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Discussion Paper

Gains and Losses in Kenya's Road Towards African Integration

July 2014

United Nations Development Programme

POVERTY REDUCTION

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Contents

List of Acronyms and Abbreviations

ADB	African Development Bank
AGOA	African Growth and Opportunity Act (US)
AU	African Union
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
EPA	Economic Partnership Agreement (European Union)
EU	European Union
FTA	Free Trade Agreement
GDP	Gross Domestic Product
ICT	Information and Communications Technologies
ILO	International Labour Organization
KSh	Kenyan Shillings
PPP	purchasing power parity
US	United States of America
SADC	Southern African Development Community
SAM	Social Accounting Matrix
WB	World Bank
WTO	World Trade Organization

Foreword

The study discusses the challenges and opportunities that regional economic integration can bring about to Kenya. It reviews Kenya's trade patterns and probes into the likely effects of a couple of African trade integration scenarios. Assisted by a country economy-wide model, the study details the impact of integration on production, exports and imports of goods and services as well as the impact on employment, inequality and poverty in rural and urban areas. It discusses two trade integration scenarios: one encompassing countries belonging to either the East Africa Community (EAC) or the Common Market for Eastern and Southern Africa (COMESA), or the regional scenario; and another scenario including all African countries. Within the limits imposed by data availability and methodological requirements, the study takes an in-depth look of the global, regional, and national dimensions of integration as well as to its economic and social, hence human development, effects.

This is a timely study. Kenya's most dynamic trade partner for the last two decades, the European Union (EU), faces significant economic obstacles and no clear way back to the growth of pre-2007 years in on sight. For different reasons and in a different way, the group of emerging economies that has been at the core of recent changes in Kenya's international landscape is also now entering into a period of diminished growth rates. Kenya is thus looking carefully at national, regional and African markets to sustain its vision of becoming a middle income country by 2030.

The study finds that the effects of integration with regional partners as well as with all African countries are positive on the whole. Along the findings of UNDP's Regional Integration and Human development: a Pathway for Africa (2010) report, the study also holds that African integration has significantly stronger effects than regional integration. But stronger effects does not mean that policies need to be the same; in fact, the two integration options are likely to affect sectors output, exports and imports differently. Policy makers can take note of such insights and design policies in anticipation of upcoming trends. The study finds that integration promotes human development. Integration is found to increase wages, reduce unemployment, reduce poverty and improve income distribution. However, not all distribution, employment and wage effects are the desired ones, underscoring the need to design and implement employment based, pro-poor and inclusive policies.

1. Introduction

The Kenyan economy has shown a strong performance since the early 2000s, growing rapidly and quickly overcoming the adverse shocks of domestic political turmoil and the global economic crisis. The economic outlook appears to be one of relatively rapid and sustained growth, as suggested by the growth rates of above 4 per cent in 2011 and 2012 (Kenya National Bureau of Statistics, 2012). The country currently has a Gross Domestic Product (GDP) over US$30 billion and a GDP per capita of almost US$800, which supports its aspiration of becoming a middle-income country by 2030. Trade and Kenya's integration efforts have been an important factor in the recent improved economic performance. Building on years during which the country has established itself as an important supplier of a number of products to European countries and more recently to the United States of America, trade has grown rapidly, and now the country entertains trade relations with a variety of countries, including emerging economies as well as neighbouring African countries. Kenya is a member of and an enthusiastic participant in the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA), and the proposed tripartite initiative that will join these two with the Southern African Development Community (SADC), and has also engaged in the Doha round, the US's African Growth and Opportunity Act (AGOA) and the EU's Economic Partnership Agreement (EPA), among others.

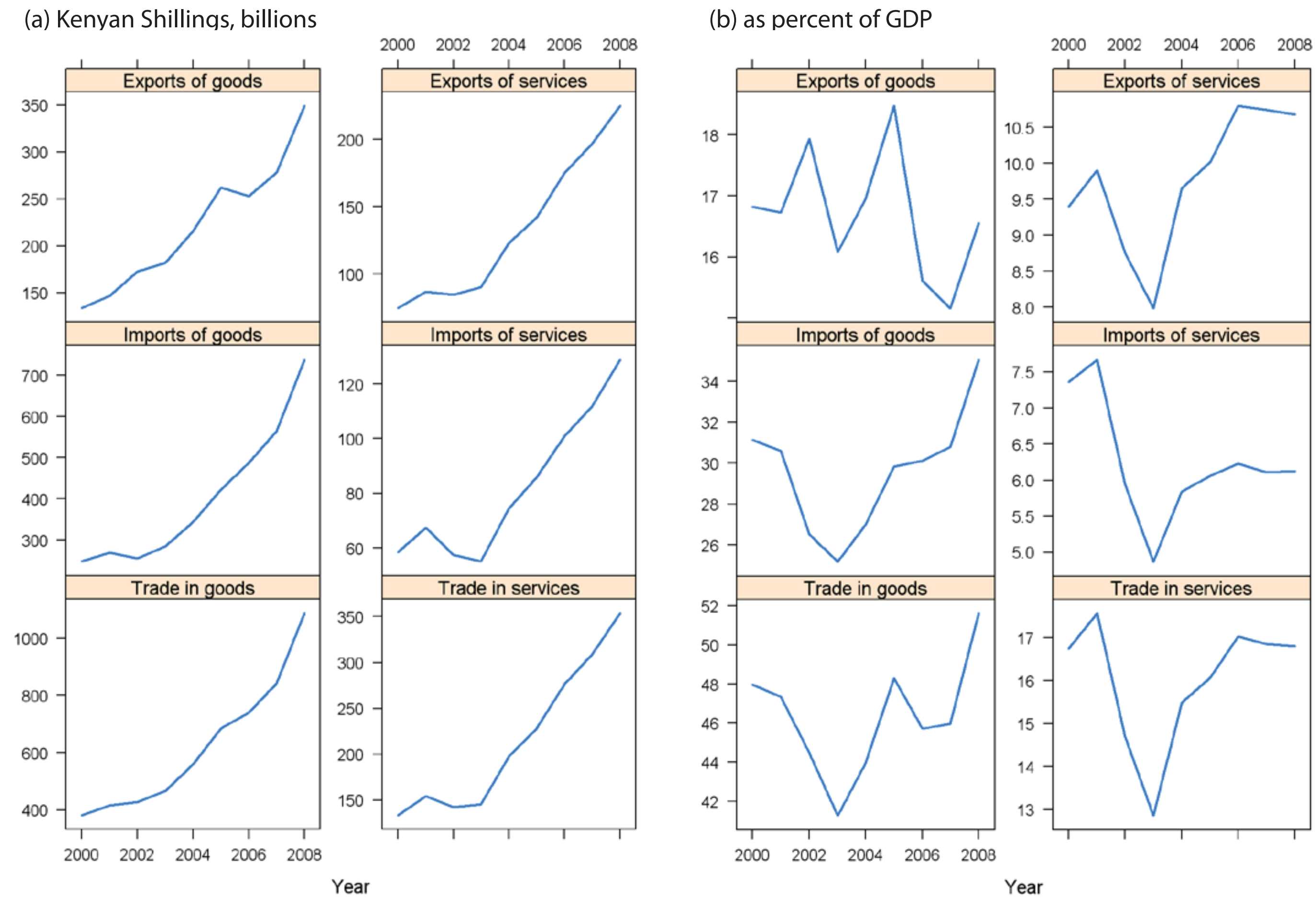
This study reviews Kenya's recent trade performance, as well as the main threads of the country's trade and economic integration efforts with African countries, with a focus on the challenges and potentials that African integration represents for Kenya. It contributes to the understanding of the potential gains and costs of integration by presenting the results of economy-wide simulations probing into trade and economic integration with Kenya's immediate geographic and economic region — i.e. countries in the EAC and COMESA agreements, and with the totality of African countries. The discussion of results includes the simulated effect on Kenya's exports and imports, GDP, consumption, wages and unemployment, as well as on the distribution of consumption across rural and urban households.

The simulation results indicate that the overall effect on the Kenyan economy is systematically positive, which is consistent with tenets of international trade and integration theory. Changes by activity include a significant number of cases of exports and imports increasing or decreasing significantly over the course of the simulated period of 2012 to 2020. As integration improves economic conditions, it also helps advance human development, mainly because integration increases wages, reduces unemployment and increases trade — including in food products, therefore contributing to food security — but also because the distribution effects tend to be positive. However, not all distribution effects are the desired ones, which underscores the need to design and implement pro-poor and inclusive policies. The effects of African integration are significantly stronger than the effects of regional integration (EAC–COMESA) and the pattern of sector impacts exhibits important differences.

2. Trade, integration and growth

Trade has been an important factor in Kenya's recent strong economic growth. Exports of goods set the pace for rapid growth early in the 2000s, but exports of services and imports of both goods and services followed swiftly a few years after (Figure 1, left panel).[1] Looking at trade as a proportion of GDP highlights a trade setback in 2003 and shows that exports of services and imports of both goods and services recovered more or less smoothly after that year, albeit in different degrees and following different patterns. The change in exports of goods shows a slightly different behaviour. Exports of goods recovered strongly after the 2004 slump but fell again significantly with the political turmoil of 2007; the fall was so significant that exports even appear to be recovering ground relative to GDP in the global crisis year of 2008.[2] At the end of the decade exports almost represented the same proportion of GDP as at the beginning of the 2000s, while imports of services fell from 7.5 percent to 6 percent of GDP; remarkably, exports of services rose from 9.5 percent to almost 12 percent of GDP.

Figure 1: Kenya exports and imports of goods and services: 2000–2008



Note: *trade refers to exports plus imports.*

Source: *Authors' construction based on KNBS data.*

1 This section draws on Mbithi (2011).

2 It must be noted that service trade trends are likely to underrepresent the growing importance of international services. Trade in services is difficult to track, as many of the activities do not take the form of international transactions but, rather, as temporary migratory flows for qualified workers or as transferences among international corporations

The Kenyan economy appears to be undergoing significant changes. Although the time-frame is too short to clearly see structural changes, there are nevertheless some visible trends. The main one is the fall in the share of production accounted for by agriculture, manufacturing and by services such as public administration, health and education. On the other hand, there is a rise in services associated with production activities (producer services), a more active participation in the international tourism industry, infrastructure improvements, and the growing importance of construction triggered by the recovery of investment and rising income per capita (Figure 2). Interestingly, the share of finance and real estate services remained relatively stable over the short period under consideration (2000–2008).

Figure 2: The structure of GDP by sector (percent)

Source: *Authors' construction based on KNBS data.*

Kenya's integration record

Development has been an objective of Kenya's government since the country gained independence in 1963.[3] The current development policy framework, "Vision 2030", clearly sets development in general and human development in particular at the core of the country's economic and social strategies. For a long time, Kenya has recognized economic integration and cooperation as an important vehicle towards achieving its development objectives. Since 1917, when Kenya formed a Customs Union with Uganda, the country has pursued regional integration with its immediate neighbours, with other African countries, and with countries outside Africa. Recently, the country has recognized that active participation in regional and international integration and cooperation schemes represents an important step towards addressing the issues affecting the development of the trade and industry sectors (Government of Kenya, 2003). Notably, the Private-Sector Development Strategy 2006–2010 recognized trade, including regional trade, as a crucial factor to attain sustainable growth and poverty reduction (Ministry of Trade and Industry, 2006).

Kenya has invested significant efforts in pursuing integration with African and non-African countries. The country's trade diplomacy has opened a wide range of options. A first definition of trade partners might divide them between those within Africa and the rest of the world. Each of these two first distinctive groups can then be subdivided. The rest of the world could be divided into developed and emerging partners — i.e. between the European Union, the United States and other developed countries, on the one hand, and China, India, Brazil, among other emerging countries, on the other hand. Africa could be thought in turn as comprising regional partners and distant partners. Kenya has been particularly active in building trade integration schemes with other countries in the region, which include, first, members of the EAC, then the members of COMESA not included in the EAC and, finally, other countries from SADC that would become closer trade partners within the tripartite initiative. The distant group of countries refers to countries

3 See, for example, Kenya's Sessional Paper number 1 on African Socialism, various development plans, several poverty reduction strategy papers and the recent development policy frameworks including the Economic Recovery Strategy Paper for Wealth and Employment Creation (Government of Kenya, 2003).

from Central, North and West Africa not included in the proposed tripartite initiative joining the EAC, COMESA and SADC regional initiatives but included in the Africa-wide trade integration efforts of the African Union.

Kenya has embarked in negotiations and institution-building in several of the integration options, but its greatest efforts have been perhaps devoted to regional African countries and with key partners among developed countries. In one case, Kenya's trade diplomacy has resulted in building solid links with the EAC, promising developments in COMESA and ambitious aspirations in the tripartite EAC–COMESA–SADC initiative. Kenya has also concluded bilateral trade agreements with various African countries including DR Congo, Liberia and Nigeria (among others) and is in the process of negotiating others including one with South Africa. Despite the African Union's strong efforts towards establishing Africa-wide integration, integration with other African countries represents a more significant challenge, given the weakness of current trade relations and the difficulties raised by the state of regional infrastructure.

Outside Africa, integration trade diplomacy has engaged with the EU's EPAs and with the US's African preferential trading regime, the African Growth and Opportunity Act (AGOA). Diplomacy has also engaged in several bilateral trade agreements including with Argentina, China and India, among others. Significant all-encompassing trade diplomatic efforts have been applied, of course, to the World Trade Organization, more recently under the Doha Round.

The EAC is Kenya's most advanced integration scheme. The EAC became a Common Market in 2010 and expects to soon have a common currency and to achieve a political federation.[4] It is an important market destination for Kenyan exports, estimated to represent about 25 percent of total exports in 2011. The second most important integration endeavour is COMESA, which includes four of the five EAC Partner States. COMESA is expected to become a full Common Market in 2015, a Monetary Union in 2018 and an Economic Community in 2025. In 2012, non-EAC COMESA member countries accounted for about 10 percent of Kenyan exports, a small yet significant value. The COMESA integration scheme has the potential of pulling together a market of close to 400 million people with an income of almost US$600 billion. A market of this size could open many opportunities for business, infrastructure and economic synergies. Yet, this enlarged market is mostly composed of countries with low mean incomes and with infrastructure and development challenges. The most ambitious yet achievable scheme is the tripartite initiative that would join the EAC, COMESA and SADC. This initiative will entail forming a single market of more than 500 million people and more than US$600 billion of value added — i.e. about one third larger than COMESA. Again, the formation of such a market will face the same infrastructure and development challenges and larger distances to be covered.

The challenges of integration

As difficult as reaching political and diplomatic agreements might be, once achieved, integration processes still need to overcome a number of challenges separating economies. These challenges include specific measures occasionally taken by government that obstruct trade in particular commodities for a variety of reasons; slow implementation of agreed liberalization measures; weak institutional settings; deficient trade infrastructure, such as customs clearance, freight and ICT, among others; and poor transport and communications infrastructure. Up to mid-2013, for instance, over 6000 standards in the region have been harmonized, and several protocols related to trade facilitation have been signed, but implementation has remained dismal, while trade facilitation continues to be a challenge to regional cross-border trade, as evidenced by the continued existence of non-tariff barriers (EAC, 2012). To tackle these challenges and build truly integrated markets, countries need to, among other things, dismantle the existing non-tariff barriers, reduce technical barriers to trade, give shape to a unified labour market, build common institutions for trade, shorten distances, and adopt a unified approach to an array of economic and social policies through macroeconomic and sectoral policy convergence. The EAC, COMESA and, to a lesser extent, the tripartite initiative have made initial progress in tackling some of these challenges, which represents an important step in the right direction.

4 The dates set are 2012 for the common currency and 2015 for political federation.

Barriers to trade

Despite the important tariff reductions that have been achieved, there are significant non-tariff barriers and technical barriers to trade arising from weak adherence to the integration goals and schedules or incorrect implementation of agreements, and from governments' endorsement of national special interests, some of which could be legitimate. The importance of these barriers to integration can hardly be exaggerated. A study has found that EAC's private sector considered non-tariff barriers a critical obstacle to trade within the community, second only to infrastructure (World Bank, 2008). There is a clear need to accelerate the elimination of many non-tariff barriers. Examples of some that could be solved with an adequate negotiating framework include the standoff on livestock trade between Kenya and Uganda triggered by Uganda's banning of beef imports from Kenya under the argument that animals had unspecified diseases. This ban was introduced in 1997 and as of 2012 was still holding. A failure to recognize EAC Rules and Certificates of Origin for some products, requirements for transit bonds and fees, and strict certification procedures (e.g. on milk exports from Kenya) are other important non-tariff barriers currently being addressed under the EAC's time-bound schedule for elimination of identified non-tariff measures.

There are a number of initiatives in the EAC aiming to facilitate trade. These include measures at the national and regional level. A notable initiative is the National Single Window System that can potentially bring significant reductions in technical barriers to trade. This is a project being undertaken by all the stakeholders involved in the cargo clearance process in Kenya, with the aim of facilitating cross-border trade. The project aims at establishing a single-window electronic document-processing system and ICT infrastructure to support the exchange of trade and logistics information between stakeholders, which is expected to facilitate faster movement of goods and processing of administrative documents. Key stakeholders in this programme include: Kenya Revenue Authority, Kenya Ports Authority, Kenya Bureau of Standards (KEBS), Kenya Plant Health Inspectorate Services (KEPHIS), Port Health Department and private-sector associations involved in clearing and forwarding, shipping or exports and imports.

On the regional level, the one-stop border point is a notable initiative aiming to reduce technical barriers to trade. Under the EAC, Kenya and Uganda are in the process of implementing the East Africa Trade and Transport Facilitation Project funded jointly by the African Development Bank, World Bank and the EAC. The transport component aims at upgrading the road connectivity between the countries, while the facilitation component aims at enhancing cross-border transport by implementing a one-stop border post principle at three border posts at Holili, Malaba and Namanga. The last two of these border posts were operational as of 2012. There are also other significant trade facilitation programmes under the EAC and under the COMESA integration process. These include a common customs document for EAC countries, COMESA yellow card, EAC transit licences and COMESA Regional Customs Transit Guarantee, COMESA Carriers Licence, and harmonized road transit charges systems.

Infrastructure and human development

The first issue business people cite as an obstacle to integration is weak infrastructure (World Bank, 2008), and detailed analysis has rightly highlighted the pre-eminence of infrastructure challenges for economic integration in Africa (UNECA, 2010). Infrastructure is one of the most important basic material and organizational structures needed for an economy to function. Delivering goods and services across borders requires adequate cross-border infrastructure, making the development of such infrastructure a critical factor for regional economic integration.[5]

Key for regional integration with African countries is road infrastructure. While roads constitute the most important means of transportation in Kenya, accounting for over 87 percent of all the cargo transported, only about 15 percent of the 54,440 km of roads

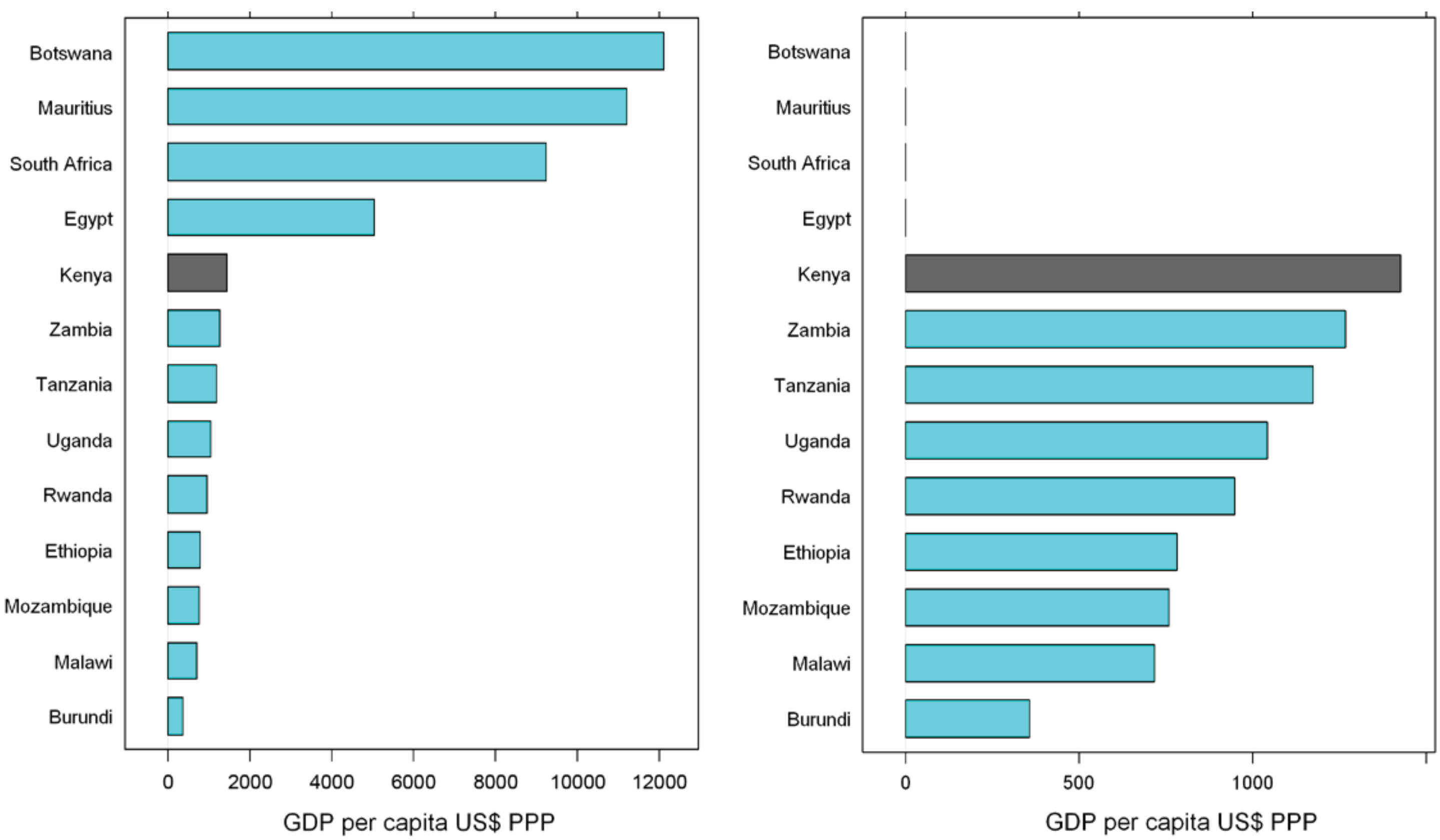
5 Hard infrastructure refers to physical structures or facilities that support society and the economy, such as transport, including ports, roads, railways; energy including electricity generation, electrical grids, gas and oil pipelines; telecommunications, including telephone and internet; and other basic utilities such as drinking water supply, hospitals and other health facilities, schools and irrigation. Soft infrastructure refers to non-tangibles supporting the development and operation of hard infrastructure, including policy, regulatory and institutional frameworks; governance mechanisms; systems and procedures; social networks; and transparency and accountability of financing and procurement systems in an economy.

are made of bitumen.[6] This results in high transportation costs and difficulties in reaching sections of the population. A successful development strategy and integration process might require more than a good road infrastructure. Rail transportation might be of great importance. However, the importance of rail and pipeline transport has been declining in recent times (current levels are around 4 percent and 9 percent respectively; Government of Kenya, 2008), so there is a need to step up efforts to upgrade the railway and pipeline transport infrastructure. Such improvements will benefit not only Kenya but also landlocked countries in the region, especially Burundi, Rwanda and Uganda.

A good telecommunications infrastructure is also important for trade. Kenya has invested in access to modern communications; however, its availability is limited. Internet usage, for example, stands at less than 10 percent. On the positive side, the breakthrough in mobile telephony has allowed the achievement of connectivity levels that would have been unthinkable before, as more than 40 percent of the population now owns a mobile phone. Furthermore, the ability to transfer money through mobile phones has also allowed the payment system to expand well beyond the network of banking branches. Integration is playing an important role here. The East African Submarine Cable System (EASSy) is already providing high-speed telecommunications among East African countries and between these and the rest of the world.

Kenyan transport infrastructure is also in need of improvement. EAC members and most COMESA countries face similar, if not less advantageous, challenges. The Logistic Performance Indicator ranked Kenyan infrastructure (transport and ITC) 122nd out of some

Figure 3: Kenya's GDP per capita in the regional context (circa 2011)



Source: *Authors' construction based on data from World Development Indicators (World Bank).*

6 The remaining 85 percent are earth/gravel roads. By type, 5.7 percent are international roads, 4.2 percent are national trunk roads, 17.8 per cent are special roads; the rest, primary, secondary and minor, represent about 72 percent (Government of Kenya, 2008).

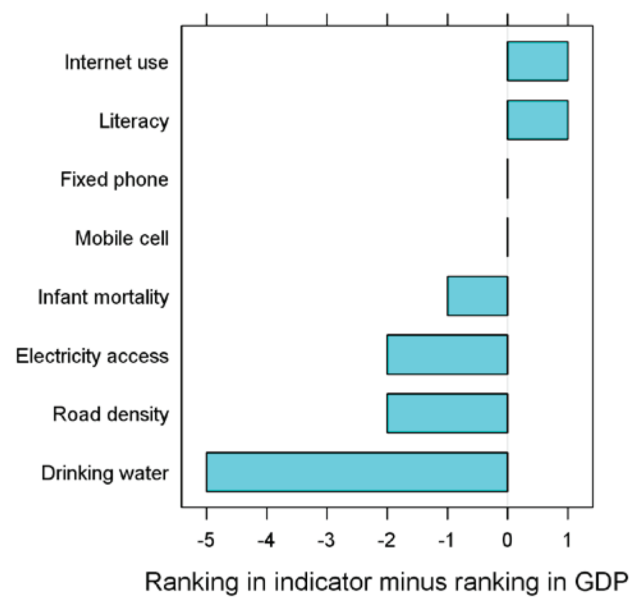
155 countries (World Bank, 2012). Concerns with transportation in Kenya include long transit times, high freight charges, delays at road checkpoints, breakages and losses of goods being shipped, and road traffic accidents (KSC, 2009). These concerns point to issues that result in high transport costs, high overall costs of doing business and low competitiveness. Transport costs in landlocked African countries (in COMESA, EAC and SADC) could be as high as 77 percent of the value of the respective country's exports (UNECA, 2010).

The proposed Northern Corridor Infrastructure Project is of particular importance for Kenya and regional integration (UNECA, 2010). The project will improve, extend and develop infrastructure and facilities (including the roads, railways, pipeline, sea ports and dry ports, inland container depots and inland water transport) serving eight countries including Burundi, Kenya, Rwanda and Uganda, DR Congo, Northern Tanzania, Sudan and Ethiopia. The transport corridor links the Great Lakes countries with the port of Mombasa. Under the project, southern and northern by-passes are already under construction.

The development experience of the last 20 years has led to a search for indicators that can reflect well-being better than GDP (see, for example, CMEPSP, 2009). The objective is not only to better measure outcomes but also to better assess broad economic prospects. To better understand the integration challenges Kenya might currently be facing, it is useful to look at the relative stance of the country regarding GDP as well as regarding its relative stance on broad-based infrastructure and human development. In terms of GDP per capita, measured in purchasing power parity (PPP) terms, Kenya stands above all of its current EAC partners and above many of its partners in regional integration schemes but clearly below some countries (Figure 3). Compared to a sample of 12 countries, which includes all EAC countries, four countries have a GDP per capita that is between three and eight times larger than Kenya's. On the other hand, Kenya's GDP per capita is larger than that of the other eight countries considered, with differences ranging from 10 percent (Zimbabwe) to four times larger (Burundi). The discrepancies are significant and suggest a variety of opportunities and limitations to integration.

Kenya needs to invest in expanding its transport and communications infrastructure, the skills of its workforce, and in human development in general. The available indicators for these development dimensions underscore the need for investment, as the above discussion on road transport already suggested. Investment in these areas can greatly be facilitated by an enlarged GDP. While covering these needs is to a certain extent part of Kenya's development process, adopting significant human and productive infrastructure development strategies can make a difference. It is useful, therefore, to get an idea of Kenya's relative position in the region regarding infrastructure and human development indicators. To illustrate Kenya's relative position we look at eight indicators relative to the same 11 countries for which we looked at GDP per capita. But rather than looking directly at indicators, we attempt to highlight Kenya's strategy and policy approach by accounting for GDP per capita when looking at these indicators. To do that, we rank countries according to GDP per capita, in PPP terms, and according to performance in each of the eight indicators, and we then compare the two rankings. The two rankings will be the same when Kenya's relative position on the specific indicator corresponds to its relative GDP; however, if Kenya ranks ahead (behind), it means that it has progressed beyond (lagged behind) what one would have predicted based on its GDP. This is an admittedly crude procedure, but it suffices to illustrate some of the challenges of integration.

Figure 4: Kenya's infrastructure and human development record in the regional context (circa 2011)



Source: *Authors' construction based on data from United Nations MDG database and World Development Indicators (World Bank).*

Thus, after accounting for income per capita, Kenya shows some remarkable progress in internet penetration and adult literacy (Figure 4). Even if Kenya is one place ahead in the ranking, progress is impressive, because the countries considered in this sample that have a higher GDP per capita than Kenya have significantly higher incomes. Kenya shows reasonable progress in the spread of telephone use, fixed and mobile, and one might also consider that Kenya's achievement in reducing infant mortality corresponds to its income status, because it is only one place behind. However, Kenya lags behind in several human development and infrastructure indicators such as access to electricity and drinking water, and road density.

Institutions

At the national level, three ministries in the Government of Kenya — the Ministry of Trade, of Foreign Affairs and of the East African Community — are involved in foreign trade policy. Although the Ministry of Trade has the prime mandate on all matters, inconsistencies might arise with the involvement of the other two ministries. Consequently, efforts are currently being made to improve the coordination, coherence and consistency of trade policy, to provide an enabling institutional framework that can greatly foster development and allow the country to benefit from the opportunities offered by enlarged markets. The ease of doing business is one indicator of how business can flourish in different countries. Kenya and most of its regional partners do not score highly in this regard.[7] In response, the Kenyan government has been simplifying business regulations, such as business licensing and the tax administration system. Harmonization of legal and regulatory frameworks, in particular those related to taxation and avoidance of double taxation, will lead to a larger and more enabling business environment. The EAC and, to a lesser extent, COMESA have taken some steps in this regard. Several EAC regional legal and regulatory frameworks, including standards, metrology testing and competition policy among others, have so far been harmonized. The challenge remains to implement these frameworks through national institutions with little coordination among them.

Key to market unification is effective free labour mobility. Kenyans have a long tradition of migration within the country's borders and have recently started to make significant inroads in cross-border migration, mainly to EAC countries. The recent regional expansion of Kenyan companies, many of them in service industries, has in some instances been facilitated by the labour mobility granted by the labour provisions of the EAC Common Market Protocol. The EAC Common Market Protocol provides for free movement of labour, enabling EAC citizens to move freely and to work and stay in another EAC Partner State. COMESA has eliminated visa requirements among its members. Labour regulations also need to be harmonized across the region. From the mid-2000s, Kenya has revised several labour laws to make them consistent with International Labour Organization conventions and recommendations.[8] Kenya has also revised its wage guidelines, which provide the basis for negotiating terms and conditions of employment as well as arbitration and settlement of trade disputes, while providing for collective bargaining agreements.[9] An important challenge is to more fully integrate labour markets. The EAC is currently looking into a common recognition of academic and professional qualifications and the issue of social security portability.

Kenya has been implementing reforms aimed at simplifying and expediting the customs clearance processes. The customs modernization process undertaken by the Kenya Revenue Authority (KRA) led to the implementation of a more integrated and automated customs clearance process, the Simba 2005 system. The working hours of the customs and port authorities have also been increased to 24 hours per day, with the aim of improving the customs clearance process. These efforts aside, delays in customs clearance, particularly at Kenya's main sea port of Mombasa, have contributed to congestion, and have continued to present an obstacle to trade. There is an urgent need to significantly reduce the current delay for containers of 7–14 days.

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7 Regulations related to businesses competitiveness in Kenya have been considered by the business community as a challenge to doing business. The overall Ease of Doing Business Index ranks Kenya as number 98 out of 183 (World Bank, 2011).

8 Among the laws revised are the Employment Act, the Labour Institutions Act, Work injury Benefits Act, Labour Relations Act, and the Occupational Safety and Health Act.

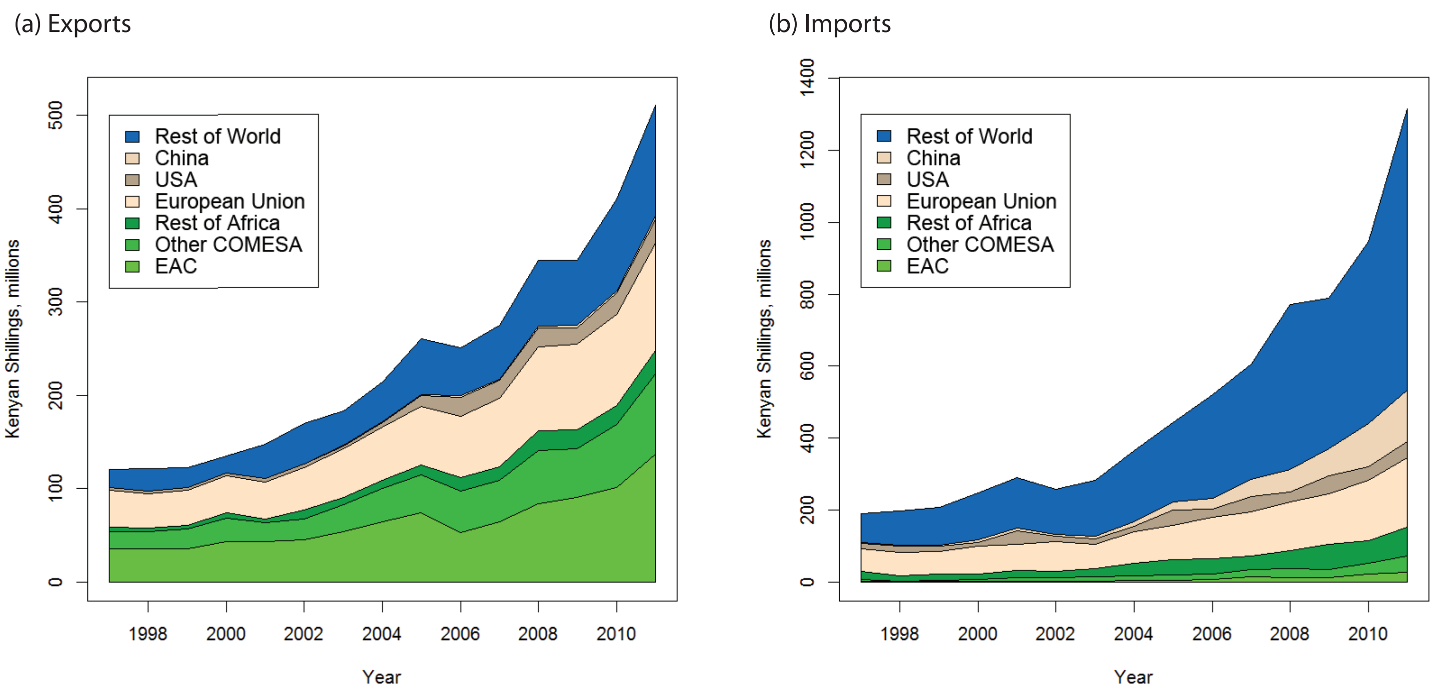
9 Over the years, the number of registered collective bargaining agreements has been on the increase. Labour is not an important productivity constraint for Kenyan businesses (World Bank, 2008).

Kenya's African integration option

The case for African integration has a long history and enjoys the endorsement of most of Africa. However, the practice of integration has lagged behind. Such slow progress is at first sight consistent with the view that the potential benefits of African integration are small. Two reasons for such a view are often given: first, trade among African economies is scant, implying that little can be gained when the initial level of trade is small; and second, potential trade is inevitably bound to be small because African economies produce very similar products. Indeed, intra-Africa trade is relatively small, and African economies are relatively similar.[10] However, this line of reasoning fails to take into account, among other things, two important caveats. First, a large part of African trade with the rest of the world originates from the rich natural resource endowments of the region which give rise to strong export flows to less resource-endowed countries abroad. Second, there is a significant and growing trade in services that greatly benefits from geographical and cultural proximity. Once these two factors are taken into account, the economic case for African integration is stronger and certainly realistic (UNDP, 2011). The argument that African economies are too similar to significantly benefit from integration fails to consider the fact that the strongest case for integration rests on dynamic, not static, gains.

Because Kenya is not endowed with large stocks of natural resources, it is a good example of a country for which African trade is very important. Between 2009 and 2011, Kenyan exports to African countries accounted for almost half (47 percent) of its total exports. Kenya is also an example of the strong limitations that African countries still face: the bulk of its imports (88 percent of all imports in 2009–2011) originate from non-African countries. It is well known that Kenyan exporters have succeeded in making significant inroads

Figure 5: Trends in Kenyan exports and imports of goods by destination (KSh millions)



Key: *EAC = East African Community; Other COMESA = COMESA countries that are not members of EAC; Rest of Africa = All other African countries not inlcuded in the prior regions; Rest of World = All other non-African countries.*

Note: *Trends correspond to a spline smoother. The graph excludes activities whose changes to at least one market are equal to or smaller than KSh20 million."*

Source: *Authors' construction based on data from KNBS.*

10 See, for example, Geda and Kibret (2002); and Maruping (2005).

in developed countries' markets, notably in tea, vegetables and cut flowers; it is also well known that the markets in African countries for these goods are small. Despite this, exports to African countries have shown a similar pattern of growth to that of exports to non-African countries (Figure 5).[11] Integration policies and non-policy-induced business opportunities in African countries have resulted in a situation in which the shares of African and non-African export markets have changed little for Kenya since the mid-1990s (Figure 3).

Trends in Kenyan imports are somewhat different, as imports from African countries have slightly lagged behind imports from the rest of the world (Figure 5). Imports from African countries have been declining in Kenyan markets, reflecting perhaps the challenges of weak integration and/or weak competitive structures that African countries face when accessing Kenyan markets (Figure 5). Underscoring the asymmetry in export and import trends, it is noted that the share of African countries' exports to Kenya have been increasing, while the share of Kenyan imports from the region has been declining.

Kenya exports a bundle of goods that is different from what it imports. The difference between import and export patterns and shares suggests that few exporters in African countries can supply the goods Kenya needs and imports, but it also suggests that if deeper integration takes place among African countries the supply of goods from these countries might increase. Similarly, Kenya's export products to African countries differ from its exports to non-African countries. The competitiveness of Kenyan producers varies by the type of goods and the comparative strength of competing producers in regional or third countries. To the extent that competitiveness summary indicators are useful, Kenyan trade with African countries relates for the most part to trade among countries with a similar basic competitive structure, whereas trade outside Africa involves countries that are one or two qualitative degrees of competitiveness away from Kenya, such as the EU, the United States, China, India and Brazil, or that supply strategic commodities such as oil.

How effective integration has been in influencing Kenyan trade patterns is difficult to know by looking at available trade data, simply because too many factors are involved in the determination of such trade patterns. To address this, we use an economy-wide model to analyse the potential gains of regional integration for Kenya.

11 See Mbithi (2011) for a discussion of Kenyan competitiveness.

3. Estimating the impact of African integration on Kenya

The review of integration initiatives and trade trends above invites further efforts to enhance our understanding of how integration can change trade patterns, influence the overall performance of the Kenyan economy and contribute to the achievement of its human development aspirations. The task is not simple, as it involves taking into account a number of factors acting simultaneously. A number of studies have looked at the effects of integration schemes and trade liberalization on Kenya. They tend to suggest that while there are negative consequences, the overall effect tends to be positive. A study on COMESA estimates that the group might enjoy economic gains from its formation but that the adoption of a common external tariff — a customs union — will deliver larger income gains than the simple elimination of tariffs among its members through a free trade area (Karingi et al., 2002). Another study has analysed the potential impact of the proposed tripartite Free Trade Agreement (FTA) joining the EAC, COMESA and SADC (Karingi and Fekadu, 2009). The study finds that the proposed FTA brings benefits to the majority of its members but that these benefits are not evenly distributed among them. Countries in the SADC grouping appear to derive most of the benefits, followed by those in the EAC and lastly by COMESA countries. The authors argue that the imbalance in the distribution of benefits originates in the lower initial protection and higher diversification of the SADC economies. The study further warns against limiting negotiation to the harmonization of trade regulatory frameworks, and emphasizes the need to address structural constraints such as weak infrastructure and limited productive capacities.

Studies of the potential impact on Kenya of the now stalled Doha Round found that the country is likely to gain in agricultural products and processed foods but lose in the manufacturing and mining sectors (Omolo, 2012; Zepeda et al., 2009). On the whole, the net effect might be an average increase in GDP, a fall in poverty and improvement in some human development indicators. Omolo (2012) looks at the effect of full liberalization and finds that, unlike the Doha liberalization, which features constrained liberalization, Kenya's manufacturing sector is likely to gain more than the agricultural sector.[12]

Contrary to the small but positive net effect on production and hence on employment found in the two Doha studies, other studies have found that trade liberalization has had at best no impact on employment and possibly even led to net job losses (see, for example, Karingi and Siriwardana, 2001). On the impact of trade liberalization on poverty, findings are mixed, depending on the sector of the economy. Odhiambo and Otieno (2006), for example, found that liberalization in the sugar and cotton industries may have increased poverty, while in horticulture and fisheries, liberalization is likely to have reduced poverty. Along the same lines, another study argues that while new export opportunities in the horticulture sector have alleviated poverty for some rural Kenyans, overall poverty is more likely to have increased due to trade liberalization (Jenkins, 2005). In a study on the effects of trade liberalization on Kenya, Were et al. (2005) found that liberalization worsened poverty. This study and a study done by Bigsten et al. (2002) found that trade liberalization has increased inequality, which they attribute to the loss of jobs in sectors where capital intensity increased after liberalization and to the restructuring of the civil service.

The difference in findings in the above studies could be attributed to differences in methodologies, which underlines the importance of carefully evaluating the underlying assumptions and methodologies but also points to the difficulties in estimating the welfare effects of trade liberalization and economic integration.

Estimating the impact of African integration

This study focuses on estimating the impact of regional (EAC and COMESA) and African (all African countries) integration on Kenya and uses an economy-wide model to assess the effects on trade, GDP, consumption and other macroeconomic indicators, employment and income distribution. The study thus covers aspects of the economic and human development dimensions of integration. The use of

12 Omolo's (2012) more detailed results indicate significant increases in maize, sugar, tea, oils, vegetables and in mining subsectors, as well important increases in milling, bakery and confectionery, beverages, textiles, footwear and wood. On the other hand, the study finds that full liberalization might lead to reductions in the wheat milling and textile subsectors.

economy-wide models is an appropriate tool to assess the effects of policy interventions, in this case integration processes, with multiple effects that call for a coherent and comprehensive framework of analysis and based on detailed statistical information on the economy.

We use an economy-wide model to assess the impact of the elimination of tariffs and a hypothetical reduction in the cost of exporting and importing commodities and services between Kenya and members countries of the EAC and COMESA, and between Kenya and all African countries. The economy-wide model is based on DIVA, a recursive dynamic model containing specific features relevant to the analysis of African economies such as the inclusion of informal labour markets and the potential benefits of economic diversification (Bchir et al., 2006). Importantly, the DIVA model has been specifically tailored to Kenyan data, including the integration of available non-tariff barriers on Kenya's import of services. Although it is customary to introduce a boost in total factor productivity when simulating tariff reductions and trade liberalization, even if agreeing that productivity might indeed increase and business opportunities might open up, we do not input any increase in productivity, as it will be difficult to know with some certainty what the size and the distribution of such an increase might be. Therefore, our results might look smaller when compared to the results of other economy-wide modelling exercises; part of the difference might lie in the treatment of expected productivity increases.

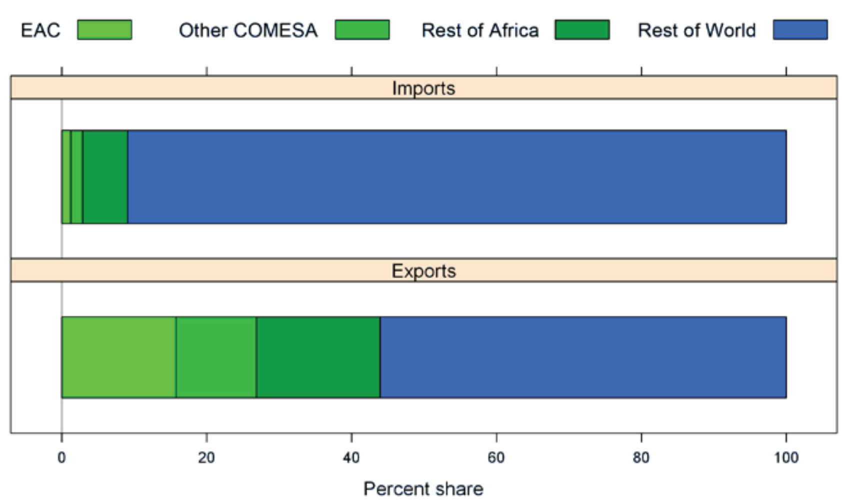
Data

The model has been constructed and calibrated for a Social Accounting Matrix (SAM) built for the year 2005, the latest year for which detailed and consistent national accounts are available. The SAM distinguishes between 36 sectors/commodities — namely, 18 agricultural subsectors, 8 industrial sectors and 10 service sectors. The SAM also distinguishes between various factors of production, including capital, agricultural land and eight labour types, themselves distinguished according to gender, skills (low versus high) and sector of employment (formal versus informal). The SAM separates households by rural and urban areas and then by national expenditure deciles. Therefore, there are 20 different representative households contained in this version of the SAM. The remaining accounts in the SAM refer to transaction costs (on imports, exports and on domestic uses), taxes (sales, direct and import taxes) and domestic (enterprises and government) and foreign (rest of world) institutions. The foreign institutions entry to the SAM is in turn disaggregated into four partners: members of the EAC, non-EAC members of COMESA, other African countries, and the rest of the world.

To implement the integration scenarios as starting in 2012 we modelled the Kenyan economy as if nothing had changed between that year and 2012 except for the assumed growth rate, the adopted demographic increases and the dispositions of signed trade agreements. According to the model results, the Kenyan economy would look as follows in 2012.

Kenya's trade would be dominated by exports to non-African countries. Kenyan exports to EAC and OCOMESA countries in 2012 would account for 16 and 11 percent, respectively, of Kenya's total exports; the rest of Africa would account for 17 percent, and the rest of the world for 56 per cent (Figure 6). The regional structure of imports differs markedly from that of exports. The EAC and OCOMESA would have only represented 1.3

Figure 6: Simulated regional composition of Kenyan trade in 2012 (percent shares)



Key: *EAC = East African Community; Other COMESA = COMESA countries that are not members of EAC; Rest of Africa = All other African countries not inlcuded in the prior regions; Rest of World = All other non-African countries.*

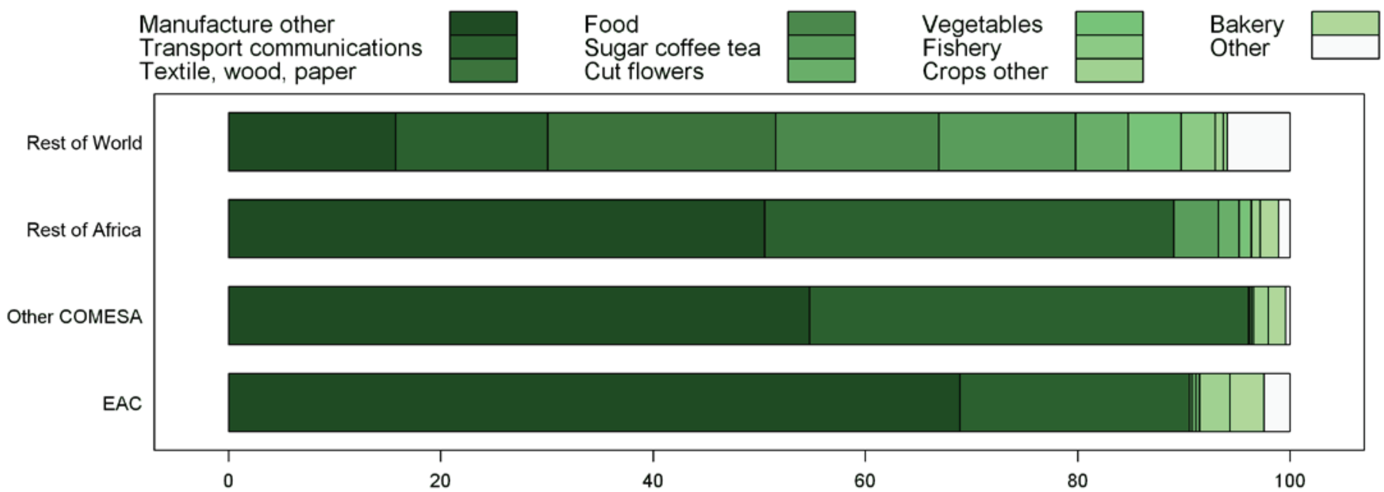
Source: *Authors' construction based on model simulation results.*

and 1.5 percent, respectively, and the rest of Africa for another 6.2 percent, while non-African countries would have accounted for 90 percent of imports. These figures are close to the actual data for 2011 discussed in the previous section.

Regional trade patterns

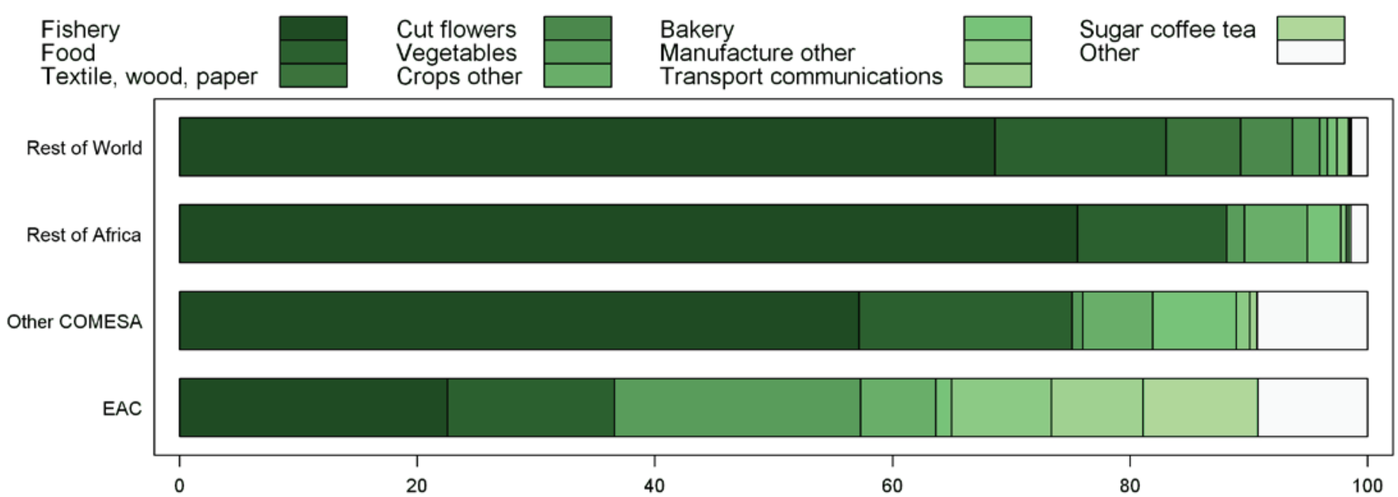
The market destination of Kenyan exports depends on the type of goods, the type of agreements undertaken by trade partners and their relative competitiveness. Exports to non-African countries are far more diversified than exports to any of the African regional groupings considered here. Seven commodity groupings account for about 80 percent of exports to non-African markets, including: textiles, wood and paper; other manufactured food; other manufacture; transport and communications; and sugar cane, cotton and tea (Figure 7). Other relatively important export commodity groups include cut flowers, vegetables, and fishery. In contrast, only

Figure 7: Kenya's main exports by region, 2012 (percent shares)



Source: *Authors' construction based on model simulation results.*

Figure 8: Kenya's main imports from the region, 2012 (percent shares)



Source: *Authors' construction based on model simulation results.*

two commodity groups — other manufacture, and transport and communication — account for about 90 percent of exports to any of the three regional African destinations.

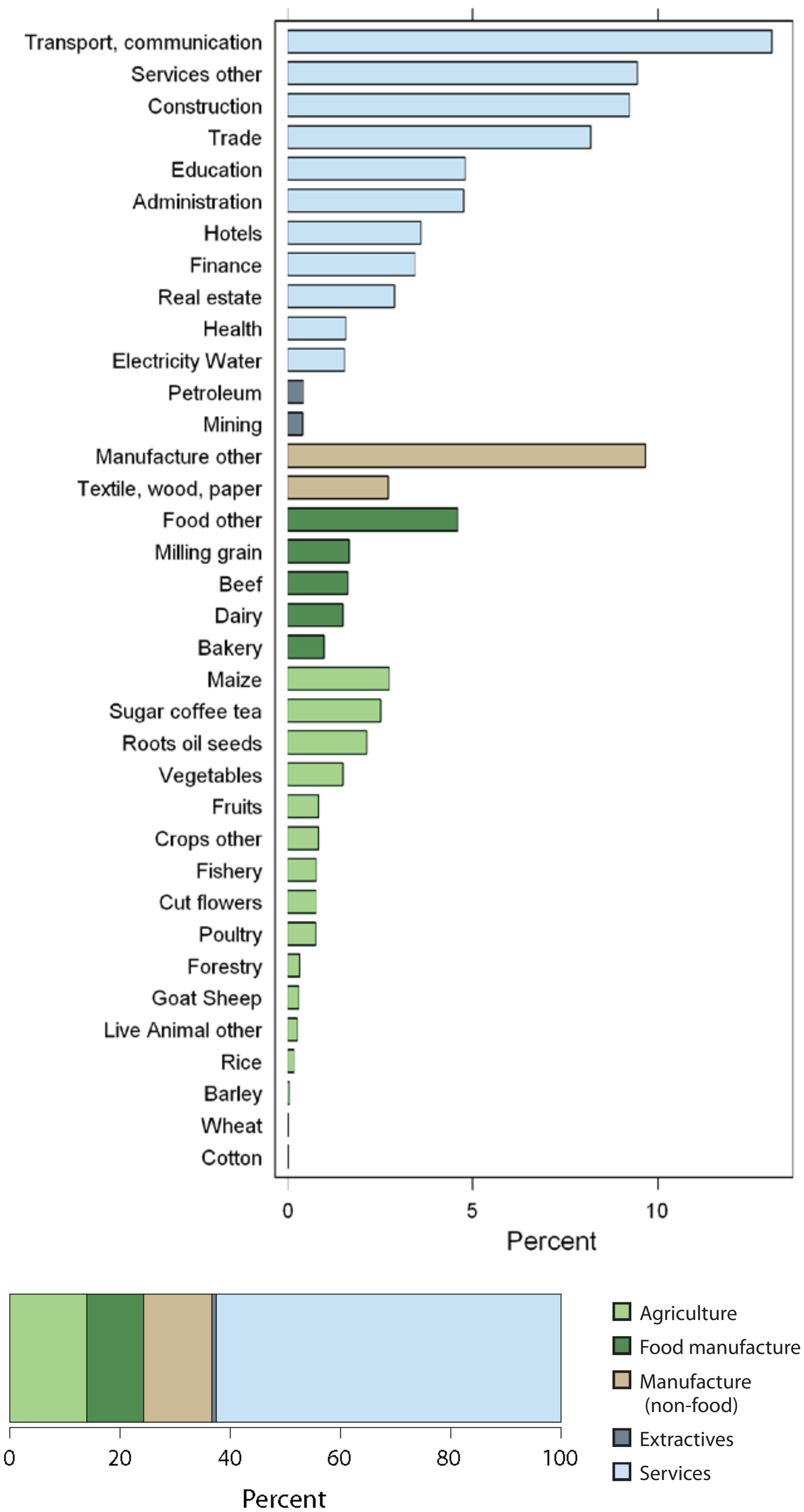
The mix of imported commodities by regions differs from that of exports. While imports from the EAC are relatively diversified, imports from other African regions or from the rest of the world tend to concentrate in a small number of commodity groups. Three commodity groups — wheat, other manufacture, and petrol — account for over 50 percent of imports from the EAC, and another four — cotton and other crops, rice, vegetables, and roots and oil seeds — account for close to 20 percent (Figure 8). In contrast, imports of petrol alone account for between 60 percent and almost 80 percent of total imports from the rest of the world, rest of Africa and non-EAC COMESA countries. Imports of wheat from these regions are also important, accounting for 10–20 percent of total regional imports.

The 2012 sectoral composition of GDP is as follows. The bulk of the production value is located in transport and communications, trade, construction and the other services sector, as well as in the composite sector of other manufacturing (Figure 9). Also significant is the total production of education, public administration services, the composite sector of textiles, apparel, wood and paper, and manufactured food. Finally, real estate and rental services, finance and sugar cane, coffee, roots and oil seeds and maize in agriculture each account for 10–20 percent. On the aggregate, the importance of services is greater than that of any other major sector (Figure 9 bottom panel).

The estimation strategy

To probe into the effects of Kenyan integration with the EAC, COMESA and Africa-wide, we run the model with several integration scenarios, of which we present results for two. Scenarios include the elimination of all tariffs on goods and services from the relevant countries when entering Kenya. In addition to this, scenarios include across-the-board increases in export prices to the relevant region and across-the-board reductions in import prices also from the relevant

Figure 9: Sectoral composition of Kenyan GDP, 2012 (percent shares)



Source: *Own construction based on model simulation results.*

region. These changes in prices represent an incentive to increase Kenyan exports and, in some cases, to increase production for the domestic market, to which Kenyan producers will respond according to their capacity to increase supply, given that particular change in price and an added competitive edge to imports from integration regions in Kenyan markets. The rationale behind simulating these price changes is to reflect the effects of the elimination of non-tariff barriers, of institutional changes that facilitate trade, and of region-wide investments in infrastructure. Since these institutional and investment actions have different scopes in a regional or Africa-wide context, the simulated price changes are not always the same in the regional and African simulations.[13]

The first scenario investigates the effects on Kenya's regional integration with the EAC and COMESA. The scenario completely eliminates remaining tariffs, decreases import prices by 5 percent and increases export prices by 5 percent. The second scenario fully eliminates tariffs on goods and services from all African countries, decreases imports prices from all African countries by 5 percent, increases export prices to EAC and COMESA countries by 10 percent, and increases export prices to all African countries by 15 percent. The use of different sets of changes in export and import prices between EAC/COMESA and the rest of Africa attempts to reflect Kenya's different degrees of integration vis-à-vis the two blocs. For example, such differences reflect the relative success of Kenya's integration with the EAC and COMESA to reduce technical barriers, compared to the limited progress in reducing these barriers in its trade with the rest of Africa.

Table 1: Scheme of simulation scenarios

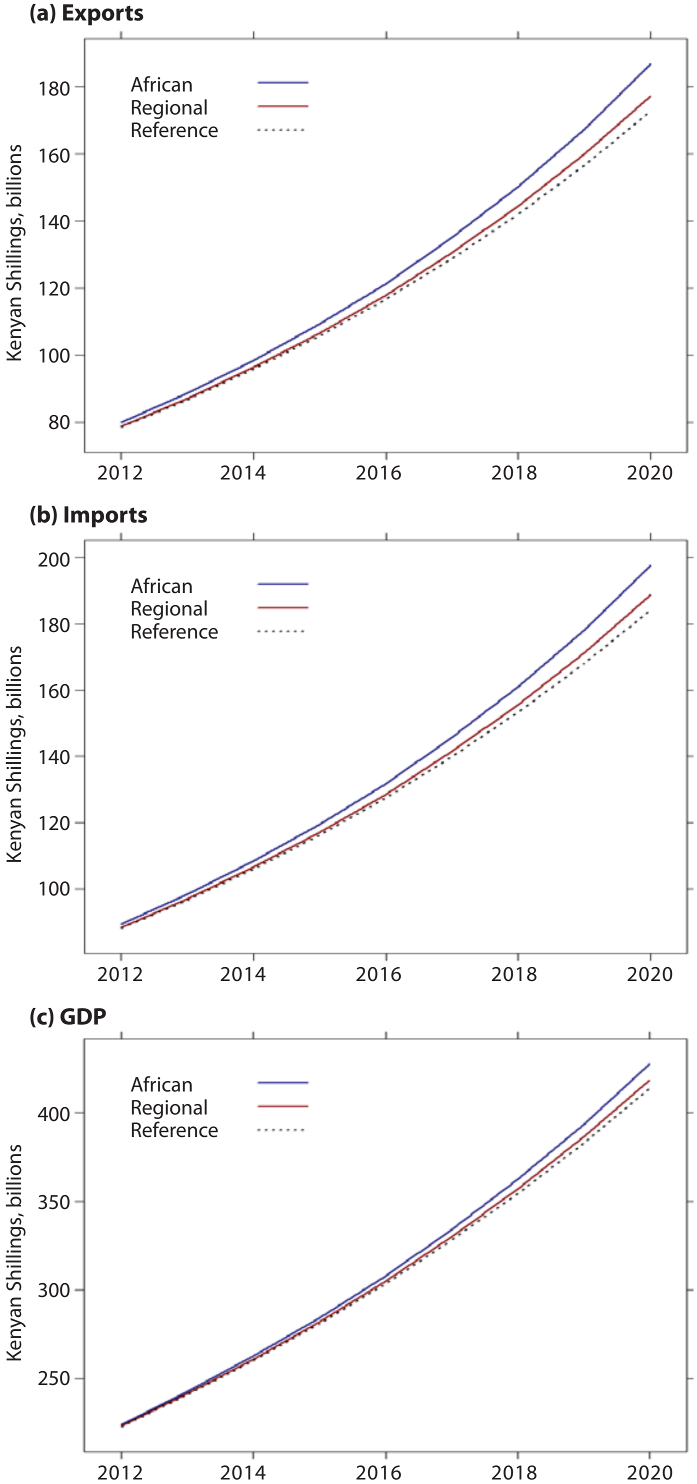
Regional scenario	African scenario
removes all tariffs from EAC/COMESA/SADAC (ECS)	removes all tariffs on imports from all Africa
drops import prices from ECS by 5 percent	drops import prices from all Africa by 5 percent
increases export prices to ECS by 10 percent	increases export prices to ECS by 10 percent
	increases export prices to rest of Africa by 15 percent

Results: The impact of integration

Comprehensive regional and Africa-wide integration is likely to result in visible changes in Kenya's trade, GDP and other macroeconomic variables, and important changes in human development indicators such as employment and the distribution of income and consumption. We begin our discussion of the modelling results by looking at the impact on trade, which will be the primary effect of simulated changes in tariffs and the cost of trading. We first discuss the impact on total exports and imports and then detail these impacts for the most important commodity or activity groupings. We present trade results grouping changes in four regions — namely the EAC, non-EAC COMESA countries, all other African countries (all Africa minus EAC, minus other COMESA), and the rest of the world. We then discuss the impact on the structure of production by activity. This is followed by a discussion on the impact on macroeconomic indicators. Finally, we address the human development impact of trade integration by looking at changes in wages and unemployment and by reviewing changes in consumption by rural and urban households classified by income consumption levels.

13 This uniform change in export and import prices is an admittedly simplified approach to assess the impact that integration might bring to the Kenyan economy and society. Nevertheless, it does provide a good starting point for assessing the potential gains of regional trade integration in the context of a detailed country model.

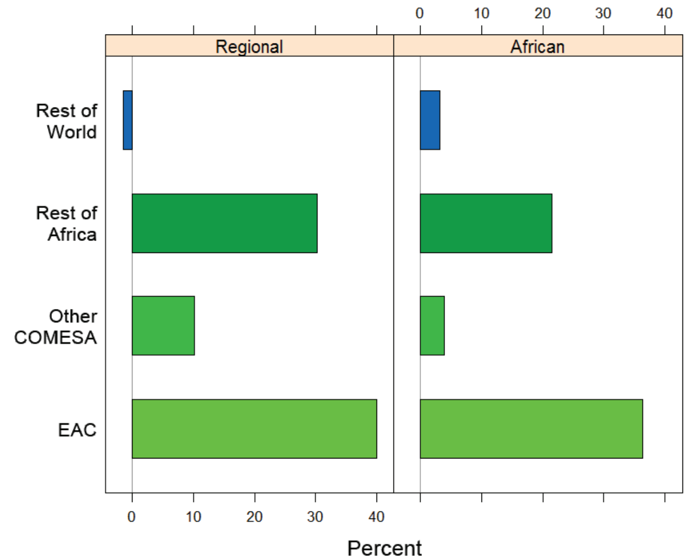
Figure 10: Kenyan exports, imports and GDP in the reference, regional and African integration scenarios (2012–2020)



__Note:__ Values are slightly modified to highlight differences; see the statistical appendix for precise values.

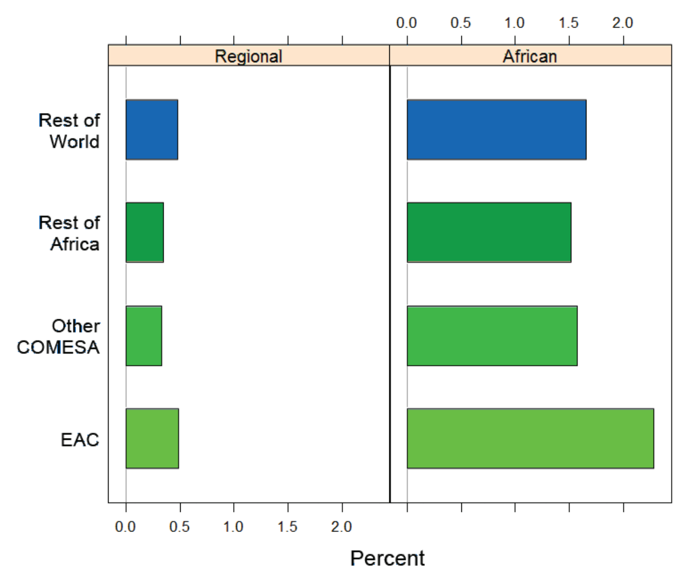
__Source:__ Own construction based on model simulation results.

Figure 11: Change in Kenyan exports to regions by type of integration (2012–2020 annual average changes relative to reference scenario, percent)



__Source:__ Own construction based on model simulation results.

Figure 12: Change in Kenyan annual imports to regions by type of integration (2012–2020 annual average changes relative to reference scenario, percent)



The aggregate impact on trade

Simulation results suggest that economic integration, regional and African, will increase Kenya's exports, imports and GDP relative to the reference scenario of no further integration. Importantly, results indicate that the impact will grow with time (Figure 10). On average, regional integration might increase annual exports by 0.44 percent, while African integration will result in annual exports 1.73 percent higher. The increasingly stronger impact on trade and GDP can also be gauged from the following figures. While in first year of the simulated regional integration will witness an increase in exports and imports of 0.31 percent and 1.09 percent, respectively, in 2020 increases will be in the order of 0.55 percent and 2.37 percent, respectively. The growth trend is even more visible in the case of African integration. While the rise in exports and imports is estimated to be 1.09 percent and 4.20 percent in 2012, respectively, the same increases are likely to be 1.26 percent and 5.10 percent, respectively, in 2020.

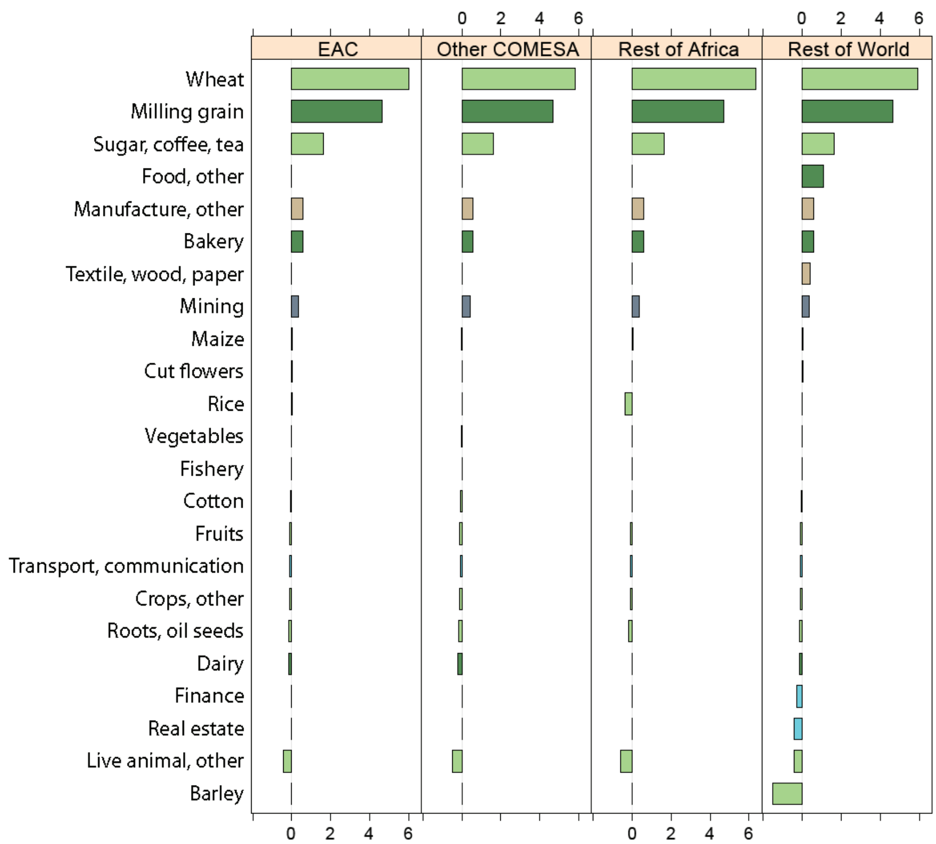
Regional integration might bring annual export gains ranging between 0.3 percent and 0.5 percent, depending on the market destination; lowest for export sales to other COMESA countries, highest for sales to EAC countries (Figure 11). African integration might bring significantly higher increases in annual exports to regions, ranging from 1.5 percent for EAC/COMESA to 2.3 percent for the rest of Africa.

The increase in imports will be more substantial. Annual imports might increase by 1.2 percent and 4.7 percent, respectively, under the regional and African integration schemes. By import origin, regional integration might result in net increases larger than in the case of African integration. Second, the largest increase in imports consistently corresponds to those originating in the EAC region, followed by those originating in the rest of Africa. An extreme case is the net reduction in imports from the rest of the world that might follow after regional integration (Figure 12).

Impact by commodity group

The impact of regional integration results in a rise in annual exports to all regions of wheat and milled grains of about 5 percent and of sugar cane, coffee and tea of about 2 per cent (Figure 13). This suggests that the driving forces behind these changes are of an indirect nature, mainly variations in the real exchange rate and changes in the mix between exports and domestic sales. Underlining the importance of indirect effects, regional integration induces a fall in some exports, such as other live animals, bakery, rice, real estate, and financial services. The most notable reduction in exports, however, is the 16 percent fall in

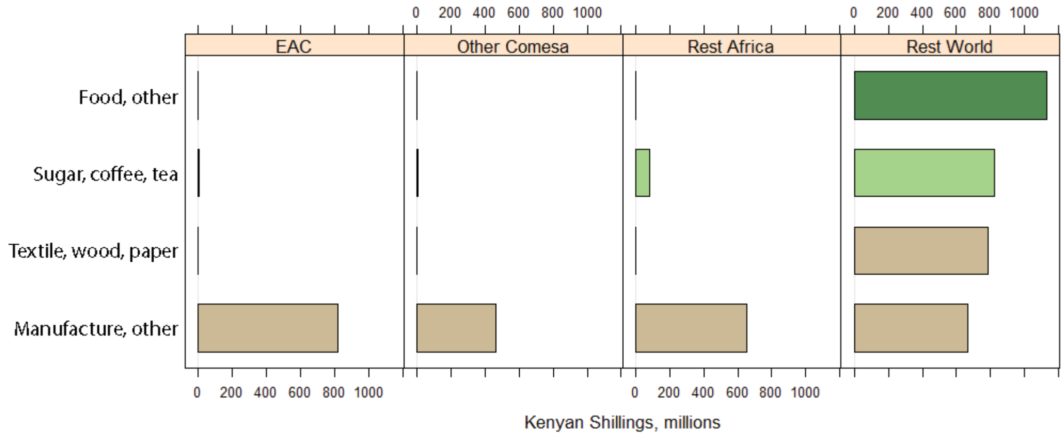
Figure 13: Main changes in Kenyan exports by activity after regional integration (2012–2020 annual average changes relative to reference scenario, percent)



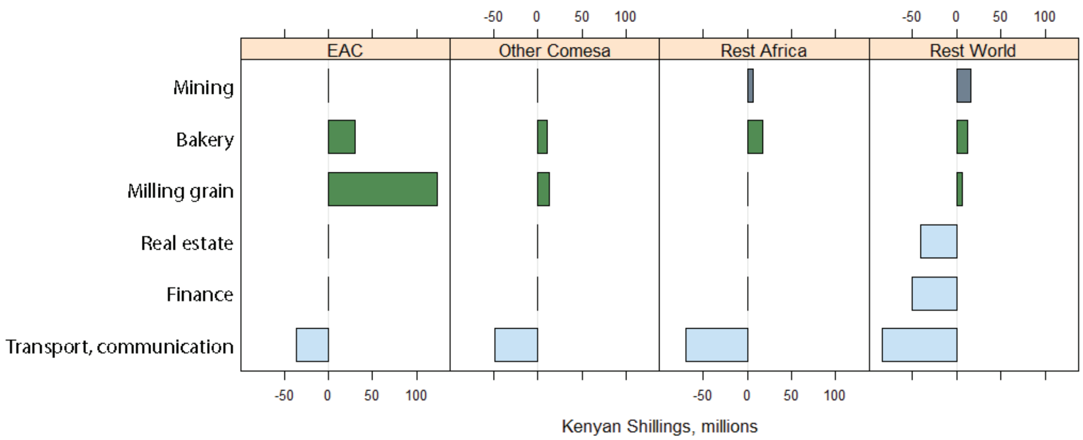
Source: *Authors' construction based on model simulation results.*

Figure 14: Main changes in Kenyan exports by activity after regional integration (2012–2020 annual average changes relative to reference scenario, KSh, millions)

(a)



(b)



Source: *Authors' construction based on model simulation results.*

Note: *activities whose changes to at least one market are equal to or smaller than KSh20 million are excluded.*

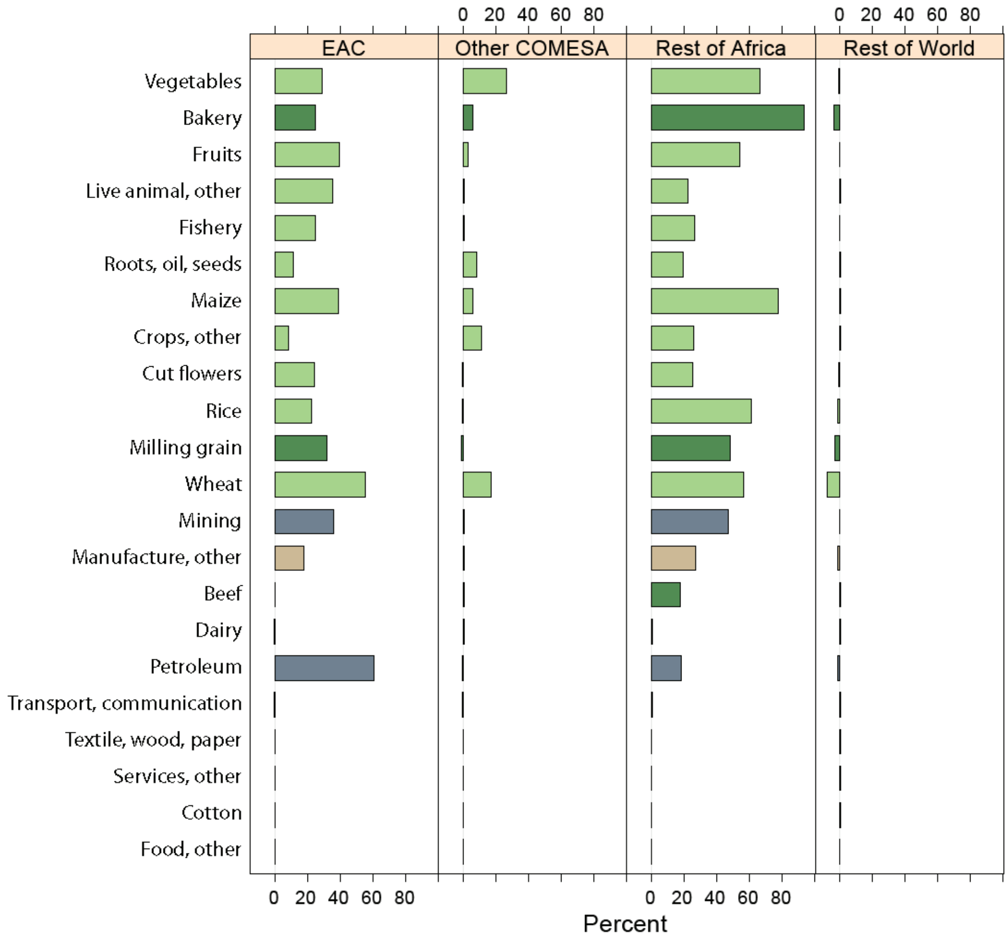
beef exports to the rest of the world (not shown in Figure 13); even if proportionally large, the fall in beef exports in not significant in value terms.

Regional integration results in large changes in the value of exports in four activities. The most significant of them is the increase in exports of other manufactured goods, which, depending on the market, might increase between KSh400 million and KSh800 million (Figure 14). Second in importance is the KSh1.1 billion increase of other manufactured food to the rest of the world; third, the KSh800 million increase in exports of sugar cane, coffee and tea to all regions; and fourth, the KSh800 million increase in textiles, apparel, wood and paper to the rest of the world. On a smaller scale, there is a rise in exports of milled grains, bakery and mining products to various markets. On the negative side, the sharpest reductions in exports are in transport and communication services to all markets, ranging between KSh30 million and KSh80 million, and in real estate and financial services, ranging between KSh30 million and KSh40 million. Again, these changes are partially explained by a shift from exports to domestic sales for intermediate consumption.

Imports

Kenyan integration with the EAC and COMESA will result in significant changes in imports from the EAC and from the rest of Africa. The largest increases in imports from these regions are likely to be in vegetables, bakery, fruits, maize, wheat, rice, milled grains, mining, and petroleum, ranging between 40 percent and 100 percent (Figure 15). Changes in imports from other COMESA countries are likely to be generally small, yet annual imports of vegetables, wheat and other crops are likely to be relatively significant — i.e. within a range of 10 percent to 30 percent. In most cases, imports from the rest of the world actually fall. Even if reductions are small, the results suggest that integration leads to a significant substitution of African imports for imports coming from the rest of the world.

Figure 15: Main annual changes in Kenyan imports by activity after regional integration (2012–2020 annual average changes relative to reference scenario, percent)



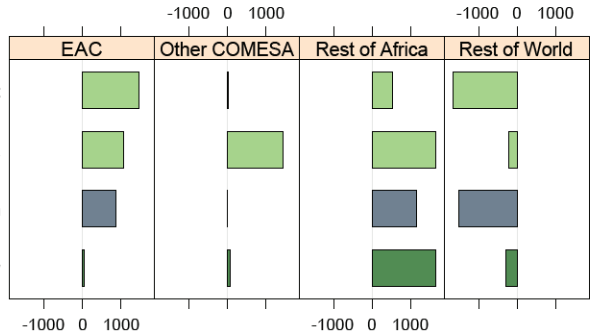
Source: *Authors' construction based on model simulation results.*

In terms of value, the most important changes are the increases in imports from African suppliers of four commodity groups: sugar cane, coffee and tea; petroleum; wheat; and bakery. The additional imports of these commodities range between KSh890 and KSh1.679 billion on average per year (Figure 16). The counterpart of these increases is the reduction of nearly KSh1.7 billion in imports of wheat and petroleum from the rest of the world, and the reductions of almost KSh280 million in imports of sugar cane, coffee and tea, and the fall in bakery imports. On a smaller scale, it is worth noting the increases in imports from the EAC and the rest of Africa of vegetables, maize, roots and oil seeds, and rice (ranging between KSh140 million and KSh440 million), and the increase in imports of textiles, apparel, wood and paper from the rest of the world of about KSh1.8 billion. On the negative side, there is the notable fall in imports from the the rest of the world equivalent to more than KSh110 million from these countries.

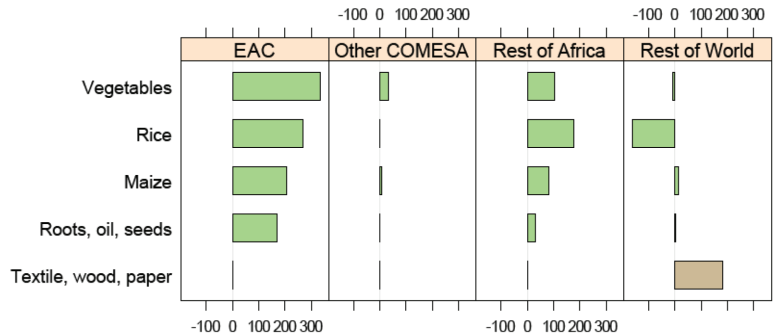
In many cases a large proportional change also means a large change in the value of imports, but in some cases these two do not coincide. For example, the large proportional changes in imports of barley, beef, other live animals, rice and wheat, are not that significant in value terms.

Figure 16: Main changes in Kenyan imports by activity after regional integration (2012–2020 annual average changes relative to reference scenario, KSh, millions)

(a)



(b)

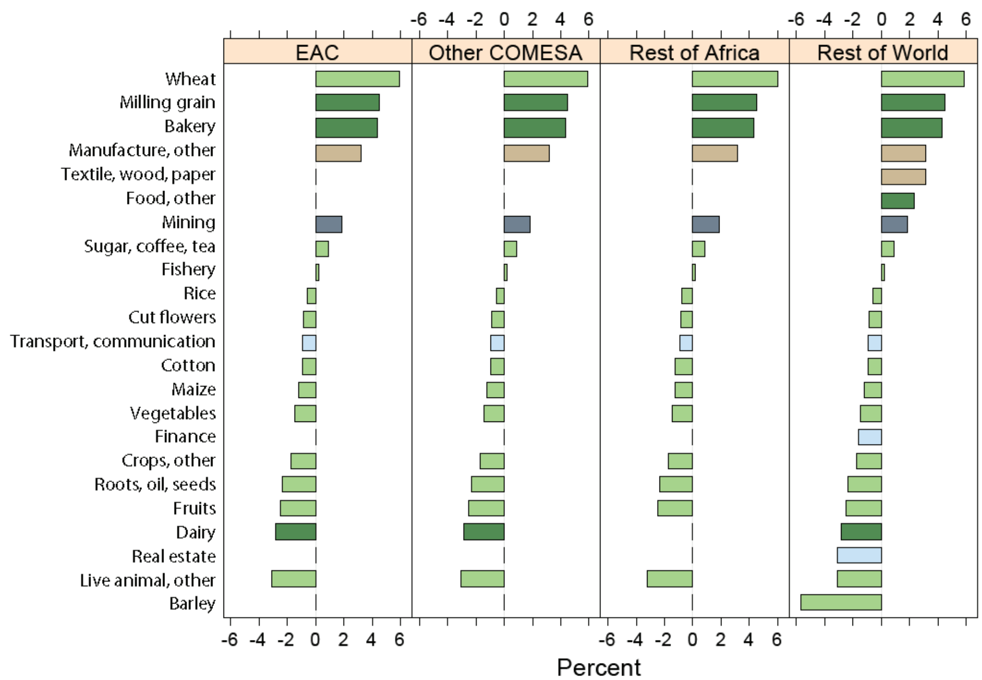


Source: *Authors' construction based on model simulation results.*

African integration

African integration has a stronger and wider effect on Kenyan exports than regional integration. Since the simulated incentives to trade are stronger than in the regional integration, the magnitude of export changes is stronger. Also, since incentives cover new countries, significant changes in exports expand to more activities. More than 20 activities experience changes larger than 7 percent in exports to at least one market. There are four particularly significant increases, each larger than 50 percent and covering all regions: bakery, wheat, grain milling, and other manufacturing goods (Figure 17). Next, by size of change, there are two significant increases to only the rest of the world: of more than 60 percent in exports of textiles, apparel, wood and

Figure 17: Main changes in Kenyan exports by activity after Africa-wide integration (2012–2020 annual average changes relative to reference scenario, percent)

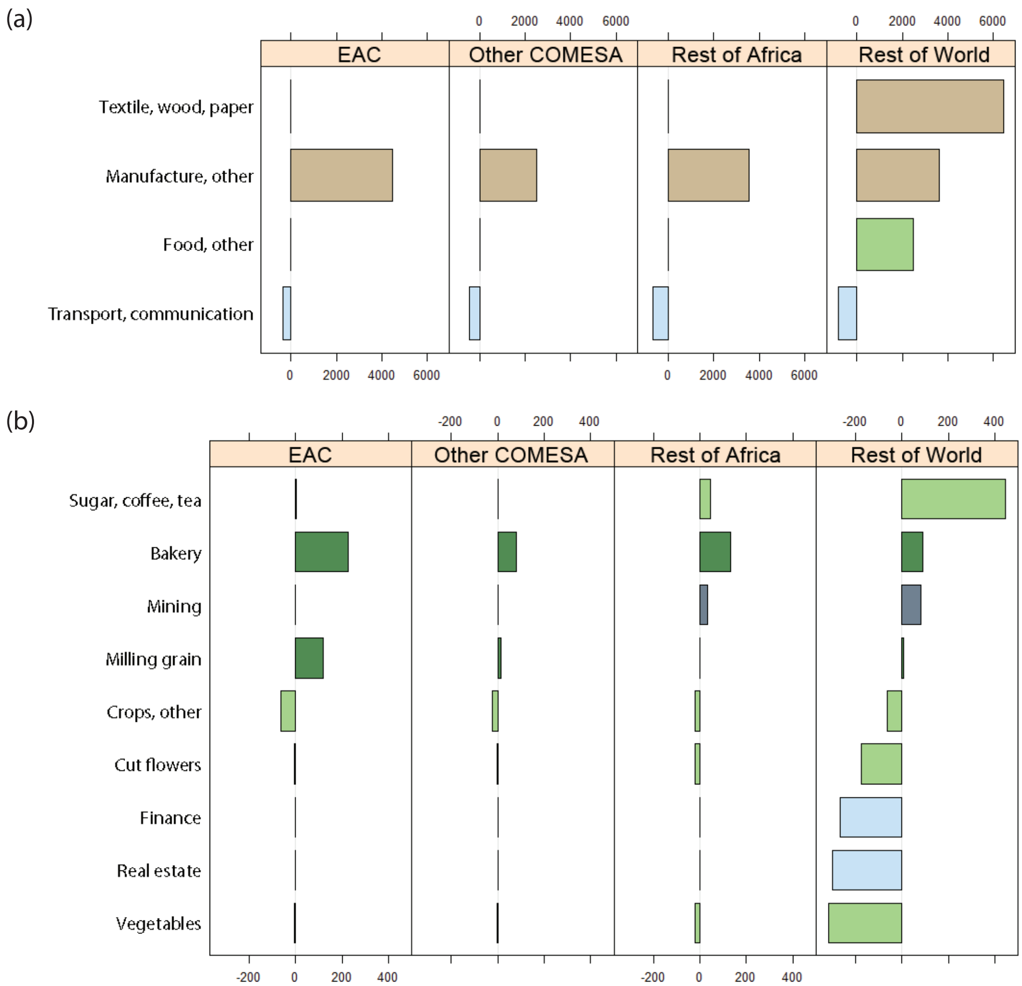


Source: *Authors' construction based on model simulation results.*

paper; and of 33 percent in other manufactured food. It is worth noting that the increases in exports of mining and the commodity group comprising sugar cane, coffee and tea are in the order of 20 percent and 7 percent, respectively. On the other hand, a total of 15 activities will experience relatively sizeable export reductions. Exports to all markets of other live animals might fall by more than 40 percent, while those of dairy, roots and oil seeds, fruits, other crops, vegetables, and transport and communications might fall by 10–25 percent. Exports of cotton, maize, cut flowers and rice might experience reductions of 7–10 percent relative to their 2012 values. In addition to these, exports of real estate, finance and barley to the rest of the world might fall between 30 percent and 40 percent. Again, as in the scenario of Kenyan integration with the EAC, beef exports to the rest of the world might fall by about 180 percent, while beef exports to the EAC might increase by 10 percent.

In terms of value, four changes stand out: the increase in exports of other manufactured goods to all markets, ranging from KSh220 million to KSh450 million. These changes are not uniform across destination markets: the largest of them is to the EAC, and the smallest to goods sold to the rest of Africa (Figure 18). Next in importance are the increases of almost KSh670 million in exports of textiles, apparel, wood and paper, and of more than KSh220 million in other manufactured food products, both to the rest of the world. Africa-wide integration might, on the other hand, lead to a significant decrease in exports of transport and communication

Figure 18: Main changes in Kenyan exports by activity after Africa-wide integration (2012–2020 annual average changes relative to reference scenario, KSh millions)



Source: *Authors' construction based on model simulation results.*

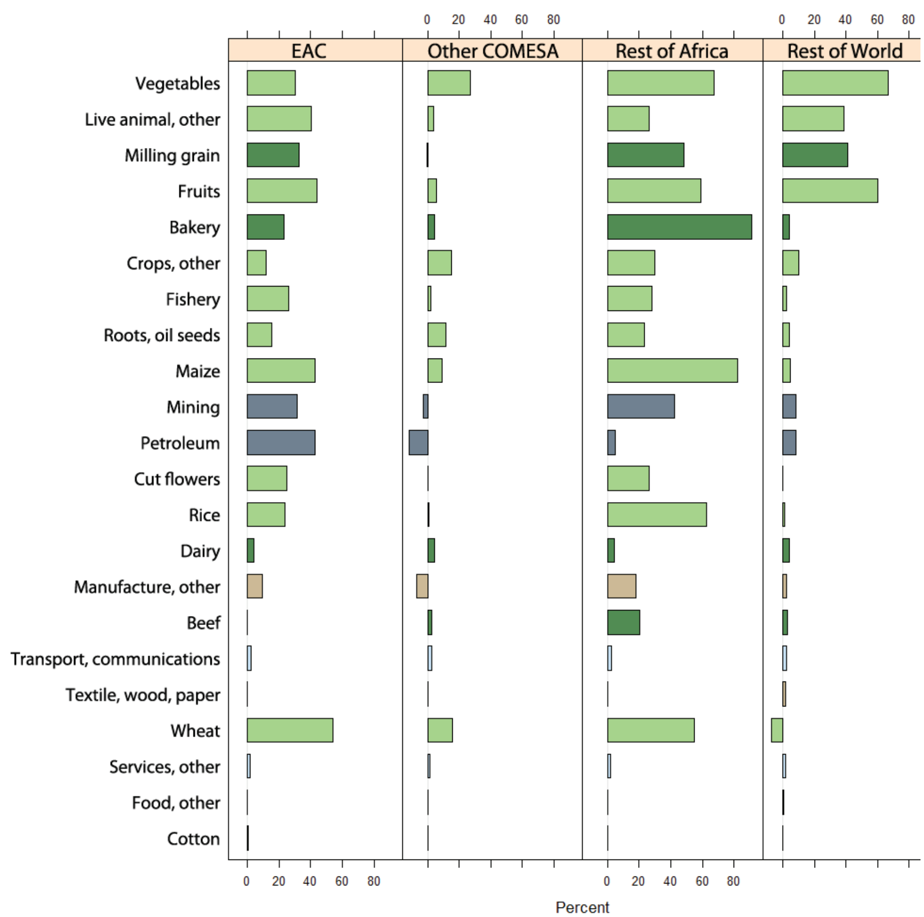
services to all markets. On a smaller scale, there are noticeable increases in bakery of about KSh100–200 million, and a KSh450 million increase in exports of the group comprising sugar cane, coffee and tea to the rest of the world. However, reductions in exports are comparatively small. More noticeable are the falls in exports of other crops to all markets, ranging between KSh200,000 and KSh700,000, and of vegetables, cut flowers, real estate and financial services to the rest of the world.

Imports

African integration significantly increases Kenyan imports. A total of 17 activities might see an increase in imports of larger than 20 percent from at least one region. Among them, the largest increase is the more than 50 percent rise in annual imports of vegetables, bakery, fruits, maize, rice and wheat from various regions (Figure 19). There are also notable reductions in imports — for example, of wheat from the rest of the world, and of other manufactured goods and petroleum from other COMESA countries. In all cases, a fall in imports from one region is compensated for by an increase in imports from other regions, suggesting that there might be important substitution effects between selling regions and/or between imports and domestic production.

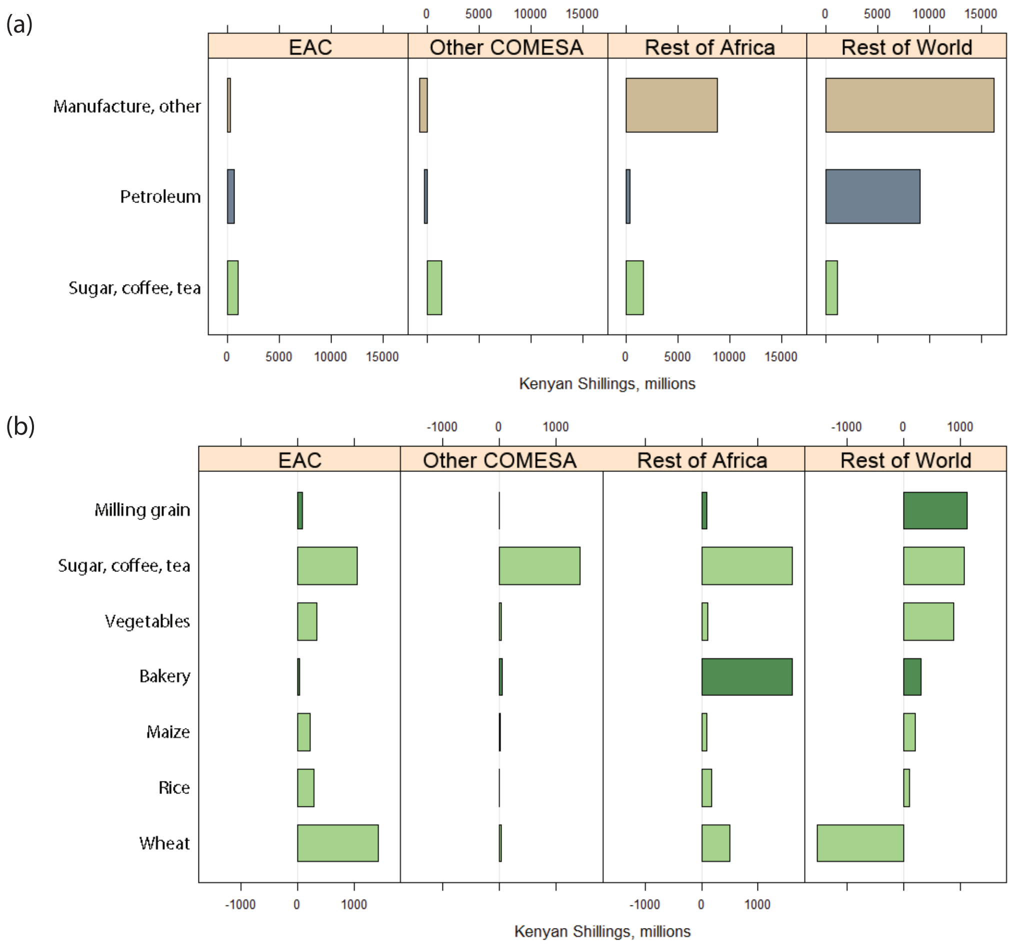
In terms of value, the more noticeable changes are the increase in imports of other manufactured products from the rest of the world and the rest of Africa, and the rise in imports of petroleum from the rest of the world, ranging between KSh890 million and KSh170 million (Figure 20). On a smaller scale, there are several increases in imports of a significant value: petroleum from the EAC; sugar cane, coffee and tea from all regions; bakery from the rest of Africa; vegetables, milled grains, and textiles, apparel, wood and paper from the rest of the world; and wheat from the EAC. There are also significant reductions in imports, mainly of other manufactured products and petroleum from the rest of Africa, and of wheat imports from the rest of the world. Note that changes in wheat imports imply some substitution of African wheat for wheat from the rest of the world.

Figure 19: Main changes in Kenyan imports by activity after Africa-wide integration (2012–2020 annual average changes relative to reference scenario, percent)



Source: *Authors' construction based on model simulation results.*

Figure 20: Main changes in Kenyan imports by activity after Africa-wide integration (2012–2020 annual average changes relative to reference scenario, KSh millions)



Source: *Authors' construction based on model simulation results.*

Comparing the impact of regional and African integration on trade

The comparison between the regional and the African integration scenarios points to three differences:

- the much larger magnitude of the effects arising from continent-wide integration;
- the Africa-wide scenario significantly impacts a larger number of activities than the regional scenario; and
- regional and African integration bring about different changes in trade in commodities.

African integration would bring about significant proportional changes in the trade in dairy, roots and oil seeds, fruits, other crops, barley, vegetables, cotton, maize, and transport and communication services. In terms of value, significant changes would also be seen in sugar cane, coffee and tea, and transport and communication. It is also worth noting a reversal in the direction of the change as Kenya migrates from regional to African integration — notably the shift from a rise to a fall in exports of cut flowers, milled grains and vegetables to the rest of the world.

In terms of the ranking of changes, it is worth noting that, unlike with regional integration, the most significant increases in exports resulting from African integration are in bakery and other manufacturing goods.

Comparing the impact on imports is more straightforward. In relative terms, the number of significant increases in imports rises from 9 to 17 activities, mainly due to increases in imports from non-EAC/COMESA countries on the continent. It is also worth noting that — unlike regional integration, where imports from all African countries tend to increase — African integration includes cases in which there is substitution of imports within Africa: notably, a fall in imports from the EAC/COMESA at the same time as imports from the rest of Africa increase. In value terms, the main change is that milled grains and wheat, which were not very important in regional integration, now appear among the activities experiencing major changes.

Comparing the impact on African and non-African trade partners

Kenyan integration with Africa, regional or continental, should be expected to increase exports to and imports from African countries, while exports to and imports from the rest of the world might increase or decrease. Of particular interest for this study are situations in which some or all of the following four changes occur in the trade flows of a given activity:

- increasing exports to the rest of the world;
- increasing exports to African countries;
- increasing imports from African countries; and
- decreasing imports from the rest of the world.

The occurrence of all of these four changes suggests that African integration basically increases inter-African trade without diminishing the importance of export markets in the rest of the world but reduces their importance as suppliers of imports.

The model anticipates that regional integration frequently results precisely in a situation where all the four changes are present. This is the case of, for example, other manufactured food, bakery, mining, milling, cut flowers and sugar cane, coffee and tea (Figure 21). Many combinations are possible, but it is worth noting the change in trade of wheat and fish that mainly involves a fall in imports from the rest of the world.

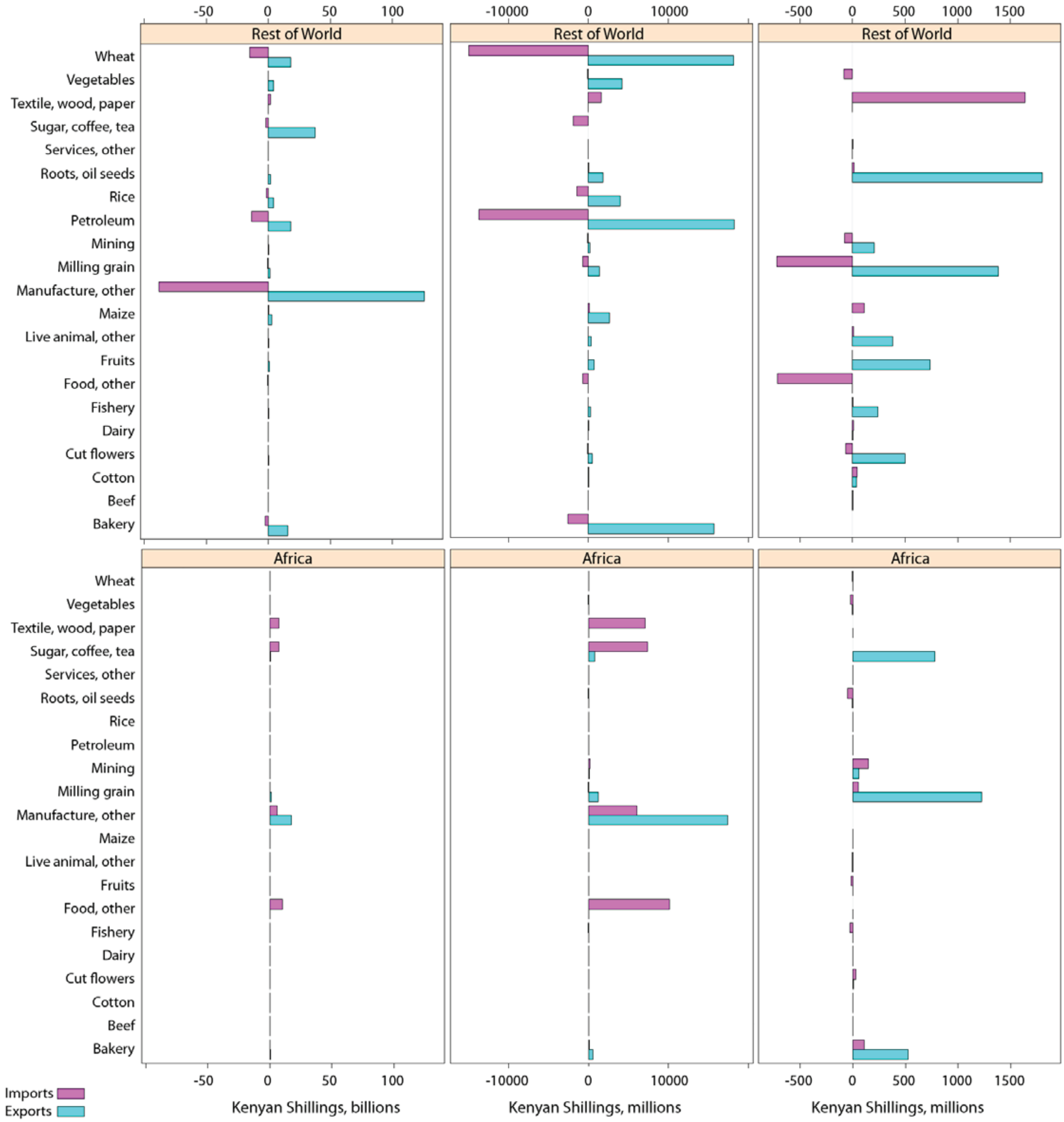
Continental integration appears to have a wider variety of trade effects on Kenya. Three notable cases where we see the simultaneous increase in imports from Africa and a reduction from the rest of the world are: other manufactured food, milled grains, and the composite of textiles, apparel, wood and paper (Figure 22). There are a number of cases in which African integration stimulates all trade — i.e. in which exports and imports to and from Africa and the rest of the world all increase; examples include other manufactured goods, bakery, mining, and the composite of sugar cane, coffee and tea.

The impact on production

The overall effect of African integration on the value of production is positive, and, as expected, the increase in output is stronger for African than regional integration. The increase in output across sectors is not uniform, however. Regional integration increases output the most in manufactured food, manufacturing, and services (in that order) and reduces output in agriculture and extractive activities. Africa-wide integration changes sectoral output in the same direction as the regional integration, but the proportions are different (Figure 23). In relative terms, the difference is of one order of magnitude. The largest proportional increase is now in manufacturing, closely followed by food and then by services. The proportions by which output in agriculture and extractives fall are also different: the fall in agriculture is now smaller than the fall in extractives, and the difference is wide.

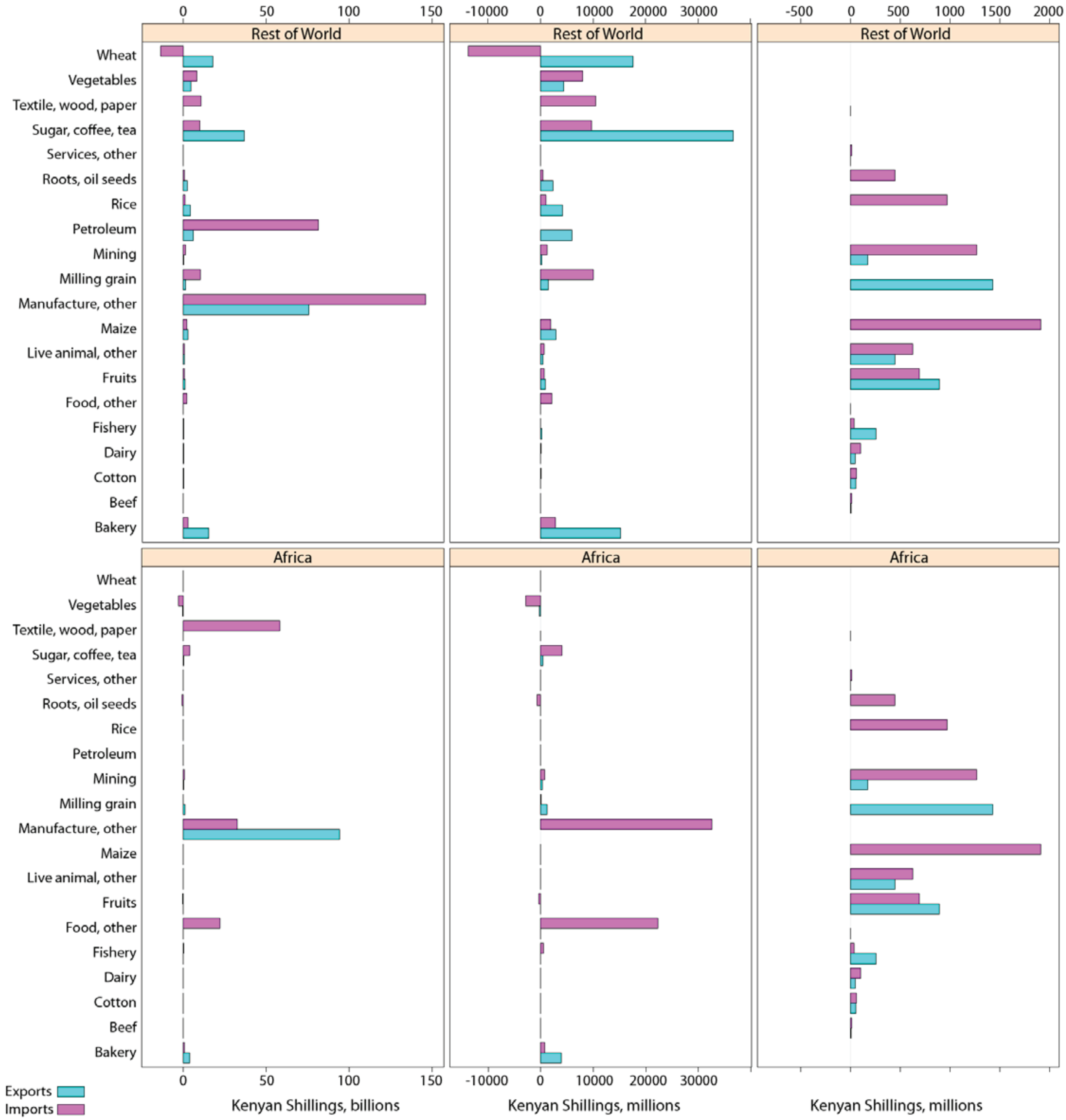
Measured in terms of value, regional integration leads to an increase in the output of manufactured foods that is almost of the same magnitude as the fall in agriculture. This shift towards more processed products is further reinforced by the increase in the value of production in non-food manufacturing activities. In value terms, the fall in extractives is small, but the increase in services is very significant. Again in value terms, the scale of changes induced by African integration is, of course, larger than the one that follows

Figure 21: Changes in Kenyan trade with Africa and the rest of the world after regional integration (2012–2020 annual average changes relative to reference scenario)



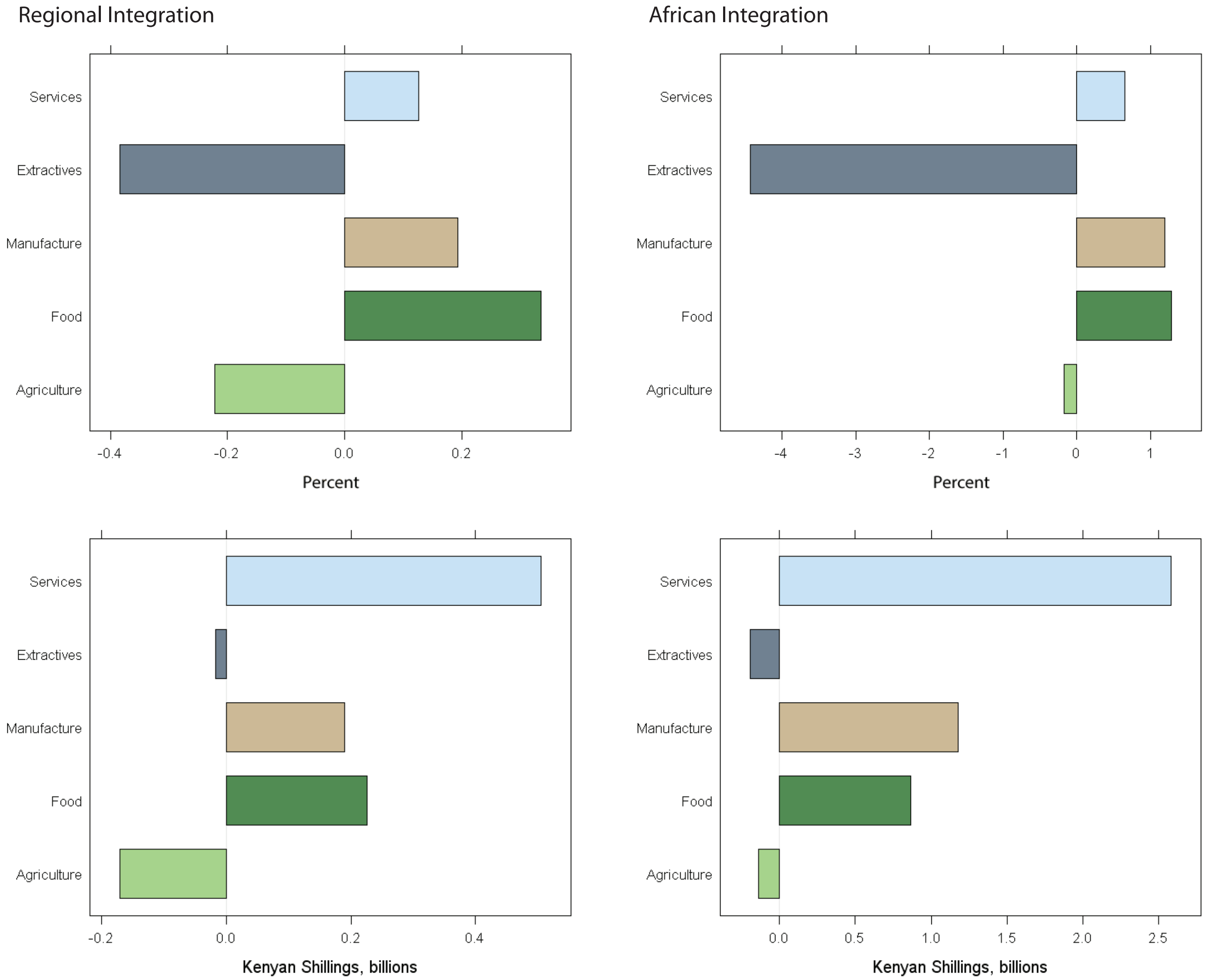
Source: *Authors' construction based on model simulation results.*

Figure 22: Changes in Kenyan trade with Africa and rest of the world after African integration (2012–2020 annual average changes relative to reference scenario



Source: *Authors' construction based on model simulation results.*

Figure 23: The impact of integration on Kenyan output: five aggregated sectors (2012–2020 average change, percent and KSh billions)



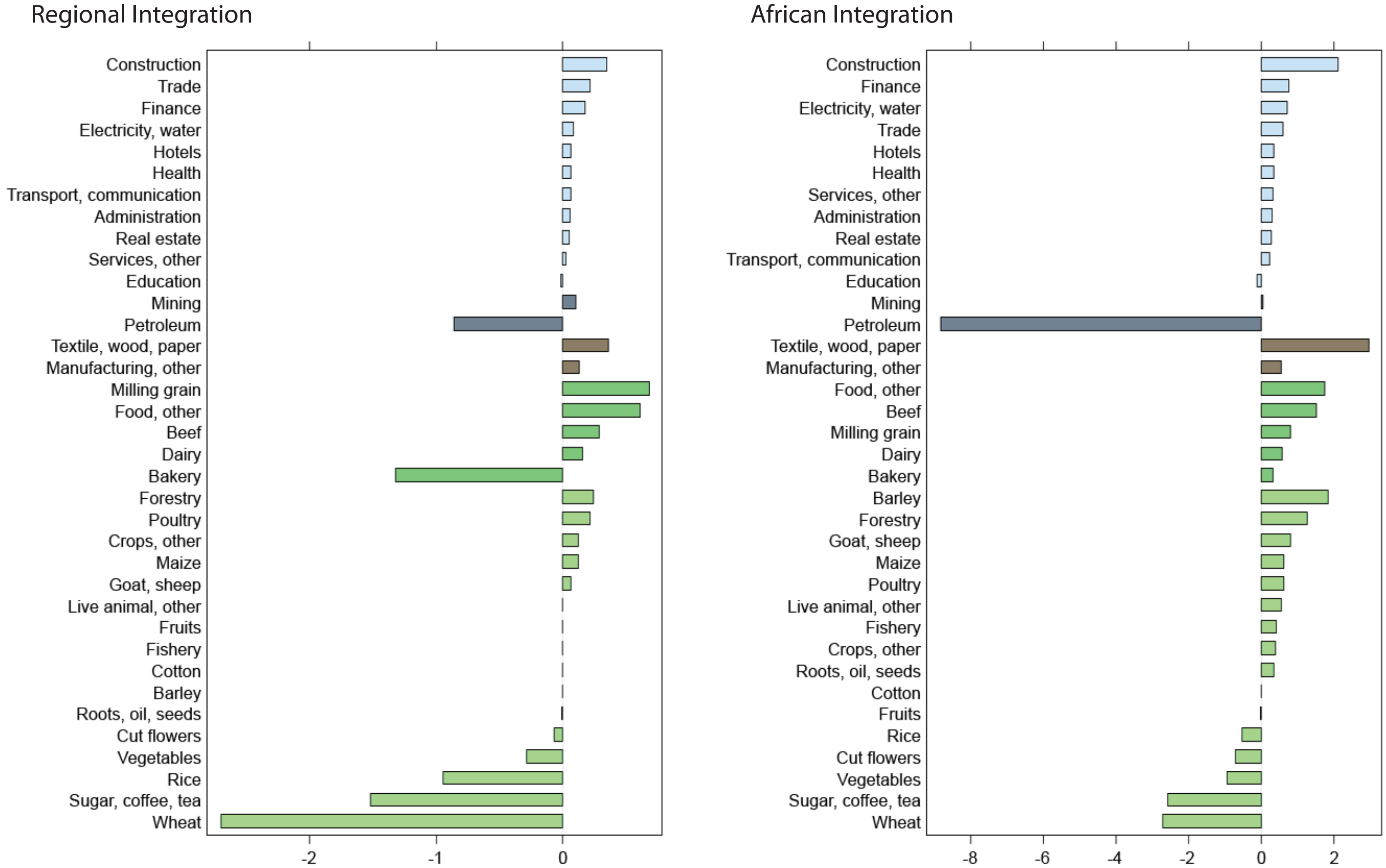
Source: *Authors' construction based on model simulation results.*

regional integration. It is interesting to note that the increase in value of manufactured food is significantly larger than the fall in the output value in agriculture. The fall in extractives is small, but larger than the reduction in agriculture, while the increase in the value of production in services is the largest single change.

These changes reflect the differences in comparative advantages of Kenyan producers in the limited regional context of the EAC/ COMESA and the wider competitive environment of Africa as a whole. The increase in manufactured foods is no larger, in value terms, than the increase in non-food manufacturing. In comparison with regional integration, Africa-wide integration places more emphasis on Kenya's non-food manufacturing and incurs a relatively lower reduction in agricultural output.

Looking in detail at changes by activity reveals that regional integration might trigger changes ranging from a decrease of 2 percent to an increase of 1 percent in the value of production (Figure 24). The largest proportional increases are seen in other manufactured

Figure 24: The impact of integration on Kenyan sectoral production (2012–2020 annual average changes relative to reference scenario, percent)



Source: *Authors' construction based on model simulation results.*

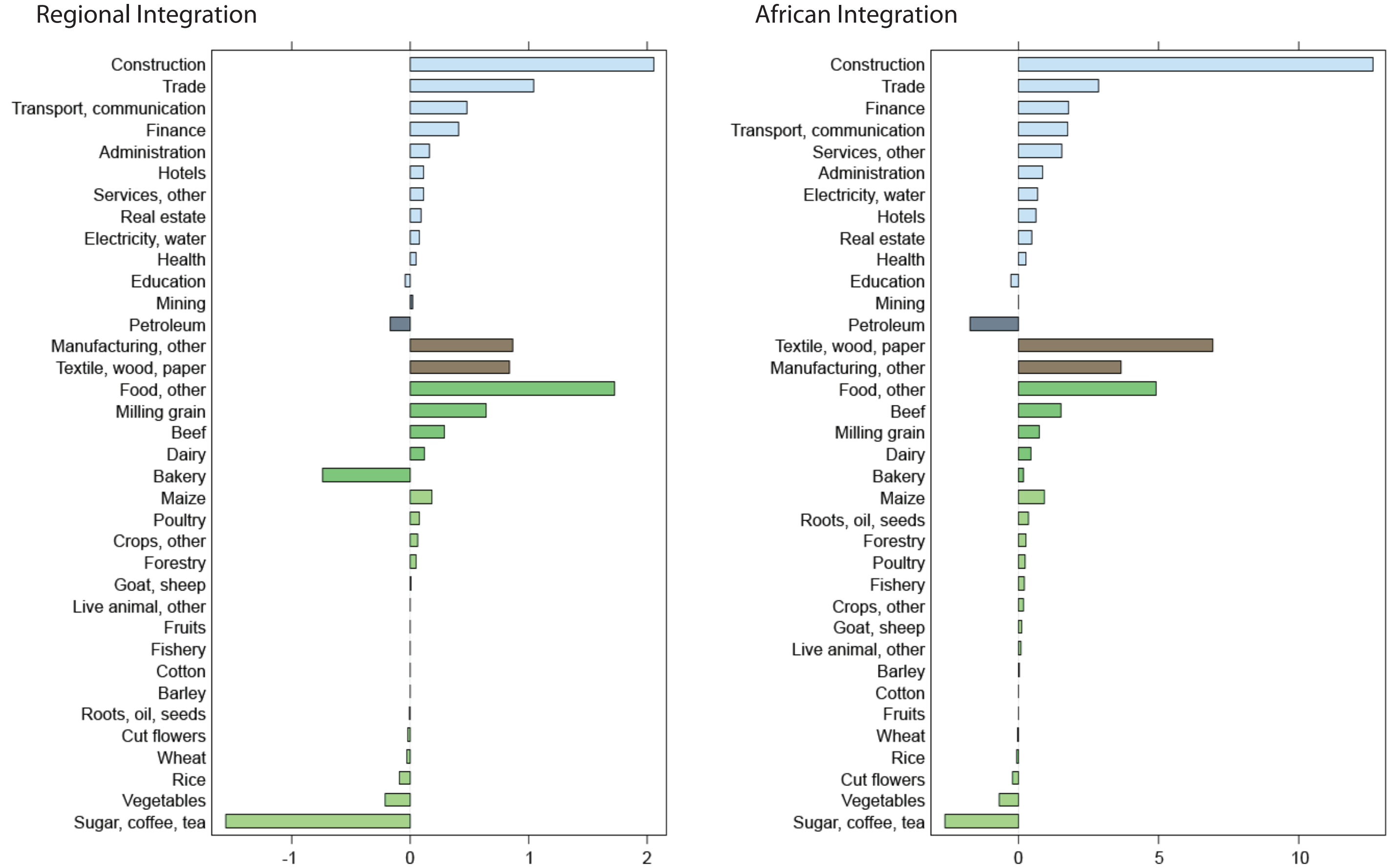
food; milling grain; textiles, apparel, wood and paper; construction; and forestry. The largest reductions are in wheat; bakery; sugar, cotton, coffee and tea; rice; and petroleum.

African integration might result in changes in the value of production ranging from a decrease of 8 percent to an increase of 2 percent. The two largest increases are seen in the group of textiles, apparel, wood and paper, and in construction. Other important increases include other manufactured food, beef, barley and forestry. On the negative side, the largest reductions are in petroleum, wheat and the group of sugar, cotton, coffee and tea, but it should be stressed that African integration might lead to a reduction in output in only a few sectors.

Measured in value terms, regional integration causes two large increases—namely, in construction and other manufactured food (Figure 25). A second layer of increases includes trade services, the group of textiles, apparel, wood and paper, and other manufacturing. Two reductions in output stand out: in the group composed of sugar cane, cotton, coffee and tea, and in bakery.

The largest increase in production resulting from Africa-wide integration is in construction services. A second layer of increases includes the group of textiles, apparel, wood and paper, other manufactured food, other manufacturing, and trade services. Again, two reductions in output stand out: in the composite of sugar cane, cotton, coffee and tea, and in petroleum.

Figure 25: The impact of Africa-wide integration on Kenyan output (2012–2020 annual average changes relative to reference scenario, KSh billions)

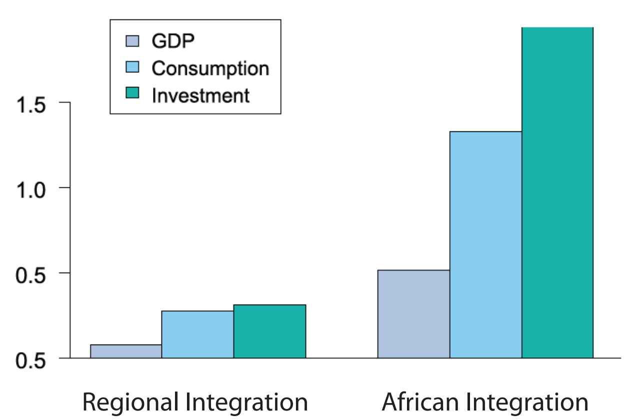


Source: *Authors' construction based on model simulation results.*

The impact on the macroeconomy

Opening trade and reducing the cost of trading among African countries will have positive effects on the Kenyan economy. According to the results of our models, three important macroeconomic indicators will improve: GDP, consumption and investment. Average yearly gains in GDP brought about by regional integration would be equivalent to 0.1 percent to 0.3 percent of the corresponding values in the reference scenario (Figure 26). The average annual gains in GDP, consumption and investment brought about by African integration would be 0.6 percent to 2 percent relative to the reference scenario.

Figure 26: Macroeconomic impact on Kenyan of regional integration and African integration (2012–2020 average changes relative to reference scenario)

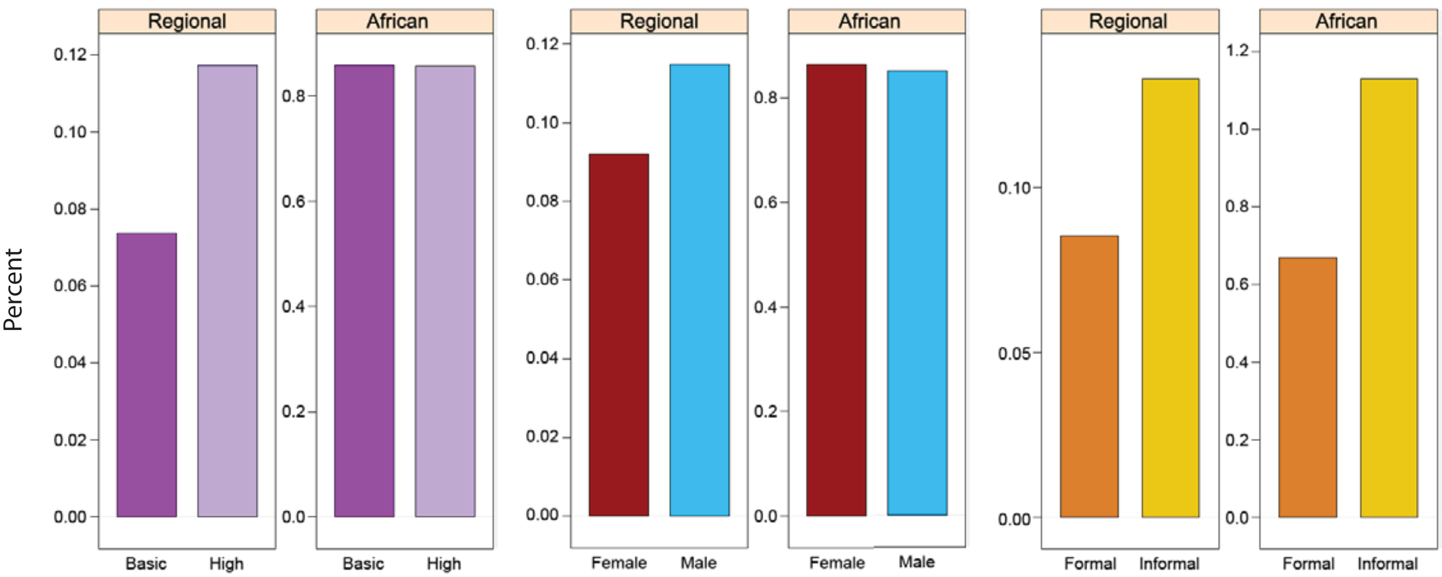


Source: *Authors' construction based on model simulation results.*

The impact on development

The positive impact on trade and production leads to a positive impact on wages and unemployment. The average increase in wages in the regional scenario is about 0.1 percent relative to the wage in the reference scenario, while Africa-wide integration increases wages by about 0.85 percent, also relative to the same reference scenario. The changes in wages generally indicate a welcome redistribution in both scenarios, but more clearly in the case of regional integration. Regional integration appears to have a clear redistributive impact on labour income, as it consistently leads to a relative rise in basic compared to high, female to male, and informal to formal wages (Figure 27). African integration has a less clear redistributive pattern. In fact, it only leads to a clear increase in informal wages relative to formal wages. In the cases of basic to high and female to male relative wages, it either remains constant or even slightly decreases.

Figure 27: The impact of integration on Kenyan wages (2012–2020 annual average changes relative to reference scenario, percent)

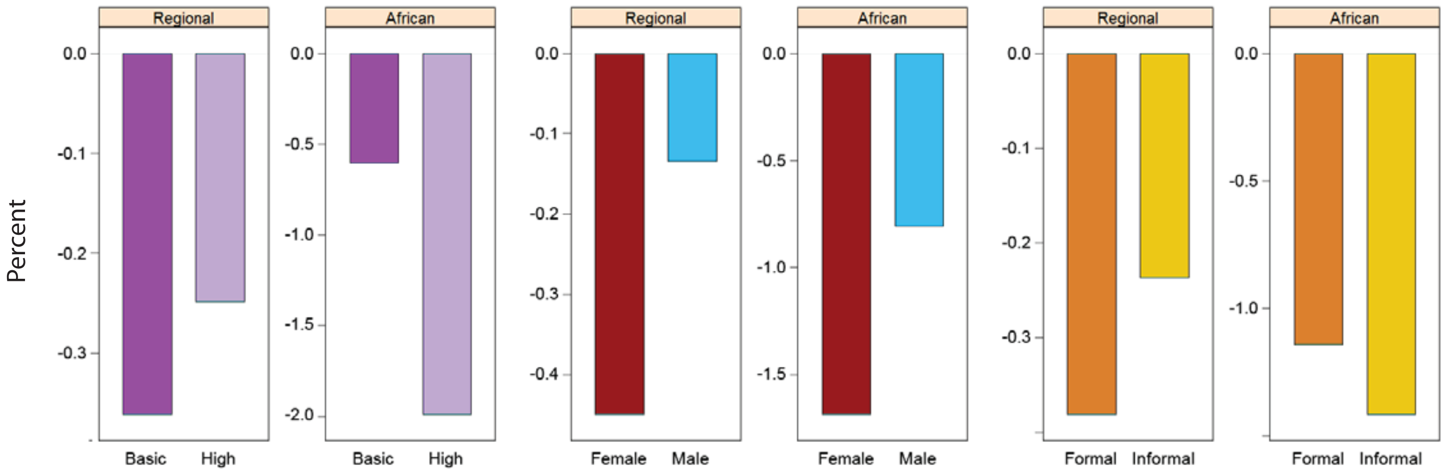


Source: *Authors' construction based on model simulation results.*

Integration has a positive impact on unemployment in Kenya. On average, the unemployment rate falls by 0.001 and 0.003 percentage points in the regional and African integration scenarios, respectively. These are small changes, but the relevance of the result lies in that it points in the right direction. Integration tends to benefit female unemployment: both regional and African integration reduce the rate of unemployment more for females than for males (Figure 28). While regional integration favours the employment of workers with basic skills, African integration tends to favour highly skilled workers. Additionally, the unemployment rate of informal workers falls more under African integration than under regional integration. These changes suggest that the distributive effects of integration working through unemployment do not have a clear redistributive or concentrating pattern.

The changes in wages and employment described above, as well as changes in income to land and capital, feed into household consumption. Changes in labour income are particularly important, because they represent the main source of monetary income for most households. The impact on income distribution is generally positive, in the sense that it tends to redistribute incomes towards low-income households, but there are important exceptions. To simplify the discussion, we present results aggregated by area of residence and by quintile of the income distribution. African integration increases household consumption more than regional integration does, by about 1.25 percent and 0.25 percent, respectively, but our interest here is in the relative increases between rural

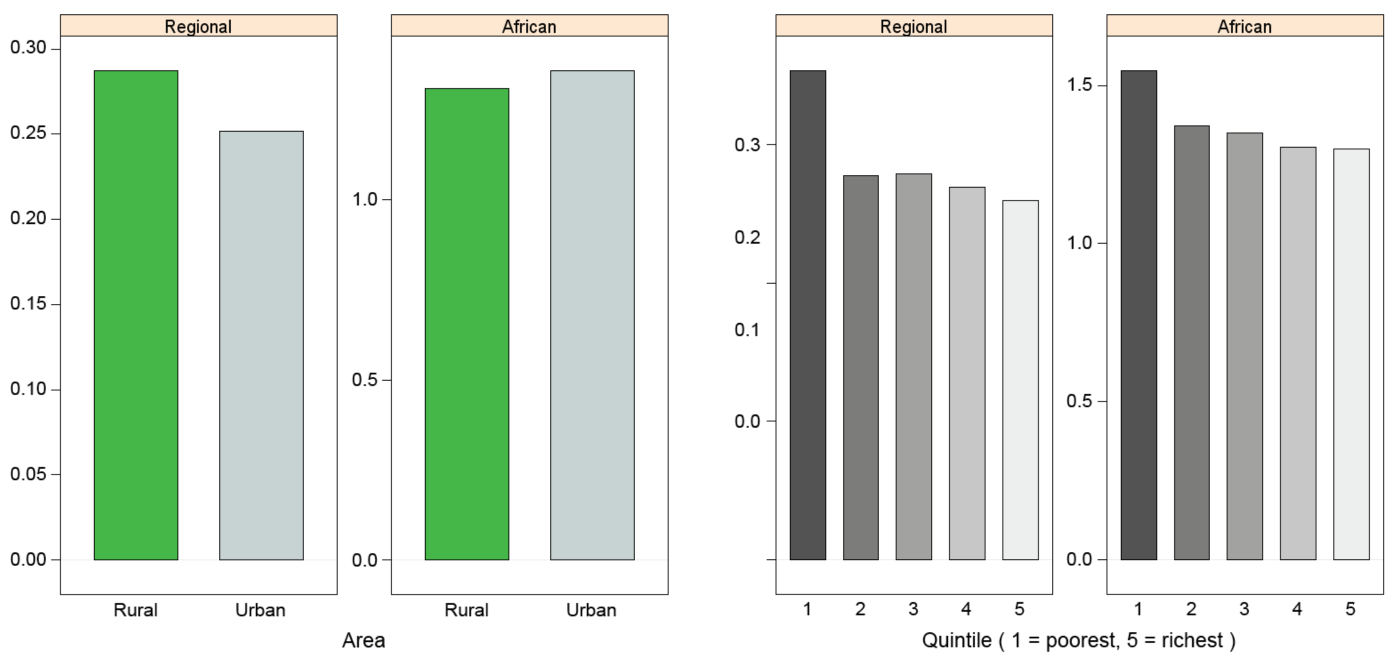
Figure 28: The impact of integration on Kenyan unemployment (2012–2020 annual average changes relative to the unemployment rate in reference scenario, percent)



Source: *Authors' construction based on model simulation results.*

and urban areas. While regional integration increases consumption in rural areas more than it does in urban areas, African integration does the opposite (Figure 29). This pattern might be associated with the different effects of integration on different production sectors discussed above. Integration has more consistently progressive effects on consumption by income bracket. Both regional and African integration increase poor households' consumption by more than that of rich households, but the relative redistributive effect is somewhat greater in the regional scenario than in the African.

Figure 29: The impact of African integration on Kenyan household consumption (2012–2020 annual average changes relative to reference scenario, percent)



Source: *Authors' construction based on model simulation results.*

4. Final Remarks

The Government of Kenya has paid great attention to trade and integration in its quest for growth and human development. For historical and geographical reasons, integration with African countries has continuously figured among Kenya's priority development areas, and particularly so with neighbouring countries. Kenya and neighbouring countries have now formed the EAC. The logic of economic and business trends has, however, emphasized the importance of the economic powers of the EU and the United States. Recent changes in the world economy, prompted by the economic difficulties faced by the EU and the United States and the emergence of new centres of economic growth, have led to the ascendance of trade and integration with African partners and new emerging partners.

Tariffs among East African countries have been falling, and measures have been taken to expedite trade and reduce its costs, but much still needs to be done. There remains the major challenge of building economic infrastructure geared to enhancing regional economic opportunities and accelerating human development, by reinforcing investments in education and health and by extending productive opportunities to poor populations.

To examine the potential effects of broader African integration featuring effective improvements in infrastructure and the ease of conducting trade, this study conducted an experiment simulating, with an economy-wide model, a set of scenarios with the complete elimination of tariffs among African partners and effective reductions in the cost of exporting and importing goods and services. The study discussed the results of two scenarios: the regional scenario, involving members of the EAC and COMESA, and the African scenario, involving all countries on the continent. The scenarios feature the elimination of tariffs and a modest yet significant reduction in the cost of Kenyan exports to regional partners and the cost of Kenyan imports from the relevant regional partners. These changes are assumed to take place in 2012, and the study looks at its effects up to 2020. The simulation results indicate that the overall effect on the Kenyan economy is systematically positive. All aggregate indicators witness positive changes, and changes by activity include a significant number of cases of exports and imports increasing or decreasing significantly over the course of the simulated period of 2012 to 2020. As integration improves economic conditions, it also helps to advance human development, mainly because integration increases wages and reduces unemployment, but also because the distributive effects tend to be positive — with greater relative benefits for poorer than wealthier populations. However, not all distributive effects are desirable ones, underscoring the need to design and implement pro-poor and inclusive policies.

The impact of integration on agriculture is important. Integration-related increases in imports from Africa anticipated by the model might contribute to wider food availability in Kenya. Increased imports of maize, rice and wheat from African countries, replacing imports from rest of the world, will also reduce food prices. Increased regional imports of these products may, therefore, contribute to both increased food availability and access and, therefore, to increased food security for Kenya.

Deep regional and African integration will facilitate both formal and informal cross-border trade, and facilitation will be stronger if integration addresses non-tariff barriers and improves, for example, the management of sanitary and phytosanitary standards and cross-border documentation processes. Informal cross-border trade n Africa is high and significantly involves trade in food commodities. The African Development Bank (2012) has estimated that in SADC countries, for example, informally traded flows are equivalent to 30–40 percent of the formal trade). Deep integration can serve to integrate these informal flows into the formal trade sector. This will contribute to better incomes, including higher government revenue, and will have potentially beneficial effects on food security and human development.

The simulation exercise highlights the well-known view that not much can be derived from further tariff reductions and that integration must move aggressively to escalate investments in infrastructure and human capacities. This would improve economic conditions and reduce the cost of trading. The results also confirm that wider integration is particularly fruitful, as synergies tend to be triggered more effectively when a larger pool of countries work together. The net gain of Africa-wide integration is significantly larger than the gain from regional integration; likewise, sector gains and losses are also more pronounced. These suggest that significant restructuring of economic activity might take place within regions, which in turn emphasizes the importance of building institutional frameworks and designing industrial policies with a clear regional perspective in mind. Furthermore, changes in sectoral output come accompanied by changes in employment, suggesting that it would be appropriate to design employment policies along with investment and industrial strategies.

Integration-driven changes in employment are likely to increase job opportunities for skilled workers and improve their wages. This result not only demonstrates the importance of investing in education and health but also suggests the relevance of looking at education and health from a regional perspective. With large sections of the population acquiring only basic skills, the simulation results also suggest the need to reinforce complementary employment generation policies for less skilled workers.

References

African Development Bank, 'Informal Cross Border Trade in Africa: Implications and Policy Recommendations', *Africa Economic Brief*, 2012, Vol. 3, Issue 10, November.

Bchir, H. et al., 'DIVA, A CGE Model for the study of African Diversification', *African Trade Policy Centre Work in Progress*, No. 63, UN Economic Commission for Africa, Addis Ababa, 2006.

CMEPSP, 'Final Report', Commission on the Measurement of Economic Performance and Social Progress, Paris, 2009, *www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf.*

COMESA, 'Treaty for the Establishment of COMESA', COMESA, Lusaka, 1994.

EAC, 'Treaty Establishing the East African Community', East African Community Secretariat, Arusha, 1999.

EAC, 'Protocol on the Establishment of the East African Customs Union', East African Community Secretariat, Arusha, 2004.

EAC, 'Protocol on the Establishment of the East African Common Market', East African Community Secretariat, Arusha, 2009.

Geda, A. and H. Kilbret, 'Regional economic integration in Africa: A Review of problems and prospects with a case study of COMESA', *SOAS Working Paper*, No. 125, School of Oriental and African Studies, London, 2002.

Geoffrey, G., 'Kenya's Trade Liberalization of the 1980s and 1990s: Policies, Impacts, and Implications', Background paper to 'The Impact of the Doha Round on Kenya', Carnegie Endowment for International Peace, Washington, DC, 2009.

Government of Kenya, 'Economic Recovery Strategy Paper for Wealth and Employment Creation', Government Printer, Nairobi, 2003.

Government of Kenya, 'Kenya Vision 2030: A Globally Competitive and Prosperous Kenya', Government Printer, Nairobi, 2007.

IGAD Secretariat, 'Agreement establishing the Intergovernmental Authority on Development', Intergovernmental Authority on Development, Djibouti, 1996.

Intergovernmental Panel on Climate Change (IPCC), 'Climate Change 2001: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Third Assessment Report', Cambridge University Press, Cambridge, 2001.

Karingi, S. and S. Mahinda, 'Structural Adjustment Policies and the Kenyan Economy: A Computable General Equilibrium Analysis', *African Development Review*, 2001, Vol. 13, No. 1, June.

Karingi, S.N., M. Siriwardana and E.E. Ronge, 'Implications of the COMESA free trade area and the proposed customs union: An empirical investigation', paper presented at the Fifth Annual Conference on Global Economic Analysis, Taipei, Taiwan, 5–7 June 2002.

Karingi, S.N. and F. Belay, 'Beyond Political Rhetoric – the Meaning of the Grand Eastern and Southern Africa FTA', Mimeo, Trade and International Negotiation Section (TINS), Trade, Finance and Economic Development Division, UN Economic Commission for Africa, Addis Ababa, 2009.

Kimalu, P., N. Nafula, D. Manda, G. Mwabu and M. Kimenyi, 'A Situational Analysis of Poverty in Kenya', *KIPPRA Working Paper*, No. 6-2002, Kenya Institute for Public Policy and Research Analysis, Nairobi, 2002.

KSC, 'Transport and logistics: cause and effects on competitiveness of Kenyan Shippers', Kenya Shippers Council, Nairobi, 2009.

Maruping, M., 'Challenges for regional Integration in Sub-Saharan Africa: Macroeconomic Convergence and Monetary Coordination' in *Africa in the World Economy. The National, regional and International Challenges*, Fondad, The Hague, 2005.

References

Mbithi, M., 'Regional integration and human development: opportunities and challenges ahead. The case of Kenya in EAC', background study to the study on 'Regional Integration and Human Development: A Pathway for Africa', United Nations Development Programme, New York, 2011.

Nzuma, M.J., S. Gbegbelegbe and J.T. Karugia, 'A quantitative assessment of the COMESA customs union', *ReSAKSS Working Paper*, No. 30, International Food Policy Research Institute, Washington, DC, 2009.

OAU, 'Organization of African Unity Charter', Organization of African Unity, Addis Ababa, 1963.

OAU, 'Treaty of the African Economic Community', Organization of African Unity, Abuja,1993.

Odhiambo, W. and G. Otieno, 'Trade Policy Reforms and Poverty in Kenya: Processes and Outcomes', background paper prepared for the 'Trade, Development, Poverty Linkages' project for CUTS International, Nairobi, 2006.

Omolo, M.W.O., 'The impact of trade liberalization on poverty in Kenya: a microsimulation', 2012.

Ramirez, A., G. Ranis and F. Stewart, 'Economic Growth and Human Development', *QEH Working Paper*, No. 18, Oxford University Department of International Development, Oxford, 1998, *economics.ouls.ox.ac.uk/12332/1/qehwps18.pdf.*

Sharma, B. and A. Gani, 'The Effects of Foreign Direct Investment on Human Development', *Global Economy Journal*, 2004, Vol. 4, Issue 2, Article 9.

UN, 'World Economic Situation and Prospects (WESP) 2011', United Nations, New York, 2011.

UNDP and Republic of Kenya, 'Kenya National Human Development Report 2009. Youth and Human Development: Tapping the Untapped Resource', United Nations Development Programme Kenya, Nairobi, 2010.

UNECA, 'Assessing regional Integration in Africa IV: Enhancing Intra-African Trade', United Nations Economic Commission for Africa, Addis Ababa, 2010.

Were, M., R. Ngugi, P. Makau, J. Wambua and L. Oyugi, 'Understanding Reform Process in Kenya', Mimeo, 2005

World Bank, 'Non-tariff measures on goods trade in the East African community: synthesis report', Report No. 45708-AFR, World Bank, Washington, DC, 2008a.

World Bank, 'Kenya Investment Climate Assessment', Regional Program for Enterprise Development (RPED), Africa Finance and Private Sector (AFTFP), World Bank, Washington, DC, 2008b.

World Bank, 'Doing Business 2010', World Bank, Washington, DC, 2009.

World Bank, 'Connecting to Compete 2010. Trade Logistics in the Global Economy', World Bank, Washington, DC, 2012.

World Economic Forum, 'Global Competitiveness Index 2009–2010', World Economic Forum, Geneva, 2010.

Zepeda, E., M. Chemingui, H. Bchir, S. Karingi, C. Onyango and B. Wanjala, 'The Impact of Doha Round on Kenya', Carnegie Endowment for International Peace, Washington, DC, and United Nations Development Programme, New York, 2009.

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