6	3.9	4.8	0.6	4.2	7.0	8.7	11.8	11.8
Coffee	10.4	7.4	0.4	1.5	0.9	0.5	27.4	17.0	2.8	2.8
Dairy products	2.8	3.5	3.3	2.9	1.9	3.7	1.5	4.4	3.7	3.7
Fish products	7.5	8.2	6.4	7.4	1.0	1.3	3.1	2.1	5.5	5.5
Fruit	2.5	3.3	2.7	2.4	0.1	0.2	1.2	1.1	2.8	2.8
Live cattle	2.8	3.0	10.5	8.8	1.3	3.5	1.6	3.7	1.3	1.3
Meat	0.8	0.8	0.7	1.6	0.2	0.2	0.6	0.2	1.6	1.6
Oilseeds	2.7	2.5	2.2	1.9	0.8	0.2	4.5	2.9	2.8	2.8
Processed food	38.5	41.8	27.5	46.3	75.5	66.2	30.3	37.3	45.5	45.5
Other	25.0	22.8	42.4	22.5	17.6	19.8	22.9	22.5	22.3	22.3
Total	100	100	100	100	100	100	100	100	100	100

Source: Authors' calculations based on CEPII (2015).

Notes: COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community.

The composition of individually traded agricultural products across Africa did not change significantly between the two subperiods under consideration (Figure 3.19). Indeed, only two products present in the top-10 during 1998–2006—cotton and food preparation items not specified elsewhere—were not also present in

the 2007–2013 ranking; these products were replaced in the more recent subperiod by vegetables and wheat flour. Notably, between the two subperiods, frozen fish products rose from third to first place in the top-10 ranking. The next subsections deal with the changes in individual commodity rankings with each REC.

Figure 3.19. The top-10 traded agricultural commodities within Africa, 1998-2006 and 2007-2013**a. 1998-2006 (trade share, %)****b. 2007-2013 (trade share, %)**

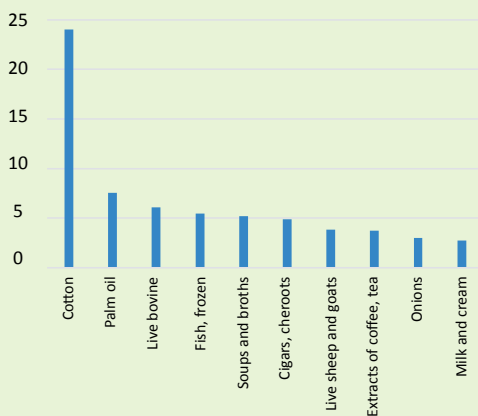
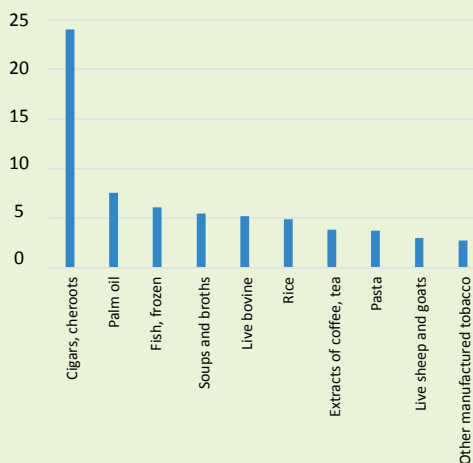
Source: Authors' calculations based on CEPII (2015).

Note: NES = not elsewhere specified.

The Economic Community of West African States

In terms of commodity groupings, ECOWAS member countries increased their trade in cereals, coffee, frozen fish products, dairy products, meat, and processed food within the region over time (Table 3.8). With an increase of almost 20 percentage points between 1998-2006 and 2007-2013, processed food accounted for almost the half the intra-regional trade in the more recent subperiod. Following the trend for Africa as a whole, cotton was the most-traded commodity within the ECOWAS region during 1998-2006 (25 percent), but

it fell off the top-10 list in 2007-2013 (Figure 3.20). In contrast, trade in cigars and cheroots quadrupled over time. Trade in palm oil and frozen fish products also increased over time, but to a lesser extent. In addition, rice and pasta were among the top-10 ranking of traded commodities within the ECOWAS region during 2007-2013, not having appeared on the earlier list. In the case of rice, this was likely a response to the rice self-sufficiency policies launched by many ECOWAS countries to cope with the 2007-2008 food price crisis.

Figure 3.20. The top-10 traded agricultural commodities in the ECOWAS region, 1998-2006 and 2007-2013**a. 1998-2006 (trade share, %)****b. 2007-2013 (trade share, %)**

Source: Authors' calculations based on CEPII (2015).

Note: ECOWAS = Economic Community of West African States.

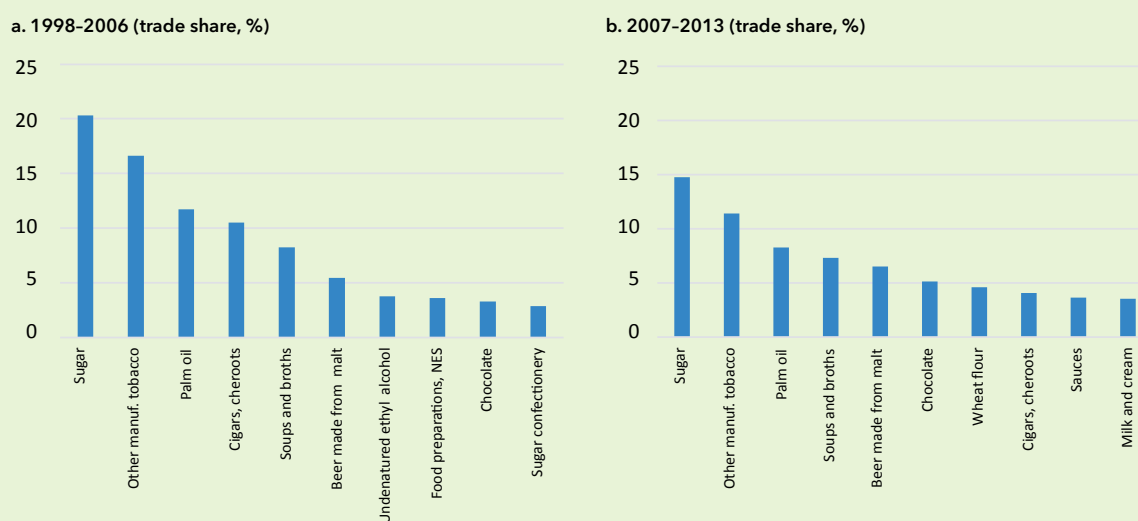
The Economic Community of Central African States

Within the ECCAS region, processed foods accounted for about two-thirds of total agricultural trade in both subperiods, despite an approximate nine-point decline in the share of this group of products between the two subperiods (Table 3.8). Cereals and fish products were the other most traded groups of commodities.

Sugar remained the most-traded agricultural product among ECCAS member countries in both subperiods under consideration,

although its share declined during 2007–2013 (Figure 3.21). Overall, the composition of trade in the ECCAS region changed very little, but a declining trend was noted for those products appearing in the top-10 ranking in both subperiods—for example, trade in cigars and cheroots fell by half between the two subperiods. In terms of newly traded products, wheat flour, sauces, and milk and cream were among the top-10 traded products during the second subperiod.

Figure 3.21. The top-10 traded agricultural commodities in the ECCAS region, 1998–2006 and 2007–2013



Source: Authors' calculations based on CEPII (2015).

Note: ECCAS = Economic Community of Central African States; NES = not elsewhere specified.

The Common Market for Eastern and Southern Africa

In both subperiods, the top-ranked commodity group traded among COMESA member countries was processed food, with a share of over one-third of all trade within the COMESA region (Table 3.8). Trade in coffee fell by 10 percentage points between the two subperiods under consideration, but remained significant throughout the entire 1998–2013 period. Following trends in ECOWAS and ECCAS, trade in cereals rose over time within COMESA.

In addition, trade in dairy products and live cattle also increased over time.

In general, the composition of the top-10 traded products within COMESA changed little between the two subperiods under consideration (Figure 3.22). Only cotton, other oil seeds, and vegetables dropped out of the top-10 ranking in 2007–2013. They were replaced by palm oil, dried leguminous vegetables, and cigars and cheroots.

Figure 3.22. The top-10 traded agricultural commodities in the COMESA region, 1998–2006 and 2007–2013



Source: Authors' calculations based on CEPII (2015).

Note: COMESA = Common Market for Eastern and Southern Africa; NES = not elsewhere specified.

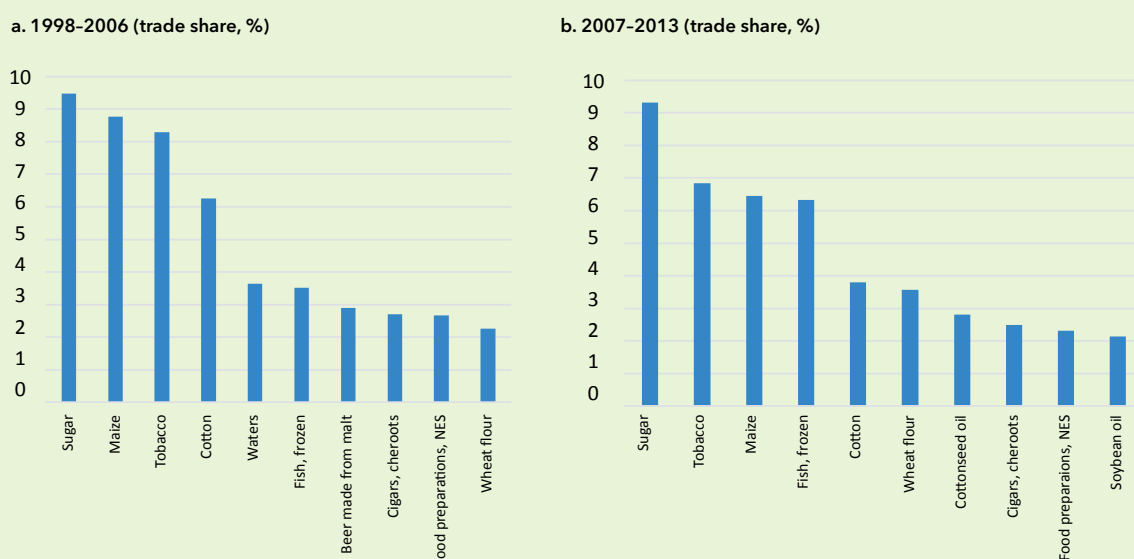
The Southern African Development Community

As in the other RECs, processed food products were the most important group traded within the SADC region over time, representing nearly half of all agricultural trade in both subperiods under consideration (Table 3.8). The shares of trade in fruit and oilseeds also remained unchanged between the two subperiods. All product groups recorded declines in their trade shares within the region between the two subperiods, with the exception of frozen fish products, which increased their share of intra-regional agricultural trade over time.

At the product level, the composition of trade

within the region remained fairly stable. Sugar ranked first among the top-10 traded commodities in both subperiods, and its share of intra-regional trade also changed little. Maize and tobacco completed the top-three listing in both subperiods, although their shares fell somewhat in the more recent subperiod. Frozen fish products rose from sixth to fourth ranking, and doubled their share of intra-regional trade over time. Oil trade increased during the second period, with both cottonseed oil and soybean oil entering the top-10 ranking during 2007–2013, while water and beer made from malt fell off the list (Figure 3.23).

Figure 3.23. The top-10 traded agricultural commodities within the SADC region, 1998-2006 and 2007-2013



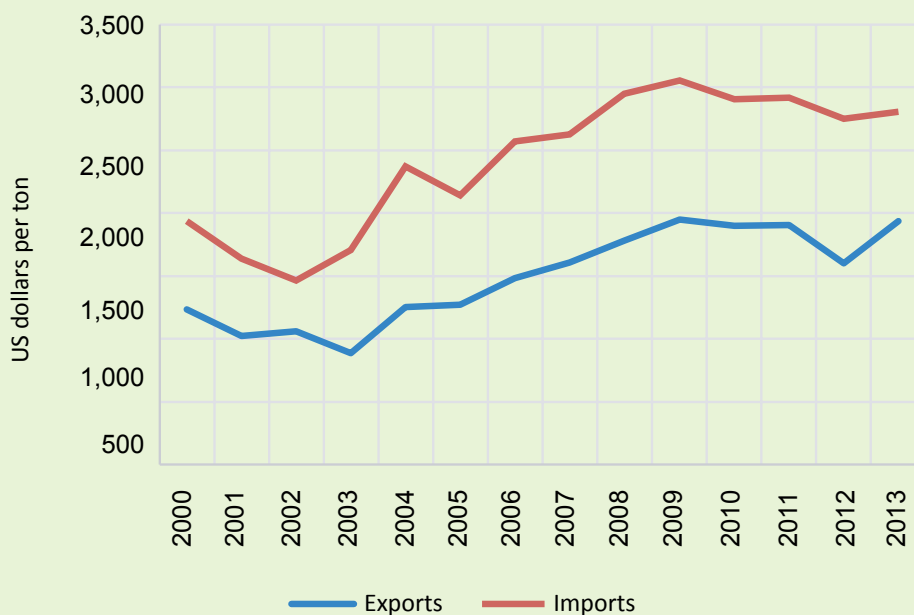
Source: Authors' calculations based on CEPII (2015).

Note: SADC = Southern African Development Community.

Changes in Unit Values of Intra-African and Intra-Regional Agricultural Trade

Trade unit values are usually used as proxies for trade prices. They are calculated as the total value of trade shipments for individual commodity classes over a particular period, divided by the corresponding quantity being traded (IMF 2009). In analyzing these trends for Africa-wide and intra-regional trade, the trade unit values dataset by Berthou and Emlinger (2011) was utilized. This database contains bilateral trade unit values to the HS6 level. The following discussions concern unit values of agricultural trade among the 45 African countries represented in the Berthou and Emlinger database.

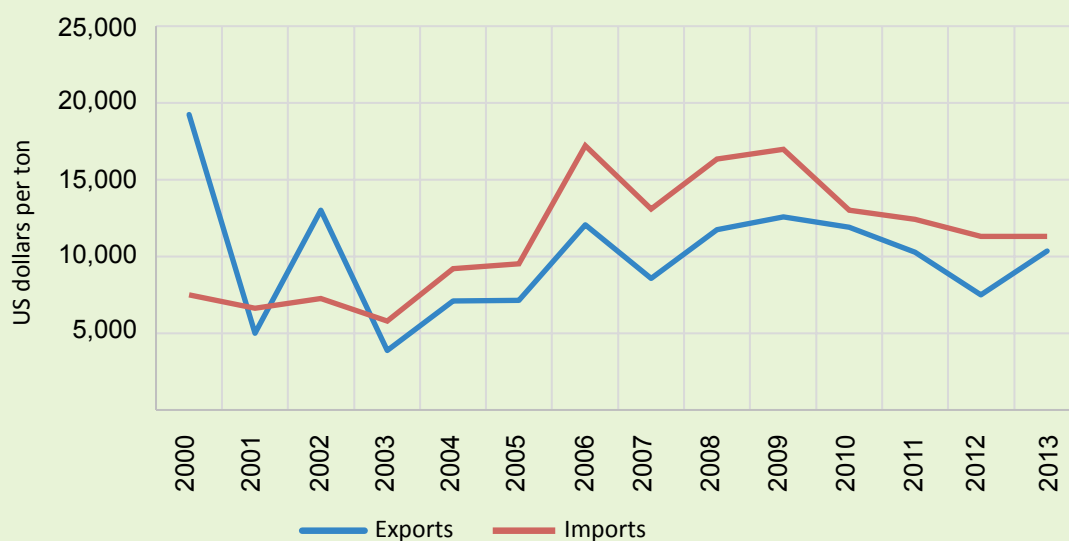
Between 2000 and 2013, the average unit values for Africa-wide agricultural trade rose at rates of 3.5 percent per year for exports, and 2.9 percent per year for imports (Figure 3.24). Unit values for exports grew at slightly higher rates during the 2007-2013 subperiod (3.9 percent) compared with the 2000-2006 subperiod (3.1 percent). In contrast, unit values for imports grew more slowly in the postcrisis period (1.3 percent) relative to the earlier time-frame (4.8 percent).

Figure 3.24. Changes in unit values for trade within Africa, 2000-2013

Source: Authors' calculations based on Berthou and Emlinger (2011) Trade Unit Value Database

Export unit values for agricultural trade within the ECOWAS region fell at 4.7 percent per year over time (Figure 3.25), but import unit values grew at 3.2 percent per year. For almost the entire period, import unit values were greater than export unit values; this suggests that existing trade agreements within the region

are facing challenges to produce the expected results. Since important progress toward economic integration has been made, especially in terms of tariff measures, the price gap between imports and exports may be attributed to the existence of non-tariff barriers in crossborder trade within the region.

Figure 3.25. Changes in unit values for trade within the ECOWAS region, 2000-2013

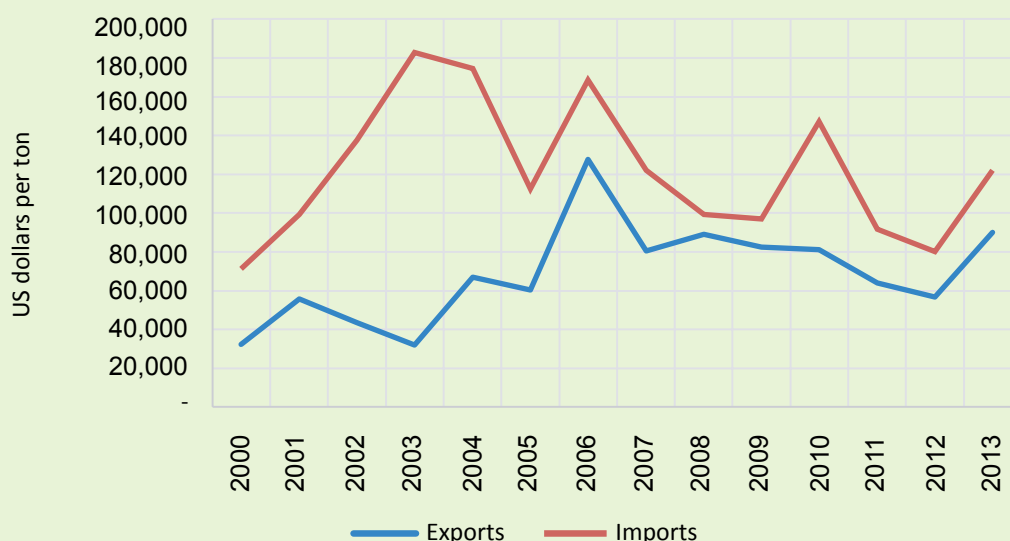
Source: Authors' calculations based on Berthou and Emlinger (2011) Trade Unit Value Database.

Note: ECOWAS = Economic Community of West African States.

Within ECCAS, data reveal a large gap in the unit values of imports and exports during 2000–2006 compared with 2007–2013 (Figure 3.26). Export unit values rose by 25.9 percent and import unit values by 15.5 percent during the 2000–2006 period, compared with

declines of 4.8 percent and 4.5 percent, respectively, during 2007–2013. This may reflect an improvement in regional integration during the more recent subperiod. Notably, unit values for trade within the ECCAS region are the highest among the four RECs.

Figure 3.26. Changes in unit values for trade within the ECCAS region, 2000–2013



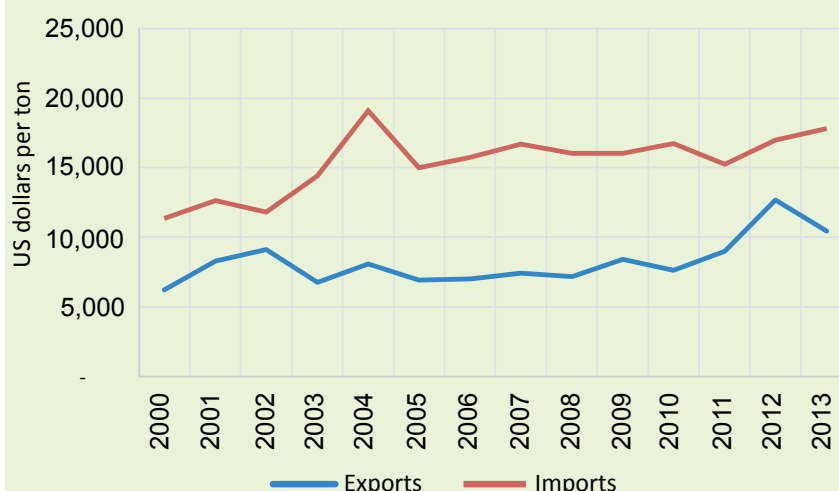
Source: Authors' calculations based on Berthou and Emlinger (2011) Trade Unit Value Database.

Note: ECCAS = Economic Community of Central African States.

Within COMESA, unit values for trade in agricultural products remained comparatively stable over time (Figure 3.27). Export unit values increased at 4.1 percent per year, whereas import unit values grew at 3.5 percent per year.

Export unit values showed faster growth during the second subperiod (from 2.0 percent during 2000–2006 to 5.9 percent during 2007–2013), but import unit value growth slowed over time (from 5.6 percent during 2000–2006 to 1.8 percent during 2007–2013).

Figure 3.27. Changes in unit values for trade within the COMESA region, 2000–2013

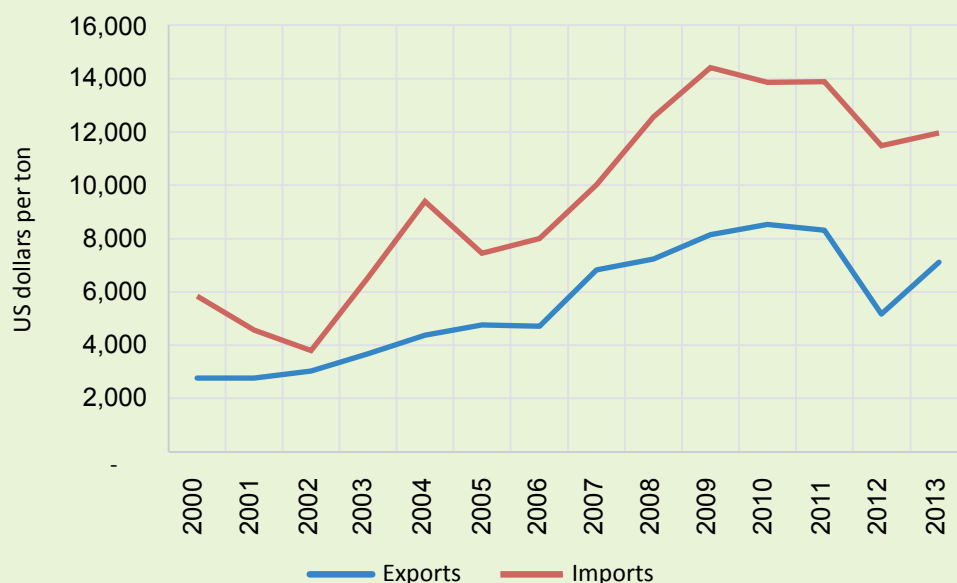


Source: Authors' calculations based on Berthou and Emlinger (2011) Trade Unit Value Database.

Note: COMESA = Common Market for Eastern and Southern Africa

Unit values for imports and exports within the SADC region grew steadily throughout the entire period considered (Figure 3.28). Export unit values grew at 7.5 percent per year and imports at 5.7 percent per year.

Figure 3.28. Changes in unit values for trade within the SADC region, 2000-2013



Source: Authors' calculations based on Berthou and Emlinger (2011) Trade Unit Value Database.

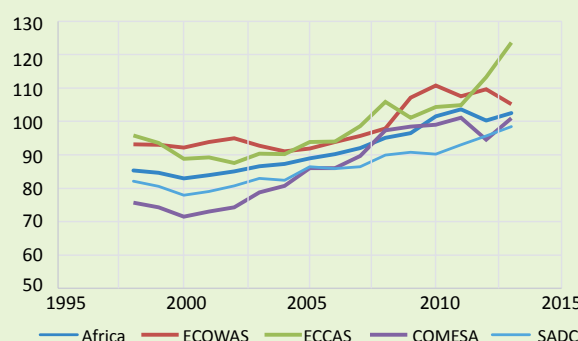
Note: SADC = Southern African Development Community.

An index of export/import values was calculated for agricultural and nonagricultural products following the methodological note by OECD (2011) and using the Fisher index (Fisher 1922). Thereafter, the terms of trade were derived for different commodity groups (Figure 3.29).

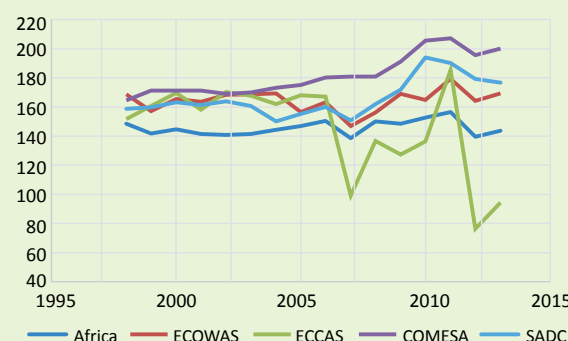
Before the global food crisis of 2007/2008, African economies exported cheaper agricultural products but imported more expensive ones. However, the terms of trade for nonagricultural products indicate that ECOWAS, COMESA, and SADC all received better prices for those products.

Figure 3.29. Evolution of the terms of trade by region and Africa-wide

a. All agricultural products



b. All nonagricultural products



Source: Authors' calculations based on CEPII (2015).

Notes: COMESA = the Common Market for Eastern and Southern Africa; ECCAS = the Economic Community of Central African States; ECOWAS = Economic Community of West African States; and SADC = the Southern African Development Community.

Conclusion

Analysis of the recent performance of agricultural trade both within Africa and among the RECs indicates that the value of agricultural trade within Africa grew rapidly over time, from \$2.2 billion in 1998 to \$12.8 billion in 2013. Average growth during this period was around 12 percent per year. Agricultural trade within the four RECs also grew significantly over this timeframe. Within the ECOWAS region, agricultural trade grew at a rate of 12 percent per year, rising from US\$494 million in 1998 to \$2.84 billion in 2013. Nevertheless, trade among ECOWAS member countries was highly erratic. ECCAS member countries recorded the highest overall average growth in intra-regional agricultural trade (17 percent per year), with the nominal value rising from \$14 million in 1998 to \$147 million in 2013. Agricultural trade among COMESA member countries also grew significantly (14 percent per year), rising from \$379 million in 1998 to \$2.87 billion in 2013. Unlike in the other RECs, the gap in growth between 1998–2006 and 2007–2013 was very low among COMESA countries (less than 3 percentage points). The volume of intra-regional agricultural trade also increased significantly among COMESA members during 1998–2013 (22 percent per year). Finally, the SADC region recorded the lowest rate of growth (10 percent per year), and the nomi-

nal value of its trade rose from \$871 million in 1998 to \$3.82 billion in 2013.

In assessing intra-African trade integration, results indicate that nearly half of all agricultural trade by ECCAS member countries occurred with countries outside their REC, making this region the highest contributor to inter-regional African trade. Results are slightly lower for the COMESA region, whereas ECOWAS and SADC trade the least with African countries outside of their regions. It may be that ECCAS trades more with other regions based on its smaller size, but the fact the COMESA—one of the largest RECs—ranks a (relative) close second to ECCAS would weaken this argument.

In terms of destinations and origins of intra-African trade, COMESA and SADC are the leading regions above ECOWAS and ECCAS; it should be noted, however, that COMESA and SADC have opposite patterns. The COMESA region increased its share of both exports and imports over the period under consideration, whereas the SADC region's shares of exports and imports declined. Moreover, in the aggregate, agricultural trade within each region increased for all the RECs. Regarding the main agricultural products traded among African countries, no notable changes occurred over time.

References

- Berthou, A., and C. Emlinger. 2011. *The Trade Unit Values Database*. CEPII Working Paper 2011-10. Paris: Centre d'Etudes Prospectives et d'Informations Internationales (CEPII).
- CEPII (Centre d'Etudes Prospectives et d'Informations Internationales). 2015. "BACI: The International Trade Database at the Product Level." Accessed April 2017. www.cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=1.
- Fisher, I. 1922. *The Making of Index Numbers: A Study of Their Varieties, Test, and Reliability*. Boston and New York: Houghton Mifflin Company.
- IMF (International Monetary Fund). 2009. *Export and Import Price Index Manual: Theory and Practice*. Washington, DC.
- OECD (Organisation for Economic Co-operation and Development). 2011. *Mexican Export and Import Unit Value Indices*. STD/TBS/WPTGS(2011)4. Paris.