

Report No. 65699-AFR

East African Community

Reshaping Economic Geography of East Africa: From Regional to Global Integration

June 2012

Poverty Reduction and Economic Management Unit
Africa Region



Document of the World Bank

ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
EAPP	East Africa Power Pool
EIZ	Economic integration zone
EU	European Union
ICT	Information and communications technology
MERCOSUR	Common Market of the South (Mercado Común del Sur)
REC	Regional economic community
SAR	Special administrative region
SEZ	Special economic zone
SIP	Singapore–Suzhou Industrial Park
TTRI	Total Trade Restrictiveness Index
VET	Vocational Education and Training
WAEMU	West African Economic and Monetary Union

All dollar amounts are U.S. dollars unless otherwise indicated.

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ACKNOWLEDGMENTS

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The report benefited from a background paper “East African Economic Integration: Benefits and Challenges for the EAC Partner States” prepared by five researchers representing economic policy think tanks of the EAC countries, Pontien Ntimpirangeza, Christopher Onyango, John Bosco Kanyangoga, Monica A. Hangi, and Luka J. Okumu.

The team owes a debt of gratitude to its counterparts at the EAC Secretariat, Governments of the EAC Partner States, and the region’s inter-governmental and non-governmental institutions for the guidance and useful comments they have provided as this report was prepared. In particular, the team would like to thank Richard Sezibera, Enos Bukuku, Hafsa Mossi, Jean Rigi, David Nalo, George Bill Kayonga, Stergomena Tax, Edith Mwanje, Uledi Mossa, Doreen Katusiime, Lawrence Kiiza, Vivienne Apopo, Nyamajeje Weggoro, Philip Wambugu, Tharcisse Kadede, Flora Musonda, Agatha Nderitu, Esther Mkwizu, Hoseana Bohela Lunogelo, Sarah Sewanyana, Bede Lyimo, Delphin Rwegasira, Abubakar Moki, Abdullah Makame, Michael Baingana, Andrew Kaggwa, Moses Ogwal, Lauren Bategana, Claver Ntasehera, Dora Simbare, Econie Nijimbere, and Francois Butoke.

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Executive Summary

Five East African countries—Burundi, Kenya, Rwanda, Tanzania, and Uganda—have made solid progress on integrating regionally in the East African Community (EAC) since 1999. Such advances are crucial, as integration in East Africa has the potential for higher than usual benefits: Burundi, Rwanda, and Uganda are landlocked, with very high costs to their economies. Successful integration would transform the five countries into one coastal, regional economy, slashing such costs.

Looking at the East African integration through the lens of economic geography helps to improve sequencing of the integration process and to develop new policies to complement ongoing efforts, maximizing their benefits. Reducing disparities in provision of social services would increase the chances of workers from the inland parts of the EAC to find jobs, especially as administrative obstacles to labor mobility are being removed under the Common Market Protocol. Implementing and deepening the current program of regional infrastructure improvements would ensure that consumers and producers throughout the region are better connected to each other and to global markets. Integration policies facilitating greater economic activity in the coastal areas would help the EAC take advantage of the global demand for manufactured goods and thus to promote employment. That would also generate substantial demand for services and agricultural goods produced inland, amplifying the benefits of the customs union.

EAC problems in 3D perspective: Distance, Divisions, Density

East Africa is a long way from the world's major markets, or "global core," but such distance is not insurmountable—look at East Asia's export success. The main issue is economic distance. The three landlocked countries, with about 40 percent of the EAC's population and about 30 percent of its economic activity, have a much greater economic distance than the coastal countries to these major markets, because transport by sea is much less expensive than by land or air. A customs union (officially phased in between 2005 and 2010) has on paper removed obstacles to moving goods within the EAC, but unofficial nontariff barriers remain, such as police roadblocks and discrimination against landlocked countries' exports and imports in the ports. Strong domestic rent-seeking institutions in the coastal countries benefit from these barriers—although the wider coastal economies do not—and landlocked countries have no effective redress.

Equally, the coastal countries are responsible for investments in infrastructure facilities used by firms in landlocked countries, which partly explains why, despite recent improvements, there is underinvestment and poor physical quality of connective, or cross-border, infrastructure.

One reason that partner states do not always honor their obligations is that officials have too few incentives to delegate responsibilities to the EAC even when it is in the common interests of all states. No regional entities have the authority to compel officials: these bodies are weak, without enforcement mechanisms. In addition, institutional capacity in partner states is below the global average (according to the Worldwide Governance Indicators), though it has generally improved over the last decade. This makes it difficult to remove the critical economic divisions discussed above.

Economic density is another issue. It is higher, and increasingly so, in the parts of the EAC that are more distant from world markets. This creates a risk that agglomeration effects (firms locating where other firms are) will lead to economic activity concentrated outside the main regionalizing and globalizing streams, and hence to lower productivity than such activity might have on the coast. Nairobi—the largest urban and industrial agglomeration—is 500 kilometers from the sea, and the larger coastal cities of Dar es Salaam and Mombasa have few industrial activities—and inefficient ports.

But how can the region overcome these problems?

Go coastal and think global: Reducing economic distance

Regional integration will work faster and better if it reduces the economic distance between the EAC economy and the global core and helps to diversify export markets of the regional economy. Since the size of the EAC's external markets vastly exceeds that of its internal market, the EAC partner states need to jointly leverage global demand. And because the EAC will need to compete with coastal parts of other regions that already benefit from huge agglomeration effects, such as East Asia, the difficulty of this task is compounded by the region's economic density. Economic activity is denser, and increasingly so, in the inland parts of the EAC, which are more distant from world markets.

Three main thrusts can help to correct the problem of inland economic density, and thus reduce the economic distance to the global core.

Reducing disparities in education to promote labor mobility. Shifting the economic and population density toward the coast will require substantial labor mobility. Educated (and healthier) people are more mobile and more employable, allowing all countries in the medium to long run to benefit from lower spatial disparities in provision of education (and other) social services as well as in human development outcomes.

The countries receiving migrants would benefit because the migrants would be more productive and the countries' social services would less likely be overburdened. The sending countries would benefit from reduced labor-market pressures at home, suggesting higher wages and lower unemployment (or both), as well as greater remittances.

Regionalizing connective infrastructure. Connecting the landlocked partner states to the coast will enable them to bear some of the investment financing burden in exchange for having a say in managing (and policing) regional roads and ports. A regionalizing approach would involve:

- Reforming the institutional framework of the region's infrastructure to improve its performance through greater reliance on forces of competition and on economies of scale and scope.
- Striking an appropriate balance between the functions of government (in a redefined and refocused manner) and the private sector, and attracting heavy foreign private investment.
- Improving regional institutional capacity, including harmonizing regulatory frameworks and administrative procedures.

Establishing an economic integration zone. A coastal economic integration zone—on or near the coast, with a port, governed and taxed jointly by the EAC partner states, and with some functions

privately run—offers real prospects of improving the EAC’s business climate and infrastructure. Loosely modeled on the special export zones that had such success in China and on the concept of charter cities similar to Hong Kong SAR, it would allow all partner states to benefit from concentrated economic activity, even outside their territory. It would also serve as a testing ground for EAC-wide institutions.

Start small and scale up: Sequencing integration

Getting sequencing right will be key for success, but also a challenge because international experience does not offer any blueprints on regional economic integration for the EAC’s circumstances. Limited capacity in public institutions makes it hard to follow the European model, and the asymmetry of coastal and landlocked partner states dims the allure of the East Asian model.

So the EAC must plow its own furrow. In parallel with removing some of the nontariff barriers and unofficial obstacles, having started to raise the quality of infrastructure and social services, and perhaps having started along the road to the economic integration zone, EAC policy makers may move to fiscal pooling and later to monetary integration.

Fiscal pooling. Directed at rebalancing the unequal distribution of costs and benefits of integration policies, fiscal pooling entails partial integration of the fiscal policy of nations that come together to set up a pool to coordinate expenditure or revenue decisions (or both). Such pooling would help East African integration in four ways: financing cross-border infrastructure, reducing spatial disparities in providing social services, improving connectivity by charging customs duty at the point of entry, and mitigating the asymmetric impacts both of integration policies and of external economic shocks.

Such pooling involves political and technical problems of course. The challenge is to find a way to start small and scale up gradually. One or more of the relatively simple arrangements—perhaps a simple insurance scheme against certain asymmetric shocks involving little or no redistribution—might both be feasible and potentially lay the groundwork for deeper fiscal cooperation. Fiscal pooling can also possibly serve as a means of ensuring that the indicators of economic convergence do not deteriorate after Uganda begins to export oil in a few years.

Monetary integration. Monetary union would help to reduce the cost of economic transactions in different EAC countries, and hence economic divisions, but the indicators of economic convergence need to improve first. Hence integration on this front should be considered a longer-term move. Institutional capacity of the central banks of the EAC partner states will be used better for financial sector integration.

Compensate the least fortunate: Sustaining integration politically

Winners and losers will emerge from regionalizing policies, and to keep the politicians and their constituents on board, those who lose initially will need to be compensated until they feel the beneficial impact of regionalization further out.

Growth of demand for labor in the coastal countries is slow, a scenario that at best will change only gradually. Higher fertility means that young age-cohorts in some landlocked countries are larger, making it harder to provide them with the education to make them employable elsewhere.

So although labor mobility will help to alleviate poverty in these countries, its impact will be minimal in the short to medium term. Improving investment in social services and productive infrastructure in Burundi, Rwanda, and some parts of Uganda is therefore critical, as is finding ways to help EAC countries to adjust to asymmetric shocks.

Donors have a role, especially in the earlier years before fiscal pooling has an impact. Potentially, the World Bank (and others) can facilitate integration and make it more politically sustainable by emulating and encouraging fiscal pooling in its lending practices. It can do this in two main forms: policy lending to implement integration policies that have asymmetric impacts on partner states, and to encourage fiscal pooling; and investment lending for connective infrastructure and productive infrastructure of the landlocked countries, and for provision of social services.

Reshaping East Africa's Economic Geography: From Regional to Global Integration

Overview

Over the last three decades, the world's largest developing economies—China and India—have witnessed large-scale migration of their workers to their coastal areas. A trip on National Highway 321 in China, east from Chengdu in Sichuan to Shenzhen in Guangdong is a journey through economic development.¹ As migrating workers travel east, they leave an agrarian realm in which they receive few benefits from working close to others, and enter a realm of “agglomeration economies,” in which being near other people produces huge benefits.

Shenzhen attracts young workers—90 percent of its 8 million residents are of working age. It specializes in electronic goods, and makes them in enormous quantities. In 2006 its exports exceeded India's, making its seaport the fourth busiest in the world. Propelled by the forces of agglomeration, labor mobility, and specialization, and helped by its nearness to Hong Kong SAR, Shenzhen has been the fastest-growing Chinese city since 1979, when it was designated a “special economic zone.”

This story is being replayed in India. Sriperumbudur used to be known mainly as the place where Prime Minister Rajiv Gandhi was assassinated in 1991. In 2006 his widow, Sonia Gandhi, watched as Nokia's telephone plant churned out handset number 20 million. Key to Sriperumbudur's success is the town's closeness to a large port city, Chennai, just as Shenzhen's proximity to Hong Kong SAR was instrumental in its growth.

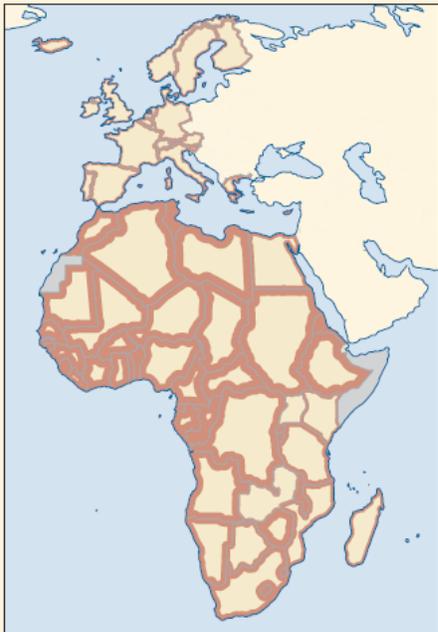
Such an outburst of growth has not yet happened in East Africa. It needs to, if the region's countries are to become vibrant, middle-income economies this century. East Africa is difficult terrain for economic integration, with many neighbors and high transport costs (map 1), in a continent with many artificial borders. East Africa is distant from some of the major world markets: it costs about twice as much to ship a container from there to the east coast of the United States as from East Asia or Latin America. Economic activity is concentrated in a couple of areas next to the coast (map 2), but large stretches of the coastal zone are virtually empty.

For East Africans who live in the landlocked countries of Burundi, Rwanda, and Uganda, expensive access to regional markets mirrors that to global markets. They must move goods long distances over land, which is dear. They also have to rely on the goodwill (and infrastructure) of neighbors for access to ports and, ultimately, markets.

As a result of similar (or worse) problems throughout the continent, a map of the world's economic geography depicts Africa as a slender peninsula—bad news economically (map 3).

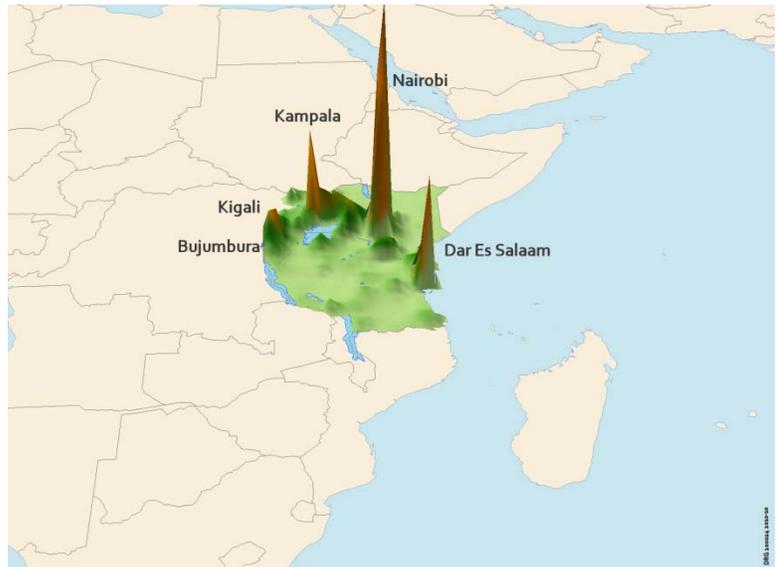
¹ World Bank 2008a.

Map 1 Division—what prevents progress in Africa does not in Western Europe



Source: WDR 2009 team (see chapter 3 for details).
 Note: The width of borders is proportional to a summary measure of each country's restrictions to the flow of goods, capital, people, and ideas with all other countries.

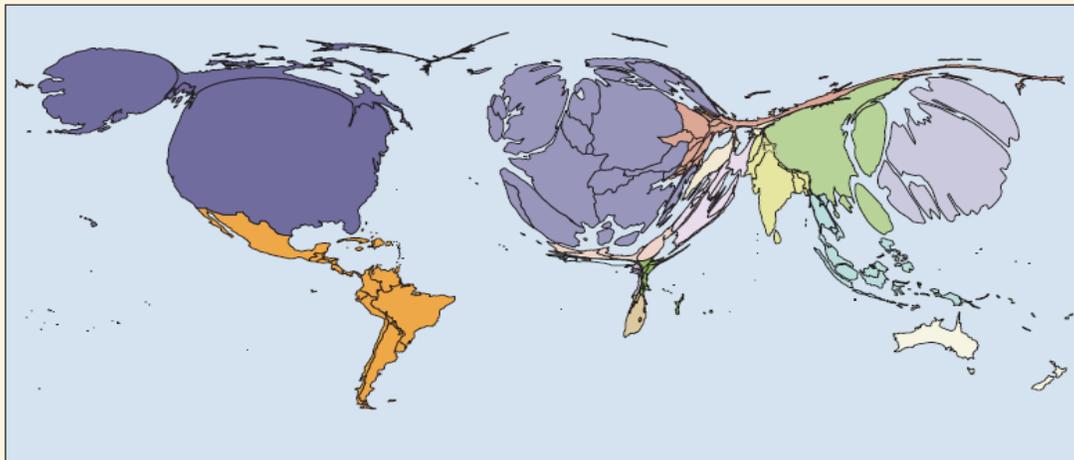
Map 2 Economic density map of the East African Community



Source: World Bank staff estimates.

Map 3 How markets view the world—the map of economic geography

A country's size shows the proportion of global gross domestic product found there



Source: WDR 2009 team using 2005 GDP (constant U.S. dollars).
 Note: The cartogram was created using the method developed by Gastner and Newman (2004). This map shows the countries that have the most wealth when GDP is compared using currency exchange rates. This indicates international purchasing power—what someone's money is worth if spent in another country.

According to the World Bank (2008a), the economic–geographic changes required to accelerate and share economic growth globally can be characterized along three dimensions of spatial transformation: *division*, *distance*, and *density*. These three dimensions conform closely to the more technical notion of market access, and have to be reshaped if the development challenges of less spatially endowed countries are to be met. Market access is an indicator of economic opportunity for a location and tells the size of the potential markets in the vicinity, and the ease of reaching them. Market access across geographic scales (international, national, and local) determines where economic activity can thrive and thus where firms will locate and populations grow.

Over the last few years, East Africa has made some progress in reshaping its economic geography, but numerous challenges remain. The East African Community (EAC) is at the moment one of the most dynamic and advanced regional integration projects in Sub-Saharan Africa.

The EAC was reestablished² by Kenya, Tanzania, and Uganda in 1999 following a gradual institutional convergence that was helped by global economic and political trends. By the late 1990s, all three had capitalist economies and had held multiparty elections, although their democratic institutions were still maturing. Burundi and Rwanda joined in 2007.

The new EAC is integrating more gradually than its precursor, marking up some successes. A customs union was officially phased in between 2005 and 2010 (although numerous nontariff barriers to trade remain). Phasing-in of a common market began in 2010. Talks about monetary union are under way (but indicators of the necessary economic convergence are unhelpful and may deteriorate further after Uganda begins to export oil in a few years). Political federation is the EAC's declared ultimate objective, but some countries (such as Rwanda and Uganda) support it much more than others (Tanzania's official position is that this "should not be fast-tracked").

Many economic and social indicators show wide disparities. Rwanda, Tanzania, and Uganda had per capita incomes of around \$450–\$500 in 2009; Kenya about \$780; and Burundi only about \$150. Average years of schooling range from 3.1 in Burundi to 7.2 in Kenya. The three landlocked countries of the EAC are much more densely populated than the coastal ones, and with high fertility rates such pressures can only get worse.

Advances in East African integration are crucial, as it has the potential for higher than usual benefits because for Burundi, Rwanda, and Uganda the costs of being landlocked are very high, while successful integration would transform the five countries into one coastal, regional economy, slashing such costs.

But the same fact of geography means that integration policies for coastal versus landlocked economies, including government revenue and spending, will have asymmetric impacts. Unequal burdens or benefits of the costs and receipts of integration complicate the political economy of integration.

Carrying forward ambitious integration agreements faces numerous challenges. Important issues such as permanent residency and the right of access to, and use of, land are subject to national policies (thus restricting mobility of labor and capital) rather than being a part of the common

² A predecessor had folded in the 1970s, as the partner states diverged in their political and economic paths, and disagreed over distributing common fiscal resources.

market protocol; and the EAC's plans for monetary union by 2012 are unlikely to be realized given the current state of preparation.

This study aims to support regional integration efforts in various ways. It analyzes the role of economic geography in integration, both as it affects returns to integration and as it creates disincentives to undertake policy reforms. And it offers a menu of policy actions to address these asymmetric impacts, tying in with the recently adopted Fourth Development Strategy of the EAC (box 1.2). The study focuses on the big picture and on linkages and complementarities among economic integration policies, as well as on contributions of those policies to achieving integration's objectives. The study follows the analytical approach of the *World Development Report 2009*³ and combines it with political-economy analysis to put into practice, in the EAC, the *World Development Report* findings on international integration. The study does not focus on the national and local dimensions of the EAC's economic geography.

EAC problems in 3D perspective: Distance, Divisions, Density

East Africa is a long way from the world's major markets, or "global core," but such distance is not insurmountable—look at East Asia's export success. The main issue is economic distance. The three landlocked countries, with about 40 percent of the EAC's population and about 30 percent of its economic activity, have a much greater economic distance than the coastal countries to these major markets, because transport by sea is much less expensive than by land or air. The customs union has on paper removed obstacles to moving goods within the EAC, but unofficial nontariff barriers remain, such as discrimination against landlocked countries' exports and imports in the ports, and police roadblocks. Strong domestic rent-seeking institutions in the coastal countries benefit from these barriers—although the wider coastal economies do not—and landlocked countries have no effective redress.

Equally, the coastal countries are responsible for investments in infrastructure facilities used by firms in landlocked countries, which partly explains why, despite recent improvements, there is underinvestment and poor physical quality of connective, or cross-border, infrastructure.

One reason that partner states do not always honor their obligations is that officials have too few incentives to delegate responsibilities to the EAC even when it is in the common interests of all states. No regional entities have the authority to compel officials: these bodies are weak, without enforcement mechanisms. In addition, institutional capacity in partner states is below the global average (according to the Worldwide Governance Indicators), though it has generally improved over the last decade. This makes it difficult to remove the critical economic divisions discussed above.

Economic density is another issue. It is higher, and increasingly so, in the parts of the EAC that are more distant from world markets. This creates a risk that agglomeration effects (firms locating where other firms are) will lead to economic activity concentrated outside the main regionalizing and globalizing streams, and hence to lower productivity than such activity might have on the coast. Nairobi—the largest urban and industrial agglomeration—is 500 kilometers from the sea, and the larger coastal cities of Dar es Salaam and Mombasa have few industrial activities—and inefficient ports.

But how have other regions overcome the tyranny of economic distance?

³ World Bank 2008a.

International experience

The Association of Southeast Asian Nations (ASEAN) and the Common Market of the South (Mercado Común del Sur or MERCOSUR) are reasonably close to large markets (Japan and the United States, respectively) and each has only one landlocked country (which accounts for very little regional output). This creates incentives for private firms to locate parts of their value chains in different partner states to benefit from localization economies and specialization. Regional private associations have strong connections with national governments and advocate integration policies. The process is also catalyzed by multinational corporations with headquarters in the larger markets closest to the region.

Higher capacity and similarity of the partner states' national institutions make it easier to set up regional public institutions and deepen economic integration. In the European Union, vibrant democracies and a strong rule of law on one side and economic integration on the other created the conditions for such institutions. Governments who have to follow the will of their voters and the rules of an integrated economic system—the two not always coinciding—have incentives to delegate authority to a central body. This promotes further economic integration. To take an example, once the European Commission was established, it filed cases on anticompetitive national practices with the European Court of Justice, which ruled against those practices. Hence the process of integration became politically self-sustaining, driven by regional public institutions. Private firms also benefited tremendously: because Europe is a major part of the global economic core, regional integration meant improved access to very large markets for private firms.

Still, overambitious or poorly sequenced policies can slow or even halt regional integration, as seen in the plethora of arrangements in Africa that remain little more than projects on paper. Even the more successful, such as the West African Economic and Monetary Union (WAEMU), are not immune. WAEMU's primary objective was, initially in a monetary union, to import monetary stability by pegging a common currency to the French franc (and later the euro). Success was elusive though, because the partner states, trading much less with each other than with the rest of the world, were hit by asymmetric external shocks.

So, although in the 1960s and 1970s WAEMU worked reasonably well on favorable terms of trade and labor mobility, declines in commodity prices—pulling commodity importing and exporting members in opposite directions—and nominal appreciation of the French franc against the U.S. dollar sent the union into a major crisis in the mid-1980s. Some governments' political commitment waned, prompting backlashes against labor mobility across the states.

What then must EAC governments do to ensure that the EAC project does not suffer from overambition, poor sequencing, and waning political commitment? This report offers three, linked approaches: think global, start small and scale up gradually, and compensate the least fortunate.

Go coastal and think global: Reducing economic distance to global markets

Regional integration will work faster and better if it reduces the economic distance between the EAC economy and the global core. Since the size of the EAC's external markets vastly exceeds that of its internal market, the EAC partner states need to jointly leverage global demand. This task is exacerbated by the inland economic density in the region, especially as the EAC will need

to compete with coastal parts of other regions such as East Asia, which already benefit from huge agglomeration effects.

Three main thrusts can help to correct the problem of the inland economic density, and thus reduce the economic distance to the global core.

- Institutions—shorthand for policies that are *spatially blind* in their design and should be universal in their coverage. Some of the main examples are regulations affecting labor, land, and international trade, as well as social services such as education and health, financed through tax and transfer mechanisms.
- Infrastructure—shorthand for policies and investments that are *spatially connective*. Examples include roads, railways, ports, and communication systems that facilitate the movement of goods, services, people, and ideas.
- Interventions—shorthand for the *spatially targeted* programs that often dominate the policy discussion. Examples include slum clearance, fiscal incentives for manufacturing firms, and preferential trade access for poor countries in developed-country markets.

This report looks at what a specific policy package consisting of these three elements may include. It argues that:

- reducing disparities in provision of social services by making them *spatially blind* should be a priority for increasing labor mobility, which is in turn critical for addressing the problem of inland economic density;
- regionalizing *spatially connective* infrastructure may help to reduce economic divisions within the region if it helps the EAC countries to allocate costs and benefits of connectivity more equitably among them;
- developing joint *spatially targeted* interventions (establishing an economic integration zone) in coastal areas may help the East African economy to leverage global demand and to pilot future common institutions in a place where they have the highest chance of success.

The following paragraphs discuss these three thrusts in more detail.

Reducing disparities in education to promote labor mobility. If economic and population density is to shift toward the coast, this will require substantial labor mobility. International labor mobility partly depends on formal agreements among countries and on the number of borders within a region, but even to greater extent on economic incentives and endowments. Internationally mobile workers go to richer, larger, better educated countries. Educated (and healthier) people are more mobile and more employable, allowing all countries in the medium to long run to benefit from lower spatial disparities in provision of education (and other) social services as well as in human development outcomes.

The countries receiving migrants would benefit because the migrants would be more productive and their social services would less likely be overburdened. The sending countries would benefit from reduced labor-market pressures at home, suggesting higher wages and lower unemployment (or both), as well as greater remittances.

Yet at the moment disparities in both human development outcomes and in public spending per child on education are very wide: Kenya, for example, spends about six times as much on each

child as Burundi, and more than twice as much as any other EAC partner state. Reducing these disparities will take time. Pooling resources for social spending may help.

Another longer-term option is accelerating fertility reduction in the landlocked countries (which on average have higher fertility rates) by putting population policies on the EAC agenda, as it would help to increase investment in education per student (other things remaining equal). Education expenditure per child, perhaps the most important indicator for human capital development, depends heavily on demographic variables. Many young dependents per worker hinder human capital investment in the EAC. Growing young age-cohorts leave less money for educational spending per child if fiscal spending—usually tied to gross domestic product (GDP)—does not get move ahead of growth.

Changes in the age structure of population also affect size of the domestic market and hence fiscal space of a country. These changes are usually driven by a demographic transition from high mortality and high fertility to low mortality and low fertility, a transition first observed in Western Europe during the 18th and 19th centuries. It has taken root in East Asia, South Asia, and the Middle East, and is apparent in Latin America and the Caribbean. Many demographers now believe that it has started in most of Sub-Saharan Africa as well.

Increasing the share of working-age individuals in the total population may positively affect income per capita growth—the demographic dividend—through three sets of effects:

- *Translation effects owing to the differential growth of the total population and the working population.* If the share of the working-age population is increasing, any growth of GDP per worker translates into higher growth of GDP per capita, unless the difference is offset by an increase in the unemployment rate or a fall in the labor force participation rate.
- *Savings effects.* More people of working age mean a higher share of savers in the population. Also, a higher probability of surviving into old age may encourage higher savings rates.
- *Human capital effects.* An increase in life expectancy generally implies better health and increases the demand for education; a lower dependency ratio implies higher per capita expenditure on education.

Simple projection exercises are used to assess the size of fiscal transfers necessary to mitigate the imbalances in education spending caused by divergent demographic developments in the EAC. Their aim is to quantify the potential costs of a coordinated policy effort to bring education expenditure per child to the level that would correspond to a scenario where fertility rates across EAC countries have converged. These simulations help to assess the challenges in terms of convergence of education expenditure measures related to the different demographic developments that EAC countries face. One of their results is that lower fertility and the associated demographic dividend will substantially raise not only incomes per capita, but also EAC countries' GDPs.

The results of the projection exercises also suggest that transfers of the size implied by the constant fertility scenario would be difficult to design; on the other hand, even under sensible assumptions of fertility convergence, fiscal transfers (although much smaller) are still required in the medium to long run. (Making such transfers might be politically easier if the funds of the

fiscal pool are also spent on lagging areas of the leading countries, such as parts of Kenya bordering Ethiopia and Somalia).

Removing obstacles to foreign investment in education and designing student and teacher mobility schemes are possible short-term solutions, as are moves to make remittance transfers easier. Host countries can also facilitate remittances and provide identity cards to workers from other countries.

Regionalizing connective infrastructure. Years of very weak operating performance due to poor governance, organizational deficiencies, revenue inadequacy, and underinvestment have led to deficient and in some cases what are, in effect, decapitalized regional infrastructure networks.

Such deficiencies seriously undermine the region's competitiveness. Freight costs per kilometer are estimated to be 60–70 percent higher than in the United States and Europe and 30 percent higher than in Southern Africa. For the landlocked countries, transport costs can be as high as 75 percent of the value of exports.

Regional connectivity is being hampered by ports with high berth and yard congestion, slow customs clearance, and excessive dwell times for ships. Transparency and efficiency in clearance and release of goods at the ports is hampered by administrative complexity of formalities, especially in Mombasa; limited skills and ineffectiveness of staff and agents, especially in Dar es Salam. Short, inadequate grace periods are provided for the imports prior to the application of demurrage charges and application of insurance bonds even on goods destined to the region. All of the above add lengthy delays, congestion, and high cost of offloading and clearing cargo (already limited by the quality of physical infrastructure at these locations) and create considerable scope for discriminatory and fraudulent behavior. Shipment clearance delays also amplify risk of deteriorating product quality, especially for perishable products.

Other challenges include limited compatibility of rail systems, poor service reliability (especially at transfer and locomotive exchange points), and low operating efficiency; and too many graveled roads that are poorly maintained, overloaded, and badly managed.

Intraregional trade is also inhibited by regulatory and administrative hurdles that inflate the costs of, and cause long delays for, freight movements along the region's transport corridors. Such movements suffer from serious delays due to informal stops and checkpoints—formal or informal. Trucks are forced to go over weighbridges, either mobile or grounded, to ensure their compliance with regional axle load and gross vehicle weight standards. The lack of proper equipment and design problems in weighbridges causes congestion and delays. Most often, trucks are stuck in long lines. Weighbridges should normally require three minutes for transit. According to the East Africa Business Climate Index 2008 survey of the East African Business Council, however, trucks on average spend 92 minutes and some weighbridges occupy trucks for up to five hours.

There are also frequent unwarranted roadblocks and checkpoints. Inspections are notorious for their lack of procedural transparency. Officials regularly deviate from agreed inspection procedures and subject drivers to administrative harassment and extortion. According to the same survey, 172,236 days are lost each year as a result of delays at weighbridges, roadblocks, and customs offices, and \$9.8 million is paid in bribes.

Many border crossings have antiquated infrastructure, inadequate coordination between the countries, and congestion. The key problems that plague border crossings have been extensively

documented and include excessive documentary requirements and anachronistic official procedures; insufficient use of information and communications technology systems; questionable due process—lack of transparency, predictability, and consistency in customs activities and determinations; unclear demarcation of responsibilities; and lack of efficient cooperation among a country's customs and other governmental agencies.

Lack of policy harmonization holds back cross-border infrastructure in promoting intraregional trade. Cross-border infrastructure helps to promote intraregional trade only when supported by harmonized regulatory frameworks and administrative procedures—still a work in process in East Africa. Regulations on vehicle dimensions, axle-load limits,⁴ road transit charges, highway codes have yet to be harmonized. Even common definitions of road classes and route numbers are missing. Similarly, rail connectivity is gummed up minimal integration of national technical standards, such as those for building and maintaining railway facilities. Shipping on inland waterways and lakes need to set common regulations on ship registration as well as safety standards, including those on periodic ship surveys, staffing requirements, and aids to navigation and radio communication.

Connecting the landlocked partner states to the coast will enable them to bear some of the investment financing burden in exchange for having a say in managing (and policing) regional roads and ports. A regionalizing approach would involve:

- reforming the institutional framework of the region's infrastructure to improve its performance through greater reliance on forces of competition and on economies of scale and scope;
- striking an appropriate balance between the functions of government (in a redefined and refocused manner) and the private sector, and attracting heavy foreign private investment; and
- improving regional institutional capacity, including harmonizing regulatory frameworks and administrative procedures.

Infrastructure networks exhibit significant economies of scale and scope. Such economies could be more fully exploited if the market boundaries of these industries were expanded beyond national borders. But in the face of global financial instability and retrenchment many multinational utilities are rationalizing their operations and are leaving countries with small infrastructure markets that are noncore to their global activities. Individual countries in East Africa may well be below this threshold size for attracting the interest of foreign utilities and other investors.

The region's infrastructure as a whole, on the other hand, may easily overcome the national size disadvantage. Cross-border infrastructure may therefore yield investment benefits that go beyond exploiting economies of scale and scope in production. Every strategy for addressing the issue of infrastructure bottlenecks should consider the region a single entity and seek to facilitate investments on regional rather than national lines.

Yet benefits from better connectivity through cross-border infrastructure tend to be indirect and long term, as well as asymmetric across countries. Costs, though, tend to be incurred

⁴ For axle-load limits, a decision on harmonization has been recently reached at a technical level, and is expected to receive final approval in April 2012.

immediately. This mismatch makes it hard for countries to agree on the appropriate allocation of costs, especially for large projects. Consequently, there is a tendency for individual governments to underinvest in such infrastructure.

In addition, because cross-border infrastructure typically extends over several countries, it also gives rise to potentially important coordination problems. (In fact, “missing links” in major cross-border roads are common.) Such problems are exacerbated if the project has asymmetric country effects.

Taken together, the above factors—inadequacy of infrastructure networks designed for national markets in the face of growing integration, potential underinvestment due to spillovers, and the risk of coordination failures—suggest an important role for regional institutions in overseeing and managing cross-border infrastructure. The role of supranational institutions is especially important when the distribution of the investment burden differs substantially from the distribution of expected benefits. Regional institutions can analyze economic and financial feasibility, as well as the distributional consequences of cross-border infrastructure projects, in a nonpartisan manner. Thus they could facilitate regional agreements and compensation schemes—a task usually beyond the wit of national institutions. Regionalizing regulation may therefore help to enhance policy credibility and commitment and to overcome constraints in technical capacity.

Regionalizing infrastructure should include two strategic pillars: eliminating cross-border infrastructure bottlenecks; and promoting regional policy harmonization (alongside institutional capacity building).

Obtaining consensus from all governments in East Africa for a regional infrastructure policy and regulation is problematic due to different attitudes and commitments toward reform, as well as concerns about national sovereignty. It requires much cooperation and trust between countries—perhaps more than now exists in the region. Thus initially, regionalization efforts could focus on promoting regional regulatory cooperation as a more realistic option for alleviating scarce country regulatory expertise and resources. At the start, regional regulatory entities in roads, rail, and energy could be established to facilitate information exchange and offer nonbinding advice on technical matters. Consensus for regional regulatory agencies could then increase as more countries reform, as gains from regional policy coordination and trade become more apparent, and as countries (especially the smaller ones) confront the costs and staffing challenges of creating and maintaining national regulators.

The initial design of an effective redistribution mechanism would be much easier if it were based on cross-border infrastructure as a whole. For example, simultaneously regionalizing transport and energy might be politically more acceptable to both Kenya (benefiting from Uganda’s hydro and Tanzania’s natural gas resources) and Uganda (benefiting from road and rail improvements in Kenya, thus facilitating access to Mombasa port). As long as regional integration provides a substantial economic dividend to some of the participating countries, designing compensation mechanisms that benefit all of them should be possible. And both returns and political feasibility of regional infrastructure projects might be improved if these projects help the coastal economies to improve their access to markets and natural resources of inland countries beyond the EAC, such as the Democratic Republic of Congo or Southern Sudan.

Establishing an economic integration zone (EIZ). Unlike the EAC, countries or regions that leverage global demand for goods generally use coastal areas for production, because they are

less economically distant from the global core, given the much lower costs of water transport. A coastal economic integration zone—on or near the coast, with a port, governed and taxed jointly by the EAC partner states, and with some functions privately run—offers real prospects of improving the EAC’s business climate and infrastructure. It would allow all partner states to benefit from concentrated economic activity, even outside their territory. It would also serve as a testing ground for EAC-wide institutions.

A commercially focused, regionally designed EIZ can tackle many of the political-economy concerns of agglomeration. If implemented effectively and with truly open labor, capital, and goods markets, such a zone could help to ensure that some of the benefits of agglomeration are distributed as evenly as possible across partner states. Thus it may offer a politically expedient and practical way of piloting federation, allowing each partner state to test how processes of federation may play out within a tightly defined commercial “pilot” in advance of committing itself economywide.

The EIZ could be designed in line with the “wide area” special economic zones (SEZs) usually associated with the Chinese model. These generally occupy a surface area greater than 10,000 hectares, with mixed-use developments (including industrial, commercial, and real estate), and normally with a resident population. It would function as a new city or municipality. The EIZ has similarities to two recent economic policy concepts—charter cities and early reform zones.

Charter cities were born from the observation that bad rules and their bad enforcement constitute a critical factor holding back growth in many developing countries. Inspired by the success of former colonial trade hubs like Hong Kong and, more recently, China’s SEZs, they aim to use unoccupied land to establish a new city that operates outside the existing arrangements of the country, establishing their own tax regimes and legal structures. In this concept, countries can act as host, source, or guarantor: the host country provides the land, source countries provide the residents, and guarantor countries ensure that the charter is enforced. Honduras, for example, recently amended its constitution to allow for charter cities.

Early reform zones are geographic areas in distorted economies, and offer world-class infrastructure, business-friendly services, strong property rights, and the rule of law. They are executed as part of an economywide dual-track strategy, which uses such zones to kick-start a dynamic market economy—“track 1” rapidly expands employment, skills, taxes, and exports. Track 1 also builds a proreform political coalition that can eventually take on opponents of reform and neutralize or coopt them. Reform proceeds slowly in the rent-distorted sector (“track 2”) to avoid early confrontation with rent seekers, which a reforming government is likely to lose. Successful dual-track economic reform in economies as diverse as China, Malaysia, and Mauritius shows that early reform zones can expand a dynamic market economy within 15 years to a scale that dominates the total economy.

While the EIZ is an appealing concept for testing federation, its regional nature aggravates some of the already difficult challenges in carrying forward an SEZ, as political-economy considerations come to the fore. First is the challenge of convincing the host government (or governments) to give up control over the land on which the EIZ is to be based, and to maintain this detachment. Establishing a territory as a separate jurisdiction requires careful consideration and often much political compromise within a country.

When one or more states are required to give up control of their sovereign territory to a collective or supranational authority, these political considerations become acute. The authors are aware of no precedent of a truly transnational SEZ, especially not one in which a country has voluntarily given up control over a portion of its land. But with political will, the potential benefits to a host country should be sufficient to facilitate an arrangement on the land for an EIZ. These considerations may be somewhat easier to overcome in the EAC, as the partner states have already agreed to gradually cede portions of their sovereignty to it.

Perhaps the bigger challenge, however, is in maintaining the commitment of the host government (or governments) and other partners over the long term. This is the challenge of managing the investment risk—the issue of credible commitment. But how do governments—particularly those in developing countries—show a credible commitment to potential investors?

Part of the answer lies having a track record of policy stability. Unstable political regimes are inherently more risky, because the shorter time horizon raises the incentive to confiscate (nationalize) assets (North 1994), or to undertake radical policy shifts. The stability of the polity, not whether it is democratic, is the crucial element. Indeed, a stable autocracy can often offer commitment (at least in the medium term) that is more credible than what a democracy can offer. Growing democracy in the presence of still-weak institutions and the emergence of political competition can make enforcing the commitments of previous policies particularly tricky. This is the situation in many low-income and African countries today. (In the EAC, Kenya is an example.)

The issue of credible commitment is particularly critical for developers and investors in zone infrastructure (with longer-term payoff horizons). But it also affects perceptions among individual firms investing in EIZ operations. Although smaller and more likely to have shorter-term payoffs than those for infrastructure, these investments would still factor in additional risk that the project may be less stable than a traditional SEZ project backed by a single sovereign. The greater the firms view the risk, the smaller their willingness to make commitments such as paying for long-term leases upfront.

Beyond investors, the risks to commitment that the EIZ would face are threefold. First is that the host government (or governments) may renege on its EIZ commitments. It could, for example, reclaim sovereignty over the zone or put up barriers to the interaction between the zone and the national economy. Some of the most likely triggers would be political, social, or economic issues in the host country, including fiscal crisis, economic or political nationalism, and elections and subsequent policy instability.

Potential approaches to overcoming the commitment challenge for the EIZ, given the likely asymmetric distribution of gains, fall into three broad categories. First are the commercial and financial mechanisms that can establish an effective incentive system from the outset, enabling trust. Second are the formal, institutional approaches to ensuring commitment—these are largely related to legal constraints and enforcement mechanisms through which to bind parties to commitments. Finally are the informal approaches to align the mutual interests of stakeholders. These approaches are by no means mutually exclusive—indeed, overcoming the commitment challenge likely relies on using all three.

Start small and scale up gradually: Sequencing integration

The EAC governments will want to choose integration policies that are implementable with their national (and regional) institutions, and gradually scale up as capacity and confidence improve. The first embodiment of the EAC collapsed partly because it was too ambitious. More recently, launching the customs union before national and regional bodies were ready to remove nontariff barriers has proven difficult. If integration helps to gradually increase the institutional capacity of the EAC, it would make the next steps easier.

Getting sequencing right will be key for success, but also a challenge because international experience does not offer any blueprints on regional economic integration for the EAC's circumstances. Limited capacity in public institutions makes it hard to follow the European model, and the asymmetry of coastal and landlocked partner states dims the allure of the East Asian model.

Optimal sequencing of economic integration and design of the safeguards ensuring the sequencing's political sustainability depend not only on the substance of the integration policies but also on the risks that the overall process faces. At this stage of integration, risks of the EAC collapsing are limited for three reasons—convergence in economic policies and institutions, outward orientation of economic policies of the landlocked partner states, and common security interests—but risks of its integration stalling are greater.

Convergence in economic (and political) institutions was among the factors helping to reestablish the EAC. It is also helping to sustain it: having common institutions and more deeply integrated economies may help to further promote institutional convergence, which in turn cements the Community.

After Kenya, Tanzania, and Uganda attained their political independence, the perception that Kenya was benefiting disproportionately from the regional trade arrangements became a major stumbling block. Today, an outward shift in priorities toward the greater importance of global markets makes a difference. For the three landlocked countries, access to international markets depends on transit via Kenya and (less so) Tanzania. Under these conditions, even if a future Ugandan government, for example, thought that Kenya was benefiting too much from the trade arrangements, the idea of going it alone would become much less appealing.

Yet a further factor suggesting why formal East African integration will not fall apart is that security concerns are a leading factor in moving toward regional integration. While the states of the EAC do not face a threat from a single external power, they are bordered by an arc of unstable states, each of which poses a constant security threat to one or more EAC members. The EAC governments have already considered how security cooperation may help to insulate them.

Risks of stalled integration are higher because of asymmetric impacts of integration policies. Economic concentration in the coastal states and the consequent reforms to level the playing field in the landlocked partners have asymmetric—and sometimes opposite—impacts. The same issues that led to the EAC's collapse in the 1970s—failure to agree to larger redistributive transfers—can slow integration, even if they are unlikely to cause the current Community to disintegrate. The main risk now is of a stalled form of integration in which a common market, although existing on paper, still allows substantial barriers to commerce in practice, an issue of particular concern for the landlocked countries. These countries depend on access to the coast through other states, and the cost of this access depends on both immutable, natural features

(distance) as well as those that can be modified by policy (quality of infrastructure, secure right of free passage). However, precisely because African regions are divided into multiple states, some landlocked and some coastal, coastal states do not fully internalize the benefits of policy measures that improve coastal access for others.

To address this problem, the EAC must chart its own course. In parallel with removing some nontariff barriers and unofficial obstacles, having started to raise the quality of infrastructure and social services, and perhaps having started along the road to the EIZ, EAC policy makers may move to fiscal pooling and later to monetary integration.

Fiscal pooling. Directed at rebalancing the unequal distribution of costs and benefits of integration policies, fiscal pooling entails partial integration of the fiscal policy of nations that come together to set up a pool to coordinate expenditure or revenue decisions (or both). Such pooling would help East African integration in four ways: financing cross-border infrastructure, reducing spatial disparities in providing social services, improving connectivity by charging customs duty at the point of entry, and mitigating the asymmetric impacts of integration policies and of external economic shocks.

Such pooling involves political and technical problems of course. The challenge is to find a way to start small and scale up gradually. One or more of the relatively simple arrangements—perhaps a simple insurance program against certain asymmetric shocks involving little or no redistribution—might be feasible and potentially lay the groundwork for deeper fiscal cooperation. Such a program could also possibly serve as a means of ensuring that the indicators of economic convergence do not deteriorate after Uganda begins to export oil.

Connecting and concentrating economic activity. This may require more complex forms of fiscal pooling, and leveraging global demand for agglomeration of economic activity on the coast may create incentives for better connectivity policies. Regionalizing infrastructure and concentrating economic activity where it is most likely to enjoy economies of scale would benefit the EAC economy, but may have asymmetric implications for the EAC partner states. As seen, an important question is how the policies encouraging concentration and connectivity need to be sequenced to facilitate their implementation. If simpler forms of fiscal cooperation such as providing insurance against shocks demonstrate viability, the EAC partner states may also want to consider further forms of such cooperation. Reducing disparities in social services across the EAC, constructing and maintaining efficient cross-border infrastructure, and integrating EAC financial sectors (which have a strong tendency to concentration while being important sources of tax revenue) would require some form of fiscal pooling involving redistribution. This should also start small before possibly expanding after the benefits are demonstrated.

Finally, if the EAC economy manages to leverage global demand and develop economic agglomeration on the coast, success is likely to create political-economy pressures for better connectivity, by means of regionalizing infrastructure or otherwise. This is because the private sector will have the incentives to reduce the costs of obtaining natural resource inputs from elsewhere in the EAC, and is therefore likely to invest in connective infrastructure and to create pressures on the governments to improve the sector's institutional and policy framework.

Monetary integration. Monetary union would help to reduce the cost of economic transactions in different EAC countries, and hence economic divisions, but the indicators of economic convergence need to improve first. Monetary integration should therefore be considered as a

longer-term move. Institutional capacity of the central banks of the EAC partner states will be used better for financial sector integration.

Compensate the least fortunate: Sustaining integration politically

Winners and losers will emerge from regionalizing policies, and to keep the politicians and their constituents on board, those who lose initially will need to be compensated until they feel the beneficial impact of regionalization further out.

Growth of demand for labor in the coastal countries is slow, a scenario that at best will change only gradually. Higher fertility means that young age-cohorts in some landlocked countries are larger, making it harder to give them the education to make them employable elsewhere. Labor mobility will help to alleviate poverty in these countries, but not much in the short to medium term. Improving investment in social services and productive infrastructure in Burundi, Rwanda, and some parts of Uganda is therefore critical, as is finding ways to help EAC countries to adjust to asymmetric shocks.

Donors have a role, especially in the earlier years before fiscal pooling has an impact. Potentially, the World Bank (and others) can facilitate integration and make it more politically sustainable by emulating and encouraging fiscal pooling in their lending practices. It can do this through policy lending and investment lending.

Policy lending to implement the integration policies with asymmetric impact on partner states. Potentially, any policy removing economic divisions between the EAC partner states, such as removing obstacles to labor mobility, regionalizing cross-border infrastructure, establishing one-stop border posts, or establishing regional payment systems, may qualify. This would partially substitute for fiscal pooling and help to achieve some of its objectives.

Policy lending to encourage fiscal pooling. Many integration policies cannot be supported through one-time lending and would rather require development continuously operating regional institutions. Donors may therefore not only partially substitute for fiscal pooling to encourage implementation of individual policies, but also encourage development of the fiscal pool financed by the EAC partner states themselves. At the early stages of the process, this could mean lending to the partner states on concessional terms to subsidize their contributions to the pool. At later stages, when the regional fiscal pooling reaches a certain advanced level, which would include stable revenue sources, donors could lend to the EAC against future revenues of the pool, thereby helping to leverage the pool's resources.

Investment lending for connective and productive infrastructure of landlocked countries. While activities exhibiting increasing returns to scale, such as high-end manufacturing, are unlikely to concentrate in the landlocked countries, some others, such as agricultural processing, certainly can—and demand for their output is likely to increase if the coastal economies grow faster. To facilitate their development, donors—and eventually the EAC itself—can help to invest in connective and productive infrastructure.

Investment lending for provision of social services. Given incomes per capita and demographic dynamics of the landlocked countries, reducing disparities in provision of social services would mean greater investments in landlocked countries. Since a fiscal pool large enough to reduce disparities in human capital investment per student is unlikely in short to medium term, donors may need to step up their support.

Conclusions

The new EAC has adopted a more gradual integration strategy than its predecessor, reflecting growing institutional convergence, and it has achieved some successes, though some economic divisions such as nontariff barriers to trade remain, despite official commitments to remove them. Economic convergence indicators are also quite dispersed.

This dispersal is partly because three out of five EAC partner states are landlocked, making the “economic distance” from large global markets highly unequal, and partly because of poor hard connective infrastructure and—even more important—weak soft infrastructure. Moreover, the EAC’s economic density is higher, and becoming more so, in inland areas that are more distant from world markets. All these strictures create a risk that agglomeration effects will concentrate economic activity in the areas where such concentration will be less conducive to global integration.

International experience suggests that relatively low and equal economic distance from major world markets creates incentives for integration driven by global private demand. East African economic integration will therefore be faster and more effective if it helps to reduce economic distance between the EAC economy and large global markets—hence the need to make policies that strengthen the link between regional and global integration at the heart of the EAC integration strategy. But partner states need to highlight feasible policies, given limited capacity at national and regional institutions (which requires expansion), and gradually scale up integration as partners gain confidence.

Yet policy effects will not be even across the region. They will likely spur concentration of economic activity in a few key areas where scale and access to global markets can best be exploited—perhaps in an economic integration zone on the coast. Such agglomeration may in turn create incentives for better connectivity policies and regionalizing infrastructure, but this highly asymmetric impact may also create political obstacles to integration.

To keep politicians (and their constituents) on board, sequencing therefore has to be got right. In parallel with removing some of nontariff barriers and unofficial obstacles, having started to raise the quality of infrastructure and social services, and perhaps having started along the road to the economic integration zone, EAC policy makers may move to fiscal pooling and later to monetary integration.

The specter at the table is of course the risk of collapse, which materialized in the 1970s at the demise of the first incarnation of the EAC. The authors of this report are optimistic, however: beyond today’s tighter economic and political convergence, greater outward orientation, and closer security interests, lies the immutable fact that the world is globalizing—and a more regionalizing EAC offers the best way to turn that fact to East Africa’s advantage.

1 Introduction

Over the last three decades, the world's largest developing economies—China and India—have witnessed large-scale migration of their workers to their coastal areas. A trip on National Highway 321 in China, east from Chengdu in Sichuan to Shenzhen in Guangdong is a journey through economic development.⁵ As migrating workers travel east, they leave an agrarian realm in which they receive few benefits from working close to others, and enter a realm of “agglomeration economies,” in which being near other people produces huge benefits.

Shenzhen attracts young workers—90 percent of its 8 million residents are of working age. It specializes in electronic goods, and makes them in enormous quantities. In 2006 its exports exceeded India's, making its seaport the fourth busiest in the world. Propelled by the forces of agglomeration, labor mobility, and specialization, and helped by its nearness to Hong Kong SAR, Shenzhen has been the fastest-growing Chinese city since 1979, when it was designated a “special economic zone.”

This story is being replayed in India. Sriperumbudur used to be known mainly as the place where Prime Minister Rajiv Gandhi was assassinated in 1991. In 2006 his widow, Sonia Gandhi, watched as Nokia's telephone plant churned out handset number 20 million. Key to Sriperumbudur's success is the town's closeness to a large port city, Chennai, just as Shenzhen's proximity to Hong Kong SAR, was instrumental in its growth.

Such an outburst of growth has not yet happened in East Africa. It needs to, if the region's countries are to become vibrant, middle-income economies this century. East Africa is difficult terrain for economic integration, with many neighbors and high transport costs (map 1.1), in a continent with many artificial borders.⁶ East Africa is distant from some of the major world markets: it costs about twice as much to ship a container from there to the east coast of the United States as from East Asia or Latin America. Economic activity is concentrated in a couple of areas next to the coast (map 1.2), but large stretches of the coastal zone are virtually empty.

For East Africans who live in the landlocked countries of Burundi, Rwanda, and Uganda, expensive access to regional markets mirrors that to global markets. They must move goods long distances over land, which is dear. They also have to rely on the goodwill (and infrastructure) of neighbors for access to ports and, ultimately, markets.

As a result of similar (or worse) problems throughout the continent, a map of the world's economic geography depicts Africa as a slender peninsula—bad news economically (map 1.3).

⁵ World Bank 2008a.

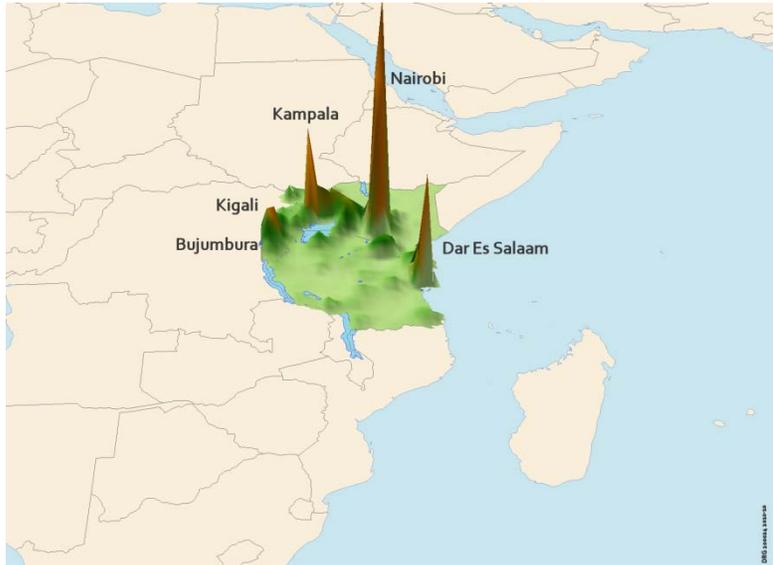
⁶ At the Berlin conference of 1884, the countries engaged in the “scramble for Africa” drew lines on the map that demarcated their influence but that bore no relation to tribal or ethnic groupings. These lines ultimately became the borders of artificial territories and states, the source of some of Africa's current problems.

Map 1.1 Division—what prevents progress in Africa does not in Western Europe



Source: WDR 2009 team (see chapter 3 for details).
Note: The width of borders is proportional to a summary measure of each country's restrictions to the flow of goods, capital, people, and ideas with all other countries.

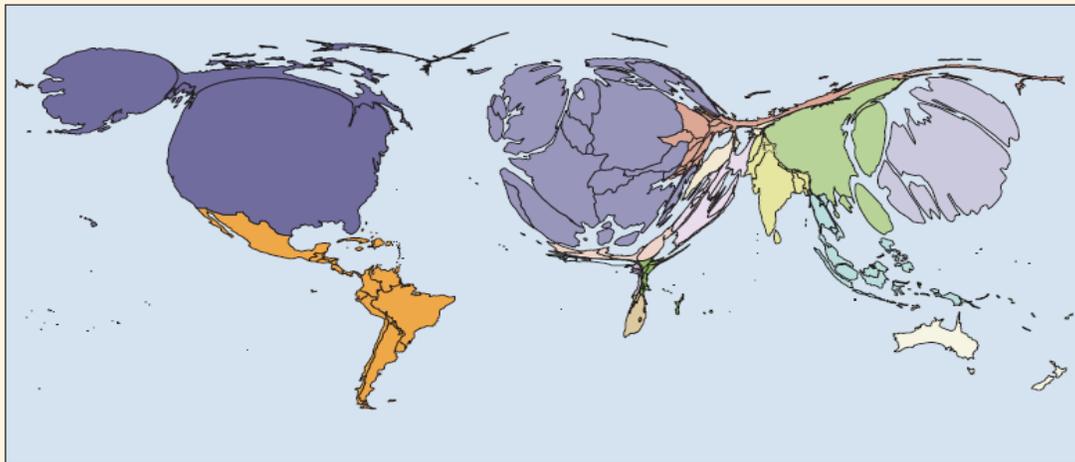
Map 1.2 Economic density map of the East African Community



Source: World Bank staff estimates.

Map 1.3 How markets view the world—the map of economic geography

A country's size shows the proportion of global gross domestic product found there



Source: WDR 2009 team using 2005 GDP (constant U.S. dollars).
Note: The cartogram was created using the method developed by Gastner and Newman (2004). This map shows the countries that have the most wealth when GDP is compared using currency exchange rates. This indicates international purchasing power—what someone's money is worth if spent in another country.

According to the World Bank (2008a), the economic–geographic changes required to accelerate and share economic growth globally can be characterized along three dimensions of spatial

transformation: *division, distance, and density*. These three dimensions conform closely to the more technical notion of market access, and have to be reshaped if the development challenges of less spatially endowed countries are to be met (box 1.1).

Box 1.1 Market access and three dimensions of spatial transformation

Market access is an indicator of economic opportunity for a location that tells the size of the potential markets in its vicinity, and the ease of reaching them. Market access across geographic scales (international, national, and local) determines where economic activity can thrive and thus where firms will locate and populations grow. Applying the concept of market access to international economic integration, the three dimensions of spatial transformation can be described as follows.

Division is the most important dimension internationally. Given relatively small size of internal markets in many African countries, economic integration is critical for achieving economies of scale and generating the agglomeration effects that the continent’s firms need to leverage global demand. Economic production is concentrated in a few world regions—North America, Northeast Asia, and Western Europe—that are also the most integrated. Other regions, by contrast, are divided. Divisions associated with the impermeability of borders and differences in institutions, regulations, and currencies are major constraints to economic activity.

Distance matters internationally the most for access to world markets. Distance between areas where economic activity is concentrated and areas that lag is important too. The policy challenge is helping firms and workers reduce their distance from density. The main mechanisms are the mobility of labor and the reduction of transport costs through infrastructure investments. A large and dynamic economy in the neighborhood can help smaller countries, especially in regions distant from major world markets, by reducing their distance to markets.

Density of economic activity has been increasing worldwide not only at local and national, but also at international level. There is no good reason to expect economic growth to spread smoothly across space. The experience of successful developers shows that production becomes more concentrated spatially. Similar concentration of economic mass has occurred internationally. Today, a quarter of the world’s GDP can fit into an area the size of Cameroon, and half into the size of Algeria. The policy challenge is getting density right—harnessing market forces to encourage concentration and promote convergence in living standards.

Policy instruments. For each dimension of the integration challenge, the *World Development Report 2009* (World Bank 2008a) proposes an instrument for integration (box table; see also section 3 for more details).

Box table “An I for a D”: Types of regions and policy instruments

Complexity of challenge	Type of region	Policy priorities for economic integration		
		<i>Institutions:</i> Spatially blind	<i>Infrastructure:</i> Spatially connective	<i>Incentives:</i> Spatially targeted
One-dimensional problem	Regions close to world markets	√		
Two-dimensional challenge	Regions distant from world markets	√	√	
Three-dimensional predicament	Regions distant from markets with small economies	√	√	√

Source: World Bank 2008a.

Over the last few years, East Africa has made some progress in reshaping its economic geography, but numerous challenges still need to be addressed. The East African Community (EAC) is at the moment one of the most dynamic and advanced regional integration projects in Sub-Saharan Africa. Its recent accomplishments include setting up a customs union, launching a common market protocol, and progressing toward a full economic partnership agreement with the European Union.

Carrying forward these and other ambitious integration agreements faces numerous challenges, however. Important issues such as permanent residency and the right of access to, and use of, land are subject to national policies (thus restricting mobility of labor and capital) rather than being a part of the common market protocol; and the EAC's plans for monetary union by 2012 are unlikely to be realized giving the current state of preparation.

This study aims to support regional integration efforts in various ways. It analyzes the role of economic geography in integration, both as it affects returns to integration and as it creates disincentives to undertake policy reforms. And it offers a menu of policy actions to address these asymmetric impacts, tying in with the recently adopted Fourth Development Strategy of the EAC (box 1.2). The study focuses on the big picture and on linkages and complementarities among economic integration policies, and on contributions of those policies to achieving the objectives of integration. It follows the analytical approach of the *World Development Report 2009*⁷ and combines it with political-economy analysis to put into practice, in the EAC, the *World Development Report* findings on international integration. The study does not focus on the national and local dimensions of the EAC's economic geography.

The remainder of the study is organized in the following way. Section 2 reviews the basic facts about the EAC and relevant international experience, diagnoses the problems of the integration process,⁸ and offers three linked approaches to addressing these problems—think global, start small and scale up gradually, and compensate the least fortunate.

Section 3 suggests what can be done to strengthen the links between regional and global integration.⁹ Section 4 looks at how these policies need to be sequenced to make their implementation politically feasible, and at what needs to be done to compensate the segments of the EAC population that benefit from the process less than others. The final section offers some conclusions.

⁷ World Bank 2008a.

⁸ These include highly unequal economic distance between individual EAC partner states and larger global markets, limited capacity of the national and regional institutions complicating removal of the divisions between them, and inland economic density.

⁹ Reducing disparities in provision of social services to promote labor mobility, regionalizing infrastructure to improve connectivity, and piloting regional institutions on the coast, where they have higher chances of success.

Box 1.2 Fourth East African Community Development Strategy

The recently completed Fourth EAC Development Strategy outlines the following broad strategic goals of the East African Community for July 2011–June 2016:

- Consolidating the benefits of a full customs union
- Fully implementing the common market
- Establishing the East African Monetary Union
- Laying the foundations for political federation
- Strengthening EAC organs and institutions.

The strategy also addresses the following:

- Improving global competitiveness
- Improving and expanding infrastructure (including energy access)
- Stabilizing the macroeconomic environment
- Developing financial markets
- Increasing efficiency in production and distribution
- Increasing trade with other regional economic communities including support to creating a Grand Free Trade Area for the Common Market for Eastern and Southern Africa (COMESA), EAC, and the Southern African Development Community
- Increasing trade with other international markets
- Developing policy measures for job creation.

The study aims to support the EAC's regional integration efforts in a manner that supports the strategy. It provides, for example, recommendations on:

- Reducing disparities in education and development of coastal areas to promote labor mobility, focusing on augmenting human capital to support job creation and to increase the efficiency of production and distribution.
- Regionalizing connective infrastructure and establishing an economic integration zone for strengthening and expanding infrastructure, improving the EAC's global competitiveness, and enhancing the EAC's access to regional and international markets.
- Moving fiscal pooling toward the EAC's broad goal of consolidating the gains of the common market and customs union by rebalancing the unequal distribution of costs and benefits, and laying the groundwork for monetary union. Such pooling also aims to improve macroeconomic convergence and maintain stability as integration progresses, by mitigating the asymmetric impacts of integration policies and of external economic shocks.
- Developing regional financial markets.

2 East African integration: Problems, international experience, and approach to finding solutions

All regional integration projects are different, and so it would be pointless for the EAC to copy those followed elsewhere in the world. Still, some projects have common threads, enabling East African policy makers to learn from experiences elsewhere.

This section outlines some basic facts about the EAC, identifies its problems as seen through the lens of economic geography, and employs analysis of the international experience with regional integration to suggest an approach for addressing these problems.

2.1 The East African Community: Basic facts

Institutional convergence among EAC partner states helped to reestablish the EAC in the 1990s after its collapse in the 1970s

The first regional institutions in East Africa were developed to expedite British colonial rule in Kenya, Tanzania, and Uganda. Britain sought to benefit from the economies of scale by minimizing its administrative expenses while maximizing its benefits by coordinating the administration of the three colonies. It constructed a railway line (the first in the region) from Kenya's coastal town of Mombasa to a border town with Uganda, Kisumu. Completed in 1902, this railway line—the Kenya–Uganda Railway—was intended to transport cash crops and other resources from the interior (Uganda and Kenya) to the coast from where they would be shipped to Britain. In 1917 a customs union between the territories of Uganda and Kenya was formed; Tanganyika joined in 1927. Viner (1950) argued that the British government introduced the customs union to provide a protected market for goods produced by European settlers in the Kenyan highlands.

The East African High Commission was formed in 1948 and lasted until 1962. Under its successor, the East African Common Services Organization, which existed through 1967, each state contributed customs revenue to a distributable pool with the proceeds divided equally among the three.¹⁰ Since Kenya had by far the largest economy and the highest per capita income, this system entailed significant redistribution from Kenya to Tanzania and Uganda. Proponents argued that it was necessary to compensate for disproportionate economic gains that Kenya enjoyed from the regional trade arrangements.

The first EAC was established by Kenya, Tanzania, and Uganda in 1967. Still based on colonial institutions, its first embodiment was very wide in scope, including joint financing and provision of social services and infrastructure.

Ten years later it was dissolved, for three main reasons: perceptions of an inequitable distribution of costs and benefits among the partner states and significant interterritorial imbalances in trade; lack of political will and ideological differences between the partner states, which were taking divergent paths in terms of political and economic institutions; and strained top-level political communication, exacerbated by Idi Amin's 1971 military coup in Uganda.¹¹

¹⁰ Hazlewood 1975.

¹¹ Katembo 2008.

Still, the dream never completely faded. The Treaty for the Establishment of the East African Community was signed by the governments of Kenya, Tanzania, and Uganda in Arusha, Tanzania in November 1999, and came into force in July 2000, when the Secretariat of the EAC was formed (see box 2.1 for more details on EAC institutions). Setting up the EAC again followed gradual institutional convergence among its founding states during the previous couple of decades, in turn helped by global economic and political trends. By the late 1990s, all three were capitalist economies and had held multiparty elections, although their democratic institutions were still maturing. Burundi and Rwanda joined in 2007, bringing the EAC's population to over 125 million people and its combined gross domestic product (GDP) to \$73 billion in 2009.

Box 2.1 EAC institutions

The main organs of the EAC are as follows.

- The Summit consists of the heads of state and government of the partner states. The Summit meets at least once a year to consider the annual progress reports and such other reports submitted to it by the Council of Ministers. It may also hold extraordinary meetings as necessary.
- The Council of Ministers is the policy organ of the Community. It consists of the ministers responsible for regional cooperation of each partner state. It monitors the implementation of EAC programs. It meets in regular session twice a year, one of which is held immediately preceding a meeting of the Summit, and may hold extraordinary meetings as necessary.
- The Coordination Committee consists of the permanent secretaries responsible for regional cooperation in each partner state. The Committee reports to the Council of Ministers and coordinates activities of the sectoral committees.
- The sectoral committees report to the Coordination Committee. They are established by the Council on the basis of the recommendations of the Coordination Committee.
- The East African Court of Justice has jurisdiction over the interpretation and application of the Treaty on Common Market Matters.
- The East African Legislative Assembly is the legislative organ of the EAC. Its membership consists of 27 elected members, nine from each partner state, plus five ex officio members: the three ministers responsible for regional cooperation, the Secretary General, and the Counsel to the Community.
- The Secretariat is the executive organ of the Community. It is headed by the Secretary General who is assisted by two deputy secretaries-general and includes the offices of Counsel to the Community and other officers appointed by the Council. Its core budget is funded by equal contributions from the partner states. Regional projects and programs are funded through the mobilization of resources from both within and outside the region.

Other autonomous institutions include the East African Development Bank, Lake Victoria Fisheries Organization, Lake Victoria Basin Commission, Inter-University Council for East Africa, East African School of Librarianship, East African Civil Aviation Academy and Civil Aviation Safety and Security Oversight Agency (CASSOA).

Source: Authors.

The new EAC adopted a more gradual integration strategy than its predecessor and achieved some success, although some economic divisions remain among the partner states and between the EAC and the rest of the world

According to its official documents, the EAC is aiming toward deep economic, social, and political integration, starting with a customs union and moving to a common market, a monetary union, and ultimately a political federation of the five partner states. It seeks to achieve these goals by laying down common rules governing, among other things, trade in goods and services; cross-border investment; mobility of natural and legal persons; infrastructure maintenance and development; environmental and natural resource management; tourism; and regional industrial development. A customs union was officially phased in between 2005 and 2010. From January 2010, all internal tariffs, surcharges, and excise taxes were removed for intraregional trade. Phasing-in of the common market began in 2010.

Numerous institutional and political challenges dog the practical steps of these and other ambitious arrangements. Many nontariff barriers to trade persist, despite the partner states' official commitment to eliminate them.¹² Such issues as permanent residency and the right of access to, and use of, land remain subject to national policies (thus restricting the mobility of labor and capital) rather than being a part of the common market protocol. Custom revenues are not pooled: customs operations, including revenue collection, are managed by national authorities, creating delays and increasing transactions costs. Further, EAC partner states have still to fully harmonize customs procedures in practice.

Moreover, the community's plans for monetary union by 2012 are unlikely to be implemented given the current state of preparations. Although talks are under way, the economic convergence indicators are rather low—comparable to the West African Economic and Monetary Union (WAEMU), where the common currency has shown only limited success¹³—and may deteriorate further after Uganda begins to export oil in a few years.

Political federation is the EAC's final objective, but some countries support it much more than others. Rwanda and Uganda support it the most, while Tanzania's official position is that it should not be fast-tracked. Thus the path to political federation remains thorny.

Multiple and overlapping memberships of the EAC partner states in other regional integration projects complicate integration among institutions. Each of the EAC partner states belongs to at least two of the eight regional economic communities (RECs) recognized by the African Union (figure 2.1). The six RECs have different structures but all share the common objectives of reducing trade barriers among partner states, coordinating and harmonizing policies, and creating a larger unified economic space.

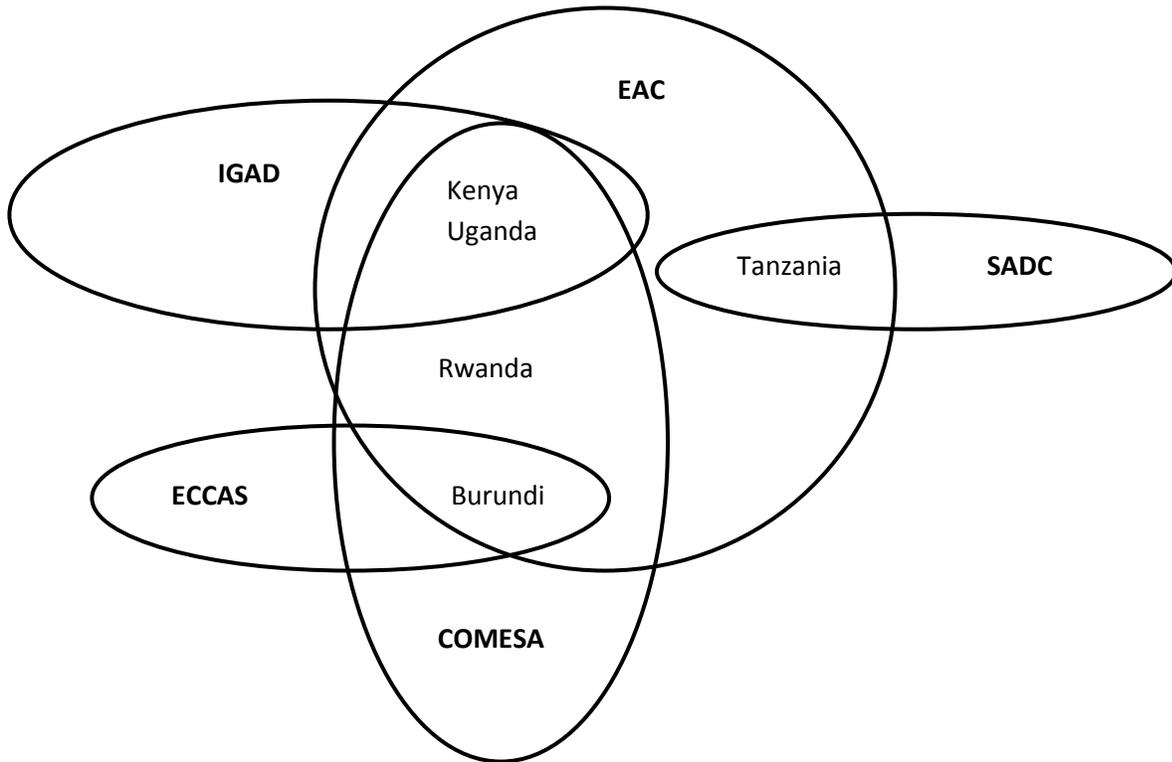
But this complex patchwork has led to problems: wasteful duplication of efforts and resources, increased transaction costs, and costly competition for resources; conflicting goals, policies, operational mandates and jurisdictions; legal uncertainties in cases, for example, where more than one trade agreement applies to two countries; fragmented economic spaces and approaches to regional integration; and reduced ability for the RECs to pursue coherent and effective integration strategies.¹⁴

¹² World Bank 2009.

¹³ See discussion later in this section and in section 2.3.

¹⁴ UNECA, AU, and ADB 2010.

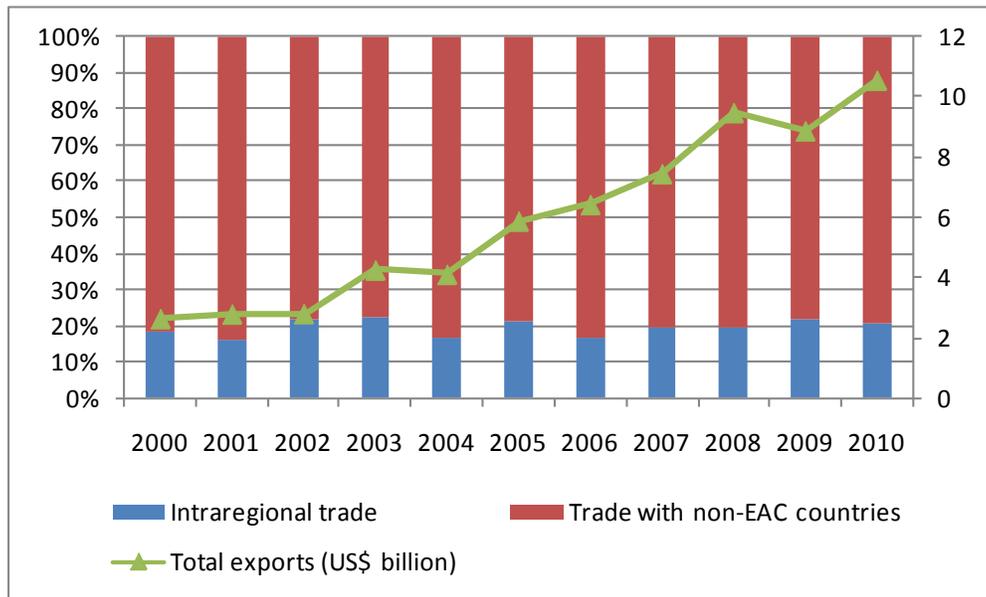
Figure 2.1 Overlapping membership in the RECs



Source: Authors.

Economic integration is led by trade and investment. Since the advent of the customs union, EAC trade and investment have burgeoned, both intraregionally and more widely. EAC exports grew by more than 15 percent a year in 2005–2008, when intraregional trade climbed by 19 percent a year. Such trade rose from about 15 percent of total EAC exports in 2000 to just over 20 percent in 2008, reaching nearly \$2 billion (figure 2.2).

Figure 2.2 EAC exports and intraregional trade



Source: United Nations Comtrade via World Integrated Trade Solutions.

As most East African countries are relatively small—and even in its larger economies, domestic market size is constrained by low income levels—regional trade has limits in its potential to drive growth. Complementarity of production also restricts its scope. Exploiting much larger global opportunities will be the key to sustained export and economic growth. Despite the sharp growth of EAC exports in recent years, the region’s share in world exports remains extremely small (table 2.1), around half the global average on a per capita basis.

Table 2.1 Size of internal and local markets for selected regional integration projects (percentage of global GDP, 2010)

Regional integration project	Internal market	Local market
EAC	0.12	0.26
WAEMU	0.11	0.84
Association of Southeast Asian Nations (ASEAN)	2.88	12.22
MERCOSUR	4.60	5.76
European Union	25.73	27.30
North American Free Trade Agreement	27.27	27.40

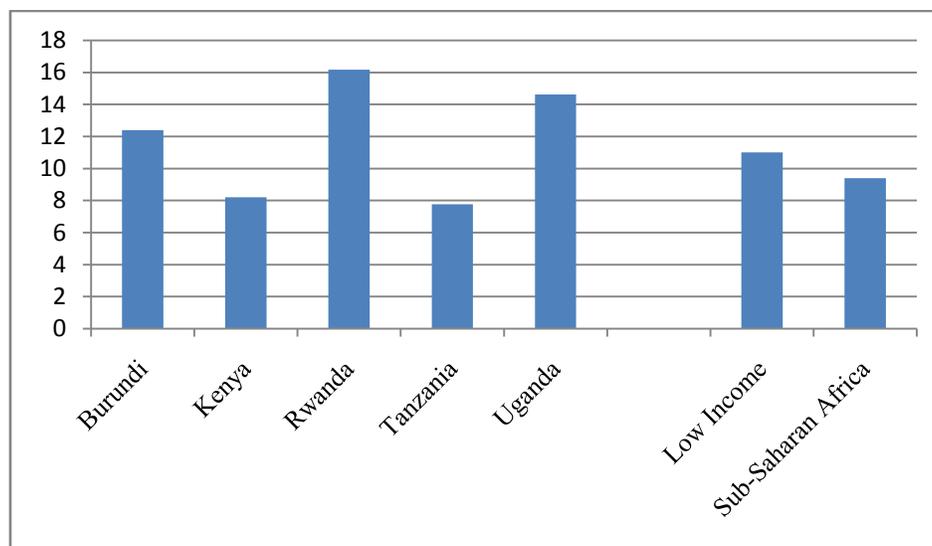
Source: World Development Indicators.

Note: Local market is defined as internal market plus markets of the countries that have a land border with one of the member states.

One reason for the small market size is that trade policy in some EAC countries—particularly Burundi, Rwanda, and Uganda (which had to increase its import tariffs as a part of the customs union)—is still quite restrictive compared with their peer groups. The World Bank’s Total Trade

Restrictiveness Index (TTRI) provides an overall measure of a country's trade policy stance.¹⁵ It is based on the ad valorem tariff which, if applied uniformly by a country, would result in the same level of imports as observed under current policy settings. Rwanda's score on the TTRI is 16 percent, or 50 percent higher than the low income average and more than 70 percent higher than the average in Sub-Saharan Africa. By contrast, Tanzania's is just under 8 percent, below both comparator group averages (figure 2.3).

Figure 2.3 TTRI (all goods, most recent year ca. 2009) for EAC countries and comparator groups (%)



Source: World Trade Indicators.

Note: The lower the percentage, the less restrictive the trade policy. Averages are calculated using GDP weights.

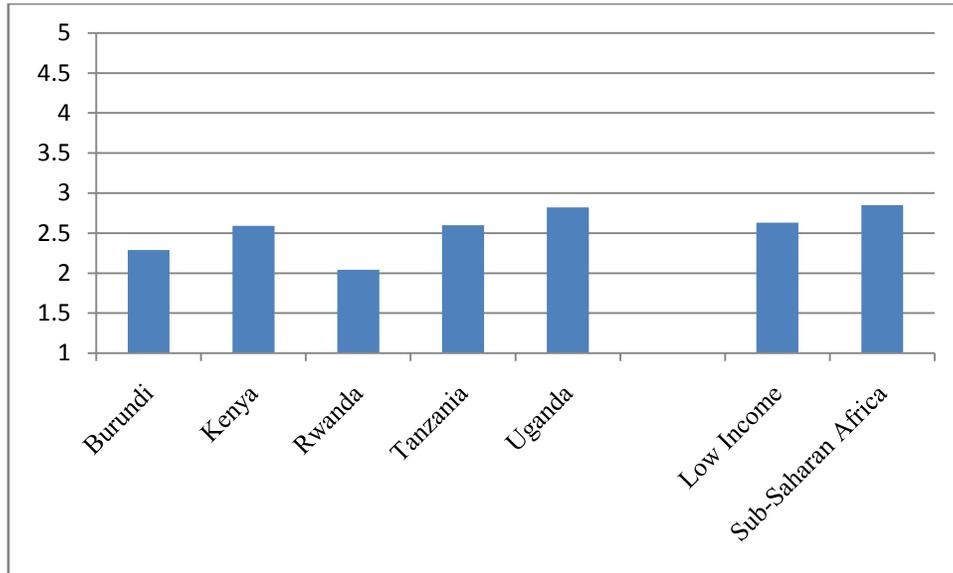
Yet perhaps the biggest reason is that EAC partner states have weak trade facilitation and logistics, according to the World Bank's comprehensive Logistics Performance Index (figure 2.4).^{16, 17} All five countries have performance inferior to the Sub-Saharan African average, although Uganda is quite close.

¹⁵ Kee, Nicita, and Olearra 2009.

¹⁶ Based on detailed surveys of around 1,000 logistics professionals, it covers six core areas of trade facilitation and logistics: efficiency of the clearance process; quality of trade- and transport-related infrastructure; ease of arranging competitively priced shipments; competence and quality of logistics services; ability to track and trace consignments; and timeliness of shipments.

¹⁷ Arvis, Raballand, and Marteau 2010.

Figure 2.4 Logistics Performance Index (most recent year ca. 2009) for EAC countries and comparator groups 2009

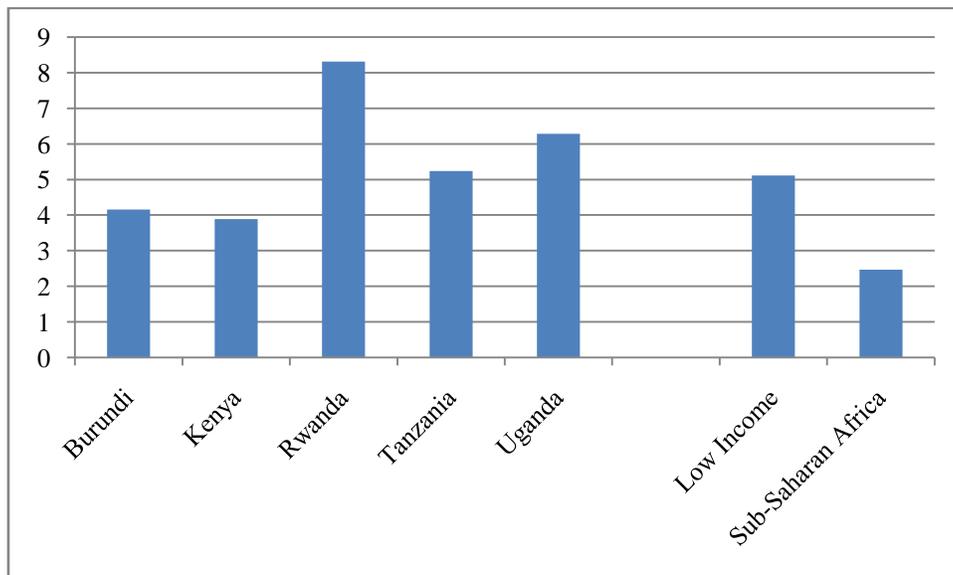


Source: World Trade Indicators.

Note: Averages are calculated using GDP weights.

The final reason for such low trade is that exports from all EAC countries face levels of foreign protection higher than the Sub-Saharan African average (figure 2.5), although they are much lower than their rates of protection at home—around one-third for Burundi.

Figure 2.5 Market access—TTRI (all goods, most recent year ca. 2009) for EAC countries and comparator groups



Source: World Trade Indicators.

Note: Averages are calculated using GDP weights.

EAC countries differ from each other across a wide range of economic and social indicators, demographic characteristics, and economic distances

Rwanda, Tanzania, and Uganda have comparable incomes per capita (around \$450 in 2009); Kenya's is about 50 percent higher, post-conflict Burundi's is about half (table 2.2). Kenya, Tanzania, and Uganda are mid-size countries with populations of 31 million–42 million people in 2008; Burundi and Rwanda are about one-fourth of that. Kenya and Tanzania have coastal access and have the areas of highest economic density in the EAC (see map 1.2); Burundi, Rwanda, and Uganda are landlocked; Uganda shares the coast of Lake Victoria with Kenya and Tanzania. The landlocked EAC members as a group have generally higher total fertility rates than the coastal ones (5.8 vs 5.2), meaning that their already much higher population densities (212 vs 59 people per square kilometer) are likely to be increasing faster, even though they also have larger shares of arable land (see below). Their human development indicators generally lag behind those of the coastal countries (table 2.3).

Table 2.2 Selected economic and demographic characteristics of the EAC countries (most recent year, ca. 2010)

	GDP (current \$ billion)	GDP per capita (current \$)	GDP growth (average, 2007-2011, %)	Population, million	Population growth (annual %)	Population in urban agglomerations of more than 1 million (% of total)	Population density (people per sq km)
Burundi	1.6	192.0	3.9	8.4	2.6	0.0	326.4
Kenya	31.4	775.0	5.3	40.5	2.6	9.0	71.2
Rwanda	5.6	530.0	7.5	10.6	3.0	0.0	430.6
Tanzania	23.1	527.0	7.0	44.8	3.0	7.5	50.6
Uganda	17.0	509.0	5.2	33.4	3.2	4.8	169.6

Source: World Development Indicators.

Table 2.3 Selected human development indicators for the EAC countries

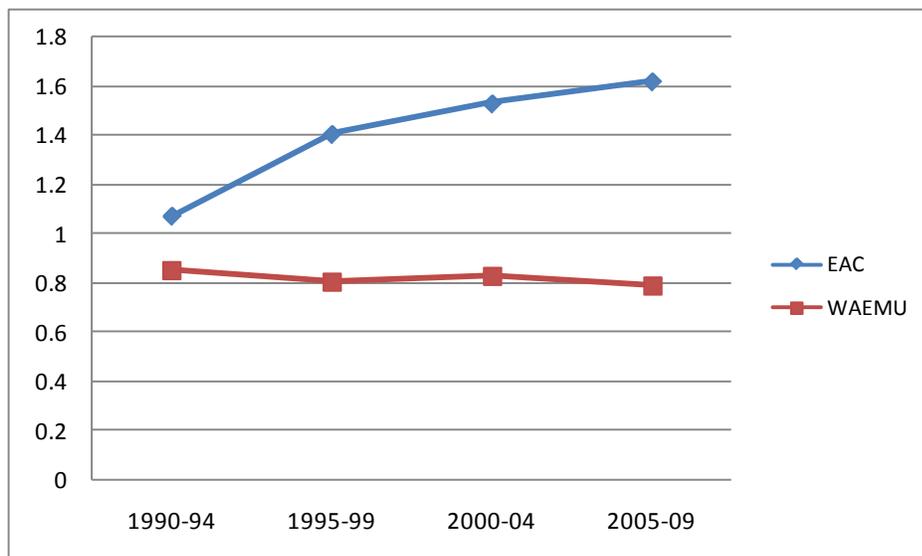
	Average years of schooling, population aged 15+ (2010)	Life expectancy at birth, total (years) (2009)	Fertility rate, total (births per woman) (2009)
Burundi	3.3	49.4	4.5
Kenya	7.3	55.8	4.8
Rwanda	3.9	54.7	5.4
Tanzania	5.5	56.6	5.6
Uganda	5.4	53.1	6.2

Source: World Development Indicators and Barro-Lee dataset.

As groundwork for the subsequent discussion, figures 2.6–2.10 present measures of dissimilarity in economic integration indicators among the EAC countries (the larger the number the greater the difference) based on the cluster analysis presented and described in annex 1, and compare them to the same measures for another regional union of Sub-Saharan Africa, WAEMU.

Figure 2.6 exhibits dissimilarity in GDP growth rate, proxying business cycles synchronization. The EAC's partner states' dissimilarity in growth is gradually increasing, while that of WAEMU remains roughly constant at a lower level.¹⁸

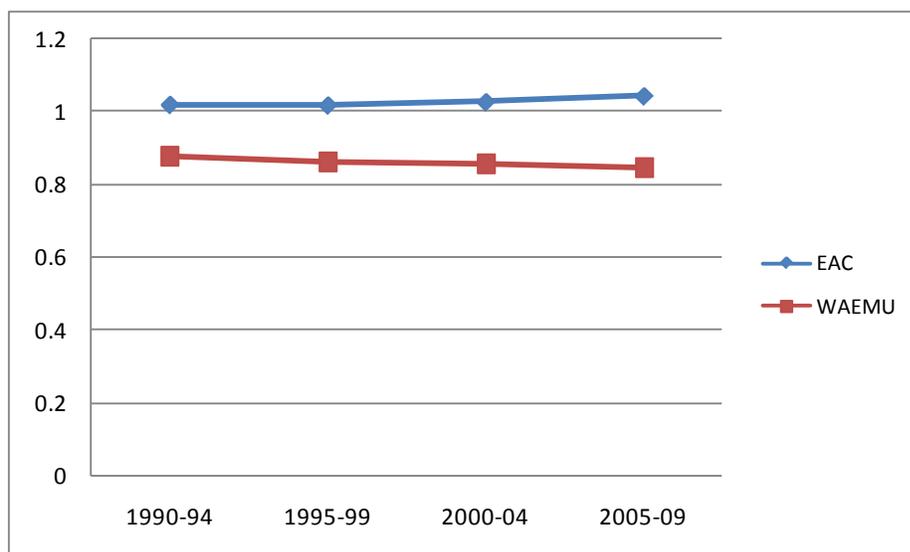
Figure 2.6 Dissimilarity in GDP growth, EAC and WAEMU



Source: World Development Indicators and World Bank staff calculations.

Figure 2.7 illustrates that the EAC has greater dissimilarity in GDP levels than WAEMU.¹⁹

Figure 2.7 Dissimilarity in per capita GDP, EAC and WAEMU



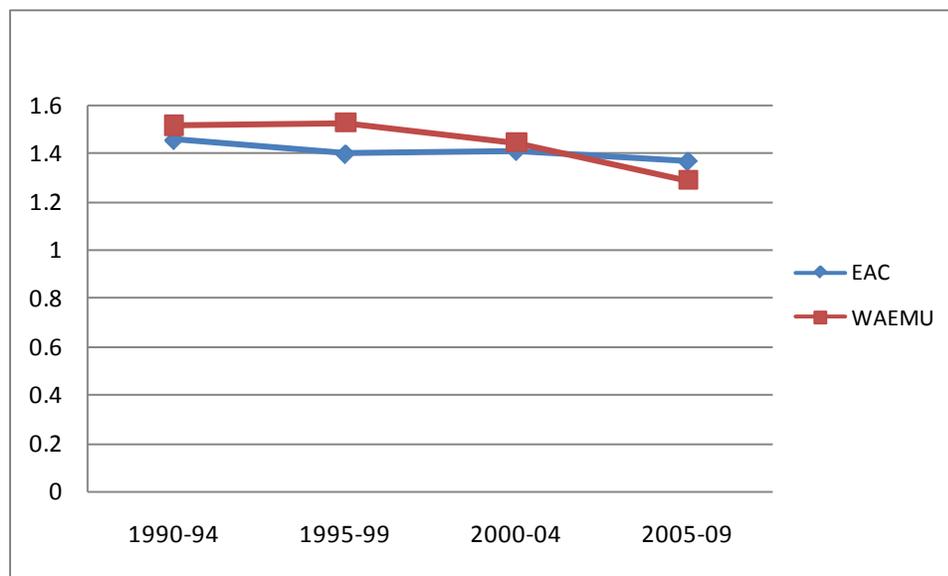
Source: World Development Indicators and World Bank staff calculations.

¹⁸ Dissimilarity in the WAEMU growth rate is largely driven by Guinea-Bissau, the new entrant and a former Portuguese colony. The original members are former French colonies.

¹⁹ In this case, the higher extent of the dissimilarity for the EAC is caused by Burundi, the new entrant to the EAC in 2007.

Figure 2.8 exhibits the dissimilarity in inflation within EAC and within WAEMU.²⁰

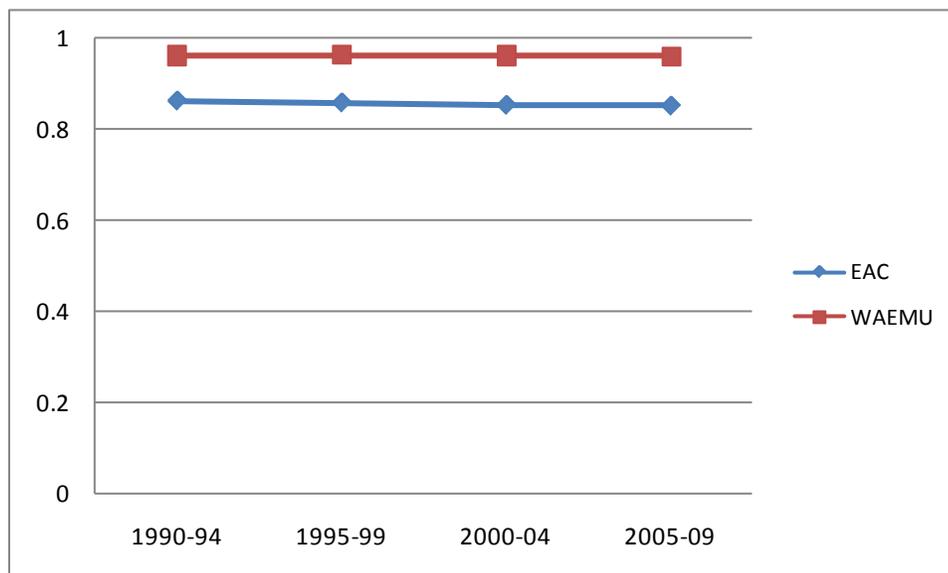
Figure 2.8 Similarity in inflation, EAC and WAEMU



Source: World Development Indicators and World Bank staff calculations.

Figure 2.9 shows that the EAC has slightly tighter trade integration than WAEMU, although both groups are progressing only slowly.

Figure 2.9 Degree of trade integration, EAC and WAEMU

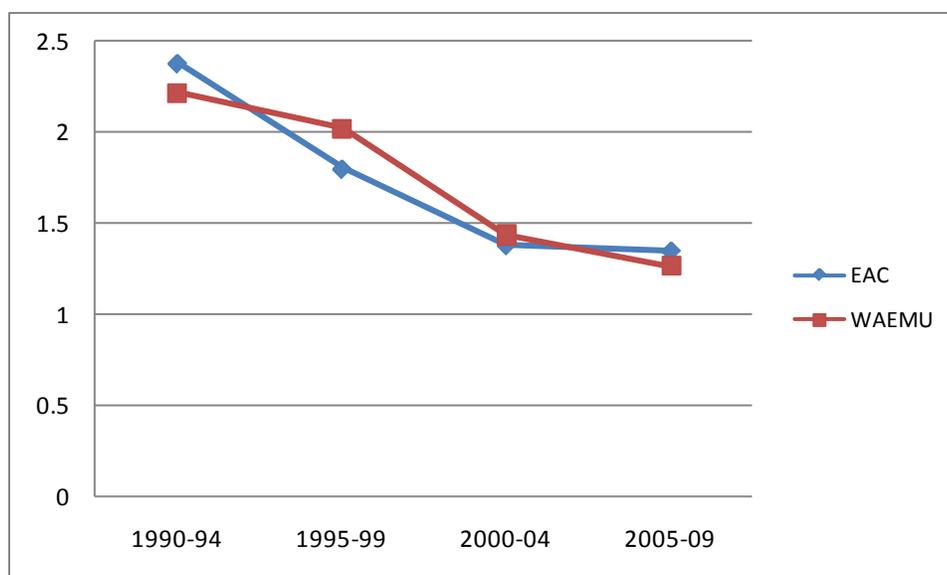


Source: World Development Indicators and World Bank staff calculations.
Note: 0 = identical, 1 = completely different.

²⁰ Dissimilarity in the WAEMU is again caused by Guinea-Bissau.

Figure 2.10 shows the degree of total economic integration. Both blocs are progressing and are at similar levels.

Figure 2.10 Aggregate economic dissimilarity, EAC and WAEMU



Source: World Development Indicators and World Bank staff calculations.

2.2 Distance, density, and divisions in the EAC: The key issues

Economic distance from the large global markets is highly unequal among the five partners and is greater for the three landlocked countries. Such distance to global markets is magnified by poor quality of connective infrastructure, and even more so by institutional factors limiting movement of goods within the EAC. Limited capacity among national and regional institutions complicates removing the divisions.

EAC's economic density is also unequal—it is higher, and becoming increasingly so, in the parts of the EAC that are more distant from world markets.

All these factors create a risk that agglomeration effects will concentrate economic activity in the areas where such concentration will be less conducive to the global integration of the EAC economies. The rest of this subsection looks at these ideas in more detail.

Economic distance from the large global markets is highly unequal among partner states

Although the physical distance between the coastal parts of the EAC and large global markets is great, distance alone is not the problem. To Europe, for example, it is comparable to that between some successful East Asian economies and the United States.

The primary problem is that three out of five partner states—with about 40 percent of the EAC's population and 30 percent its economic activity—are landlocked. Since transport by sea is much less expensive than by land or by air, the economic distance from these three countries to the world's largest markets is much greater than from the coastal countries to these markets.

Such economic distance is exacerbated by poor quality of connective infrastructure. Supply-side constraints and bottlenecks are multiple: poor road and rail networks with important missing links and operational capacity problems; congested and inefficient regional ports; and poor (though improving) access to information and telecommunications technology. Removing these constraints will require heavy investment in infrastructure, yet the EAC countries do not have the resources for such investments from general revenues. Equally, the private sector cannot do it unaided. Plugging these bottlenecks will require creative partnerships between the public and private sectors, with strategic support from international donors.

The economic distance is greatly increased by institutional factors. Despite agreements in the customs union treaty, goods movement in the EAC is still fettered by nontariff barriers to trade, such as discrimination against the landlocked countries' exports and imports in the ports, police roadblocks, and weighbridges on roads. Such regulatory disparities among countries introduce distortions that hinder regional trade and investment flows. Similarly, market opening and restructuring in the backbone infrastructure sectors require a parallel development (reciprocity) across countries. Otherwise, significant differences in market structures could hinder cross-border trade.

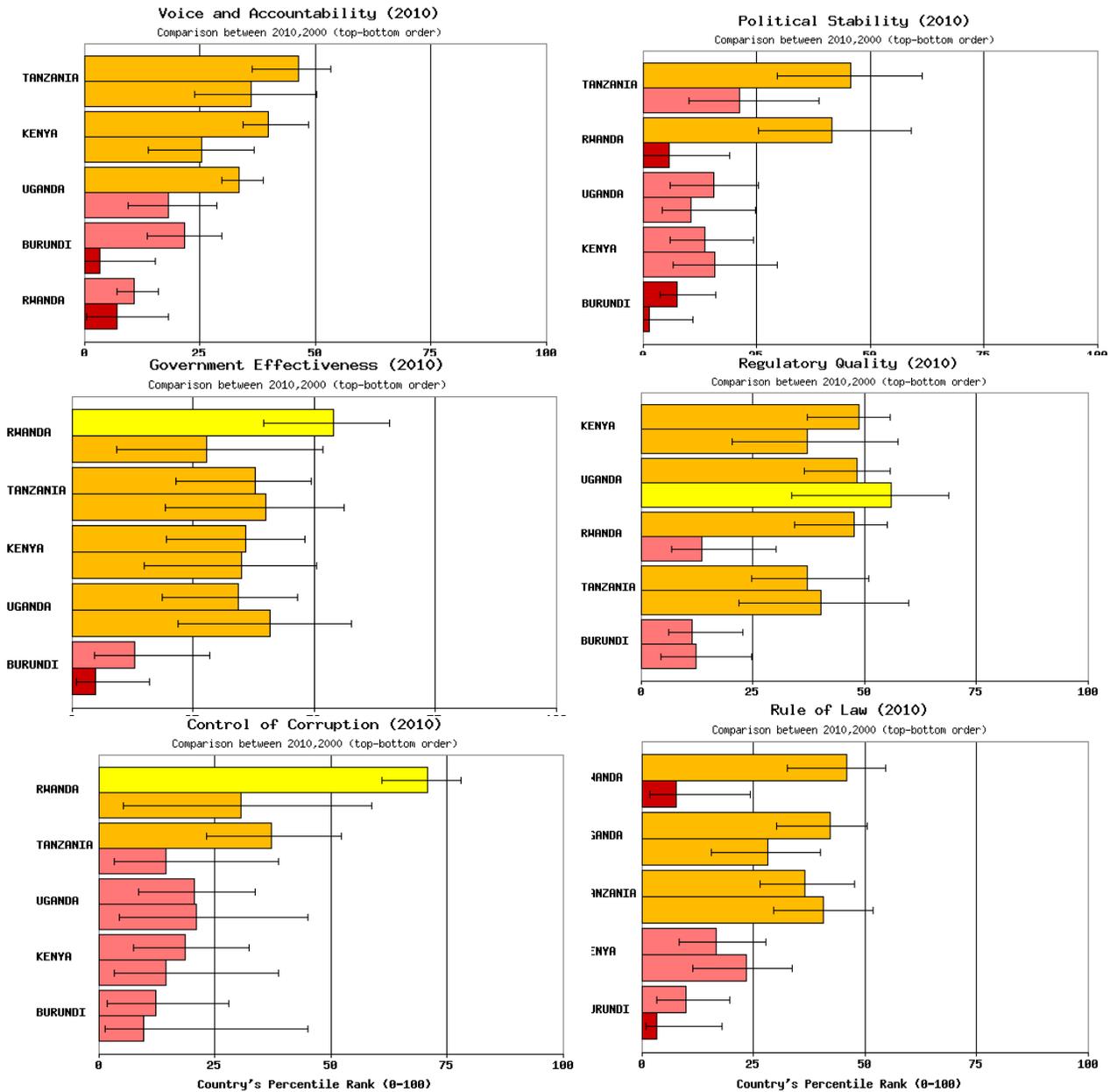
Limited capacity of the national and regional institutions complicates removal of economic divisions between the countries

EAC integration is led by the partner states' governments, but it lacks strong and well-defined enforcement mechanisms. The highest decision-making organ is the Summit of the Heads of State, which decides by consensus. Yet the EAC lacks a supranational body, such as the European Commission, to which nations delegate some sovereignty. In addition, partner states sometimes fail to observe their obligations under regional integration agreements, and their officials face insufficient incentives to delegate responsibilities to the EAC even when that is in the interest of all partner states. Although the EAC Treaty provides that EAC law and policies take precedence over national ones, regional bodies, such as EAC Secretariat, have few powers and little financing, and so struggle to carry out their mandates.

Institutional capacity of the individual partner states has for the most part improved over the last decade but is still far below global averages (figure 2.11). Out of 30 indicators for 2009, since 2000, 12 had fallen in the 10–25 percentile range on a global scale and 18 in the 25–50 percentile range. Only three (Rwanda's government effectiveness and control of corruption and Uganda's regulatory quality) were above the world average in 2010.

The East African Court of Justice has played a limited role so far. During the first 10 years after it was set up to resolve disputes on the interpretation and application of the EAC Treaty, only 20 cases were brought before it. Its judges cite low public understanding of the court and its organs as a major reason for its nonuse. The partner states effectively have the power to constrict EACJ jurisdiction as they did in 2006 when, after the court granted an interim injunction barring the swearing-in of Kenyan nominees, the EAC Summit decreed urgent amendments to the EAC Treaty, passed in record time, to overrule this decision.

Figure 2.11 Worldwide Governance Indicators for EAC countries, 2000- 2010



Note: The indicators aggregate the views on the quality of governance provided by a large number of enterprise, citizen, and expert survey respondents in industrial and developing countries. The data are gathered from survey institutes, think tanks, nongovernmental organizations, and international organizations. The Worldwide Governance Indicators do not reflect the official views of the World Bank, its Executive Directors, or the countries they represent. They are not used by the World Bank Group to allocate resources. The lines show 95% confidence intervals; the data for 2009 and 2000 are in top-bottom order.

Source: Kaufmann, Kraay, and Mastruzzi 2010.

Financing of the EAC institutions is meager and inequitable. In fiscal year 2010/11, their budget came to \$60 million, or about 0.07 percent of regional GDP. The partner states finance the budget equally, so Burundi (with 3 percent of regional GDP), makes the same contribution as Kenya (with 40 percent). Donors make up nearly half the budget. Such inequity creates challenges for allocating costs and benefits of regional cooperation and integration—indeed, failure to resolve them was one of the main reasons for the first EAC collapse in 1977.

The EAC institutions have no other revenue sources, leading to two additional problems: absence of a compensation system for the countries that benefit from certain integration policies less than others, and weak capacity. The EAC has gone through several recruiting exercises to boost staffing, but the tasks and responsibilities of the regional institutions have been expanding much faster.

In sum, no entities have both the incentives and capability to address many of the region's problems. Regional institutions are rather weak, regional agreements lack enforcement mechanisms, and domestic rent seeking in partner states is often strong enough to stymie implementation (persistence of police roadblocks on the roads of the Central and Northern Corridors provides one illustration). The outcome is continued economic divisions among the partner states.

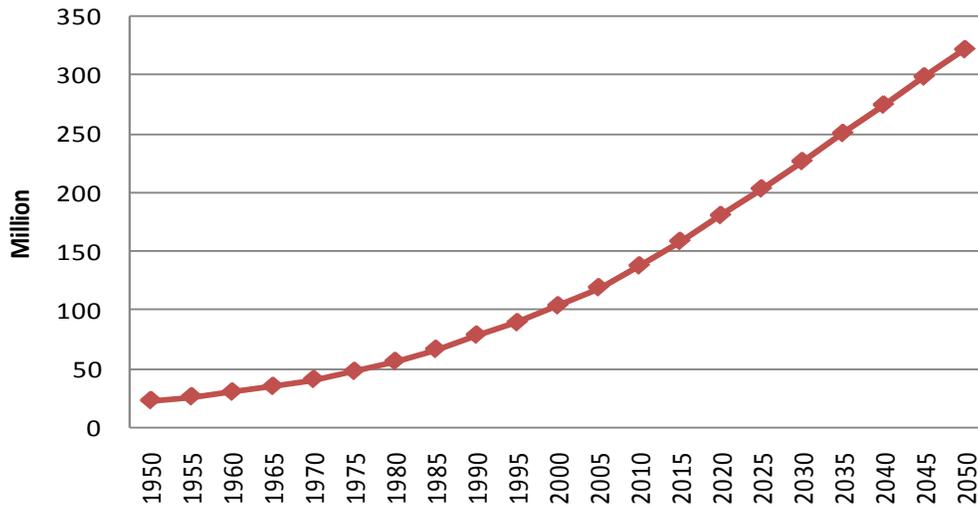
Economic density is higher, and likely to become more so, in the parts of the EAC that are more distant from world markets

Nairobi, by far the largest urban and industrial agglomeration of the EAC (the place with the region's highest economic density), is in the highlands 500 kilometers from the coast. Major cities were founded during colonial times, and their locations often reflect the colonizers' incentives to extract agricultural rents rather than produce industrial goods, mirroring the physical geography of East Africa. The most fertile agricultural lands and temperate highlands are inland. Many areas near the coast are arid or semi-arid, and have high malaria prevalence, which partly explains why industrial agglomeration occurred inland (where the colonizers had settled), leaving the larger coastal cities of Dar es Salaam and Mombasa with few industrial activities—and inefficient ports.

The population of the EAC is likely to grow fast over the next 40 years, leading to greater economic density. The United Nations developed four scenarios for future demographic developments in the five EAC countries under its World Population Prospects project. All four assume that life expectancy at birth will rise from 51–59 years for the EAC countries in 2005–2010 to 64–70 years by 2050. Scenarios differ in their assumptions on total fertility rates. In the constant fertility scenario, the EAC's average total fertility rate is assumed to remain 5.6; in the medium fertility scenario the average TFR declines to 3.2 by 2050; in the high (low) fertility scenario the TFR is assumed to be 0.5 higher (lower) than in the medium variant.

Regardless of scenario, the population will continue to grow. By 2050 it will be exceed 320 million in a medium fertility scenario (figure 2.12). Even in the low fertility variant, the EAC's population in 2045–2050 will still grow faster (1.6 percent) than the current world population (1.16 percent).

Figure 2.12 Population in the EAC, 1950–2050



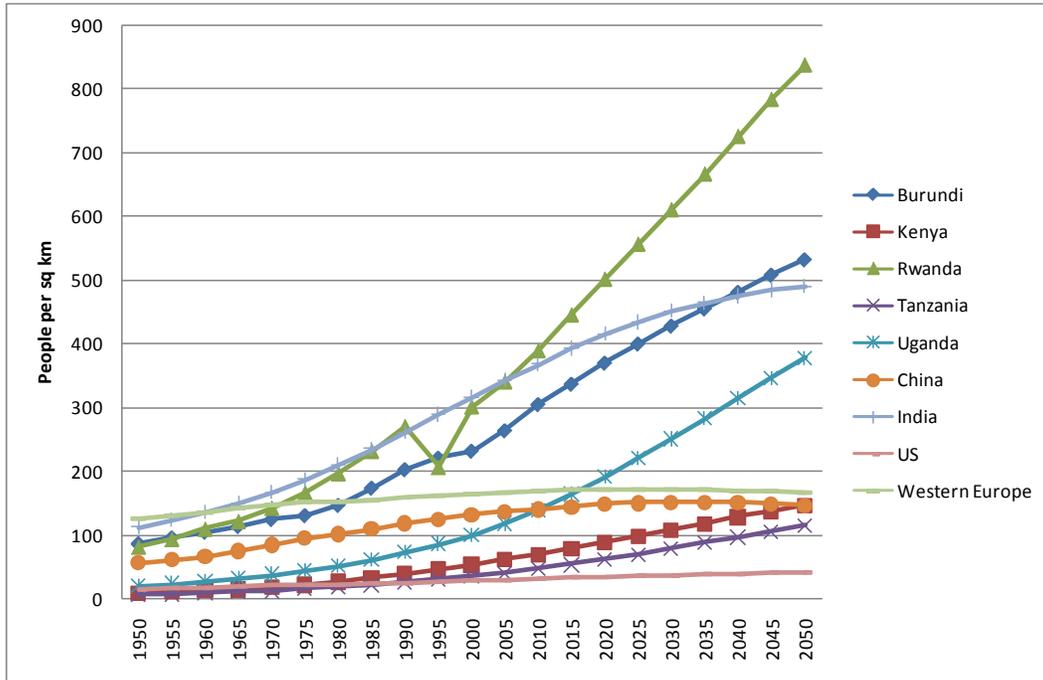
Source: UN 2011 (medium fertility scenario for 2010–2050).

The population density of the landlocked countries is already very high and is likely to be growing much faster than in the coastal countries because of higher past and present fertility rates. Rwanda’s population density is already greater than India’s, while Uganda and Burundi have overtaken China and Western Europe. The population density of the EAC as a whole—but particularly Rwanda—is expected to more than double over the next 40 years (figure 2.13).

All these factors create a risk that agglomeration effects will lead to further concentration of economic activity in the areas where such concentration will be less conducive to the global integration of the EAC economies. But because of inland firms’ much higher transport costs, such concentration reduces, other things being equal, global competitiveness of the region’s industries. It may also reduce their efficiency by protecting them from competition from goods produced in other regions, which would be delivered in the same high-cost manner.

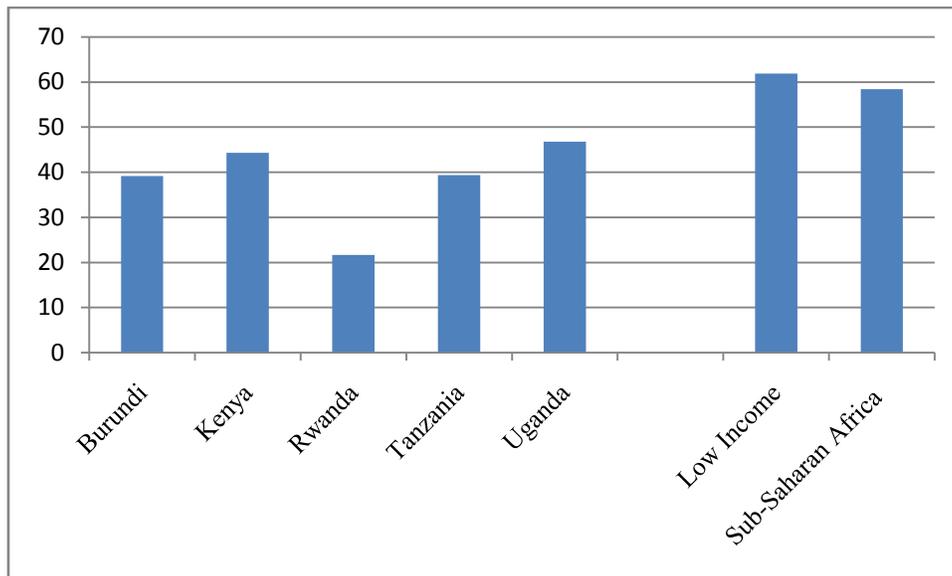
The EAC partner states are indeed noticeably less integrated with the international economy than their peer groups. As figure 2.14 shows, apart from Rwanda, goods trade accounts for around 40 percent of GDP in EAC members. Even Kenya and Uganda, where the figure is closer to 45 percent, are not as open in this sense as the low-income (62 percent) and Sub-Saharan African (58 percent) groups. The situation is much worse in Rwanda, where goods trade accounts for only 22 percent of GDP.

Figure 2.13 Population density in the EAC partner states and selected comparator countries, 1950–2050



Source: UN 2011 (medium fertility scenario for 2010–2050)

Figure 2.14 Goods trade integration (percentage of GDP, most recent year ca. 2009) for EAC countries and comparator groups



Source: World Trade Indicators.

Note: Averages are calculated using GDP weights.

Econometric analysis based on a gravity model of international trade (annex 2) also shows that the EAC partner states are trading with each other more than expected given their economic fundamentals—but, at best, as expected with the rest of the world.

2.3 International experience

Relatively low and equal economic distance from major world markets creates incentives for the integration driven by private sector and global demand. Higher capacity and similarity of the partner states' national institutions facilitates establishment of the regional public institutions and furthers economic integration. Absent both of the above, there is a higher risk that regional integration may slow or come to a halt.

Relatively low and equal distance from major world markets creates incentives for the integration that is driven by private sector and global demand

ASEAN and (to lesser extent) MERCOSUR are located reasonably close to large markets (Japan and the United States, respectively) and each has only one landlocked country (Lao People's Democratic Republic and Paraguay) both of which account for less than 1 percent of gross regional product. This creates incentives for the private sector to locate parts of the value chains for various products in different partner states to benefit from localization economies and specialization. Regional private sector associations have strong connections to the national governments and advocate for integration policies. The process is also catalyzed by multinational corporations with headquarters in the larger markets closest to the region.

ASEAN provides a useful example of how important it is to tailor the regional integration strategy to specific conditions of the region. Coastal location of its member countries allowed for intra-industry division of labor within the region, and specialization patterns started to emerge in the 1970s in the automobile and electronics industries, particularly in the export-oriented value chains producing for markets in North America, Europe, and Japan. Yet the capacity of ASEAN member countries' public institutions was limited—and, as a corollary, attempts to promote further specialization by public policies had limited success, too. ASEAN tried to create several regional production schemes supported by the governments. They included:²¹

- The ASEAN Industrial Project (AIP), which unsuccessfully tried to create large industrial projects jointly owned by all ASEAN governments and supported by preferential trade arrangements among ASEAN members “to assure the necessary minimum sales” of their output. The project's design provided for very limited involvement of the private sector, and, predictably, it never took off despite the long history of attempts to jump-start it.
- ASEAN Industrial Complementation (AIC), a scheme that aimed to facilitate specialization among ASEAN economies by promoting complementary industrial structures. The countries participating in AIC had to establish tax incentives for production of specific preagreed complementary products. Although AIC was intended to eventually cover all industrial sectors, it became operational only for the automobile industry in 1981, with the arrangement largely following the value chains started by the private sector a decade earlier.

²¹ Legewie 2000.

- The ASEAN Industrial Joint Venture (AIJV), a scheme that intended to promote cooperation of manufacturers in two or more ASEAN countries by reducing the import tariffs in the case of mutual parts delivery and by offering local content accreditation to these parts. Only three joint ventures eventually became operational. Bureaucratic rigidities and rivalry between the countries did not allow for more.

Attempts to implement these schemes lasted several decades, until the competitive pressures of the 1990s pushed the ASEAN countries to establish the ASEAN Free Trade area in 2002, allowing the private sector to expand its leading role in regional economic integration.

Higher capacity and similarity of the member countries' national institutions facilitates establishment of the regional public institutions and furthers economic integration

In the European Union (EU), vibrant democracies and strong rule of law in the partner states on one side and economic integration on the other created conditions for developing regional public institutions. The governments who had to obey both the will of their voters and the rules of the integrated economic system—with the two not always coinciding—were willing to delegate authority to the union. This in turn promoted further economic integration (the European Commission filed a number of cases against anticompetitive national practices with the European Court of Justice, which ruled against those practices). Hence the process of integration became politically self-sustaining and driven in large part by regional public institutions. The private sector also benefited tremendously from integration—since Europe is a major part of the global economic core, for private firms regional integration meant improved access to a very large market.

The first big step toward European economic integration²² was made in 1952 when France and Germany created a supranational authority to oversee their coal and steel industries. Some other European nations were invited to join this European Coal and Steel Community and accepted. The next step was the Treaty of Rome, which was initially planned to create a customs union. It was thought, however, that national governments might replace tariffs and quotas with various nontariff barriers to trade and other noncompetitive practices. The solution was to prohibit practically all policies distorting competition. Since it was impossible to foresee all future distortions, the treaty established both the European Commission with a mandate to monitor the internal market and to enforce the treaty, and an independent judiciary, the European Court of Justice, with a mandate to interpret the treaty and settle disputes.

The Treaty of Rome has the force of law in all member states and the European Court of Justice is superior to national court systems on the issues regulated by the treaty. Hence national politicians' respect of their national law—certainly a necessary condition for staying in the office in a country with a strong rule of law—implies respect for the Treaty of Rome. The European Commission and the European Court of Justice have therefore very wide powers on most economic policy issues.

In the 1970s the European Court of Justice formally ruled that most nontariff barriers were illegal, such that most of them could be successfully challenged in the court. Even though it would be unable to eliminate all nontariff barriers—there were too many of them—the ruling weakened the political-economy forces supporting the domestic protectionist pressures in member states. The nontariff barriers that would be most likely challenged in the court would be

²² This discussion is based in part on Baldwin (2005).

those that created the greatest problems for foreign competitors and hence the highest rents for national firms. This ruling reduced firms' motivation to push for regulatory protection. Political pressures for such protection declined, and the Single European Act, passed in 1986, abolished protectionist restrictions in a wide range of policy areas, leading to a single market by 1992.

Monetary integration came next. Democratically elected governments are always under pressure to achieve a favorable inflation–growth trade-off, and there was a strong belief that an independent central bank was the best way to do so, largely because its independence would insulate it from the lobbying by exporters and importers to affect the exchange rate. Further, to make a common market politically sustainable, it was critical to avoid sharp exchange rate movements, which might lead to collapse of trade integration. Thus, as part of the 1992 Maastricht Treaty, EU governments agreed to make their central banks independent, which in turn meant that the elected governments had almost nothing more to lose by abandoning their currencies—and it was up to them to decide on establishing a monetary union. They did so in 1999.

Still, not everything worked well. The Maastricht Treaty also established a set of fiscal rules focusing on a maximum fiscal deficit of 3 percent of GDP and a maximum level of public indebtedness of 60 percent of GDP. It also established a system for mutual surveillance of excessive deficits on the part of member states, combined with the possibility of sanctions. The EMU Stability and Growth Pact, initially proposed by the German government and negotiated at the end of 1996, added greater specificity to the exact procedure that would be followed, the goal being to make the enforcement mechanism for the rule as credible as possible. However, it did not contain a key element of the original German proposal, which was to make penalties for “excess” deficits automatic, instead leaving discretion to the European Commission and European Council to make this decision. This was a major flaw. Despite numerous cases of states exceeding the 3 percent fiscal deficit limit, the EU states refrained from imposing sanctions out of fear that they might find themselves in similar straits in the future.

Absent high capacity of public institutions and strong incentives for national private sectors to push for regional integration, regional integration risks slowing or even stopping

Africa has a plethora of regional integration projects that exist mainly on paper because of weak capacity among public institutions and lack of strong incentives for the private sector to push for regional integration. Even more successful projects have suffered from such problems. WAEMU started with monetary union; its primary objective was to import monetary stability by pegging the common currency to the French franc and later the euro, although the member countries were subject to sizable asymmetric external shocks and traded much less with each other than with the rest of the world. During the 1960s and 1970s, favorable terms of trade and labor mobility helped WAEMU to work reasonably well.²³ However, after a decline in commodity prices—which had divergent effects on the union's members—and nominal appreciation of the French franc against the U.S. dollar, the union started to unravel in the mid-1980s. This resulted in a softening in certain member governments' political commitment to the integration for prolonged periods; politics in turn created backlashes against labor mobility. There is also little evidence that the landlocked states of WAEMU (Burkina Faso, Mali, and Niger) gained better coastal access

²³ IMF 2005.

through belonging to such a group than did landlocked states not belonging to such groups elsewhere in Africa.

In the early 1990s the WAEMU states deepened their integration, eventually establishing a common external tariff and a customs union—though, as with the EAC, nontariff barriers have remained problems. These have involved national policies not fully harmonized with union agreements, administrative bottlenecks at ports and along transit routes, and issues linked to inadequate infrastructure.

When the partner states of WAEMU sought to reinforce their institutional integration during the early 1990s, they drew heavily on the European example in thinking about the design of fiscal rules. Before that, the WAEMU states had a set of fiscal rules designed to limit member governments' use of the common central bank to fund fiscal deficits, but these rules turned out to have several design flaws, and were often simply not enforced.²⁴ To correct these flaws, in 1994 the states adopted another set of rules, with a system of mutual surveillance of fiscal policies, which was closely modeled on the Maastricht Treaty but which established a broader range of quantitative limitations. Still, a recent IMF report suggests that “The multilateral framework put in place by the WAEMU treaty in 1994 to ensure fiscal discipline has not delivered.”²⁵ To take an example, in every year since 2005, all but one of the eight WAEMU states has been in violation of the rule stating that states should run a primary surplus.

2.4 Problem solving

The international experience suggests that East African economic integration will be quicker and more effective if it helps to reduce the economic distance between the densest parts of the EAC economy and large global markets. Policies aiming at strengthening the link between regional and global integration should be an integral part of the EAC integration strategy. But for this strategy to be realistic, the partner states need to choose integration policies that can be reasonably implemented given national and regional institutions' current capacity, and need to gradually scale up integration as capacity improves. Directly copying experiences from other regional integration projects that benefited from much greater institutional capacity of partner states, such as the EU, is unlikely to succeed.

Further, the impact of integration policies will not be felt evenly across the region: they are likely to encourage higher concentration of economic activity in a few key areas where scale and access to global markets can best be exploited. Getting the sequencing of the integration policies right will therefore help to make the process more politically sustainable, while adequate investment in social services and public infrastructure of the landlocked EAC partner states will help to ensure that benefits of integration are shared more equitably. The following paragraphs take these ideas further.

Think global: Regional integration will work faster and better if it reduces economic distance between the various parts of the EAC economy and large global markets

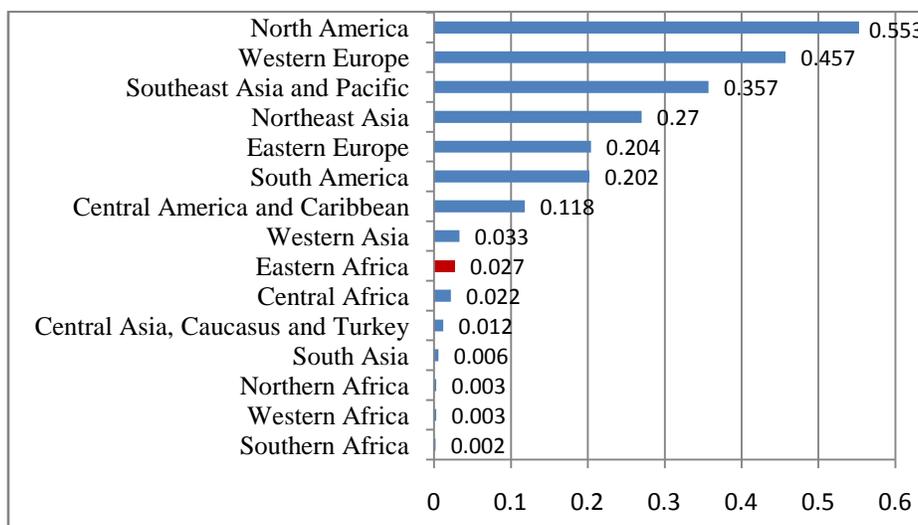
Global and regional integration are not alternatives, but complementary. Increasing the global exports of individual partner states requires improving the competitiveness of regional firms.

²⁴ Stasavage 1997.

²⁵ IMF 2011.

One of the key mechanisms to do this is through scaling up regional production—that is, integrating regional value chains to allow firms to reap the advantages of greater specialization and scale. Such integration will not only facilitate exports to global markets but will also result in greater interregional trade through increased task or component-based trade. Indeed, the EAC Industrialization Strategy already supports this process,²⁶ although the integration of production networks in the EAC is very limited. Although intra-industry trade—a proxy for integration of manufacturing networks—in the EAC is higher than in other regions in Africa or South Asia, it is much lower than in East Asia, Europe, or the Americas (figure 2.15).

Figure 2.15 Intraregional intra-industry trade (Grubel-Lloyd index, 2008)



Source: Brulhart 2009.

Since the size of the EAC’s external markets exponentially exceed the size of its internal market, finding a way for the EAC partner states to jointly leverage global demand would give a boost to regional integration. But for such leverage, the EAC will need to compete with the coastal parts of other regions, such as East Asia, which benefit from large industrial agglomeration effects. This is quite challenging, because of the region’s inland economic density (with Nairobi, for example, 500 kilometers from the coast), making the East African economy less competitive. Solving this problem will be key to successful regional integration. At the same time, rapid urbanization of the coastal areas will help the EAC partner states to specialize in areas of their comparative and competitive advantage, create a diverse portfolio of urban centers, and achieve more equitable provision of social services throughout the region as common East African economy emerges as a result of the integration process. Box 2.2 illustrates how this transformation can unfold, using Republic of Korea as an example.

²⁶ Articles 79 and 80 of the EAC Treaty.

Box 2.2 Republic of Korea's rapid urbanization, economic and social development

In 1960, the Republic of Korea had a per capita income level that Benin has today. Seventy-five percent of its people lived in rural areas, more than a third of Korean adults had no schooling, and fewer than 5 percent of children had been immunized against preventable diseases such as measles. By 2000, Korea's economy has become an integral part of the global economy, more than 80 percent had urbanized, almost everyone was literate and immunized, and the Republic of Korea's income had reached that of modern-day Portugal.

Illustrating a well-developed portfolio of places are seven settlements in the Republic of Korea's urban hierarchy: Seoul, Pusan, Daegu, Ansan, Gumi, Jeongeup, and Sunchang.

Seoul is at the pinnacle of the hierarchy. Located 50 kilometers from the Republic of Korea's border with the Democratic Republic of Korea in the Han River basin, it is the country's capital and home to a quarter of its population (that is, 9.76 million people). It serves as the nation's political center and cultural heart. Also typical is its specialization in business services, finance, insurance, real estate, and wholesaling and retailing. Overall, services account for 60 percent of the local economy.

Next in the urban hierarchy are Pusan and Daegu. With a population of 3.7 million, Pusan is the Republic of Korea's second largest city. In the southeastern corner of the Korean Peninsula, its seaport, one of the world's largest, handles more than 6.5 million container ships a year. Daegu is a metropolitan area of 2.5 million, dominated by textile and clothing manufacturing and automotive parts manufacturing and assembly. Since 1970, the Gyeongbu Expressway has connected Pusan to Seoul through Daegu. About 20 flights operate daily between Seoul and Daegu, and since 2001, the two cities have been linked by a high-speed train.

Much farther down the hierarchy, Ansan and Gumi are secondary cities, with populations of around 679,000 and 375,000, respectively. In Gyeonggi province, Ansan belongs to the Seoul National Capital Area, as part of Seoul's suburban area. Gumi is in Gyungbok province, in the southeast. As tends to be the case with secondary cities, Ansan and Gumi are more specialized in manufacturing, especially standardized manufacturing, than cities farther up the hierarchy.

At the bottom of the hierarchy, Jeongeup and Sunchang, both in the Jeonbuk province, are close to the interface between rural and urban. So while Jeongeup has a relatively large population (129,050), one in four of its inhabitants is a farmer. Likewise, Sunchang is a rural town: half of the 32,012 residents are farmers. To the extent that they exhibit any specialization in manufacturing, it is either in traditional resource-related industries, as in Jeongeup, or in the manufacture of food and beverage products, as in Sunchang.

While some areas have inevitably been left behind in the Republic of Korea's urbanization process, none has been left disadvantaged. Take Eumseong county, a largely rural area in Chungcheongbukdo province (see map 7.1). As the Republic of Korea industrialized and urbanized, the county experienced a continual outflow of people. In 1968 the population exceeded 120,000, but by 1990 it had fallen to just under 75,000. But even as the people of Eumseong were seeing their neighbors move closer to Korea's major cities, they got better education and health services and improved streets and sanitation. Between 1969 and 1990, middle and high school teachers tripled in Eumseong county from 1,000 to around 3,000. And the number of hospitals per million population in Chungcheongbukdo province doubled from around 400 in 1980 to 800 in 1990, while the water supply coverage increased from less than 30 percent to almost 60 percent. People left Eumseong, but the Korean government did not abandon the county—instead, it continued to emphasize the universal provision of basic and social services.

Source: World Bank 2008a.

Start small: Choose integration policies that can be reasonably carried out given current capacity of national and regional institutions, and gradually scale up integration as quality improves

The first version of the EAC collapsed partly because it was too ambitious. More recently, implementing the customs union before the regional and national institutions were ready to remove nontariff barriers proved difficult, too. The overall institutional capacity of the EAC remains modest, and the success of integration will heavily depend on whether the attempted integration policies will be implementable, given such limitations. If the integration process helps to gradually improve that capacity, it would make the next steps of integration easier. Getting sequencing of the integration policies right will be key for success, but also a challenge because international experience does not offer any successful blueprint under the circumstances similar to those of the EAC. Limited capacity of public institutions makes it difficult for the region to follow the European model, and asymmetric geography of coastal and landlocked partner states reduces the potential of the East Asian model for East Africa (box 2.3)

Box 2.3 The Asian “quasi-common economy” and East African geography

Canuto and Sharma (2011) argue that the Asian style of regional integration may be seen as a “quasi-common economy” that eschews a formal linkup in political or monetary terms but manages to generate similar results by strong physical integration and distributed chains of production and service delivery. They propose the Asian quasi-common economy as a benchmark for South America’s regional integration efforts.

A quasi-common economy is defined as a regional economy with a high level of physical integration, minimal barriers to intraregional trade, interlinked and interdependent production structures, and no formal or centralized structure for coordination of an entire region’s economic policies. The basis for such a postulation is that manufacturing and services that are broadly integrated across countries have ramifications for wider economic policy regimes, which result from major transmission channels such as alignment of business cycles, mobility of factors of production, and economies of scale. These channels in turn are a result of value chains cutting across multiple countries.

Would this model work for East Africa? What is similar between Asia and South America is that, with a few exceptions, almost all countries in regional integration projects in these two parts of the world are coastal. Since water transportation is much less expensive than other types, the private sector has fairly strong incentives to locate value chains in multiple coastal countries. The most important “piece of infrastructure” connecting the countries—the ocean—already exists. And labor mobility from inland to coastal areas can take place within each country.

In the EAC, however, where three of five partner states are landlocked, things are different—thus the need for a different integration model.

Source: Canuto and Sharma 2011.

If a combination of regional and global integration is achieved, it should contribute to faster growth EAC-wide, but its effects will not be felt evenly across the region. As goods, capital, and labor markets open up in the EAC and global demand is leveraged, economic activity is likely to concentrate more in a few key areas where scale and access to global markets can be best exploited. Unlike ASEAN, the geography of the EAC (40 percent of its population in three of its five landlocked partner states) is likely to restrict the spread effect of integration, resulting in higher concentration of economic activity in some of the partner states.

The challenge in EAC is to use regional integration to facilitate broad access of workers, firms, and finance to fast-growing agglomerations, while opening other parts of the region to investment and expertise to enable them to take advantage of opportunities that may be available for producing goods and services within regional value chains. But when the benefits of integration and agglomeration differ greatly for the partner states, the political implications can threaten the project. Getting sequencing of the integration policies right would be one of the key ways to address the problem—but not the only way.

Compensate the least fortunate: Ensure adequate investment in social services and public infrastructure of the landlocked EAC partner states

At the moment, growth in demand for labor in the coastal countries is rather slow. Even at best such growth will change only gradually, and meanwhile the landlocked countries are likely to benefit less from agglomeration effects. Higher fertility also means that young age-cohorts in these countries are larger, making it more difficult to provide them with education sufficient to make them employable elsewhere. Labor mobility will therefore have only limited effectiveness in alleviating poverty in these countries in the short to medium term. Monetary integration may also reduce these economies' ability to adjust to terms-of-trade shocks on their own. Improving investment in social services and productive infrastructure in Burundi, Rwanda, and some parts of Uganda is therefore critical, as is finding ways to facilitate adjustment of the EAC countries to asymmetric economic shocks.

3 Reducing economic distance between the EAC economy and major world markets: What can be done?

Agglomeration is both necessary and desired to achieve the benefits of regional scale. The question is how these processes can best be facilitated. The customs union and the wider processes of integration within the EAC should help to overcome barriers to agglomeration caused by trade policies, border-related issues, investment, and the free movement of labor. Many policy makers in the EAC are, however, rightly concerned that production will concentrate in some places, people in others. Some countries will have larger portions of the region's wealth, others larger portions of the region's poor. Even if temporary, they would be inequitable, but as the disparities may be long lasting, governments have many reasons to worry about them, particularly for welfare. Still, states also have many policy instruments for promoting economic integration to narrow those disparities. These include the “three I”s:

- Institutions—shorthand for policies that are *spatially blind* in their design and should be universal in their coverage. Some of the main examples are regulations affecting labor, land, and international trade and such social services as education and health, financed through tax and transfer mechanisms.
- Infrastructure—shorthand for policies and investments that are *spatially connective*. Examples include roads, rail, ports, and communication systems that facilitate the movement of goods, services, people, and ideas.
- Interventions—shorthand for the *spatially targeted* programs that often dominate the policy discussion. Examples include slum clearance, fiscal incentives for manufacturing firms, and preferential trade access for poor countries in developed-country markets.

For a region like East Africa, where the integration challenge spans all three geographic scales—density, distance, and division—a successful integration strategy needs to include all the “three I”s.

This section looks at what a specific policy package consisting of these three elements may include to address the problems identified in subsection 2.3 based on the “think global” principle offered in subsection 2.4. It will argue that:

- reducing disparities in provision of social services by making them *spatially blind* should be a priority for increasing labor mobility, in turn critical for addressing the problem of inland economic density (subsection 3.1);
- regionalizing *spatially connective* infrastructure may help to reduce economic divisions within the region if it helps the EAC countries to allocate costs and benefits of connectivity more equitably among themselves (subsection 3.2);
- developing joint *spatially targeted* interventions (establishing an economic integration zone) in coastal areas may help the East African economy to leverage global demand and to pilot future common institutions in a place where they have the highest chance of success (subsection 3.3).

Subsection 3.4 will apply the “three I”s framework to integration of the EAC’s financial sectors to illustrate its sectoral implications.

3.1 Reducing disparities in social services to promote labor mobility

This subsection shows that freeing labor mobility is essential to take advantage of the unrealized gains from proximity to global markets. If economic and population density is to shift toward the coast, this will by definition involve substantial labor mobility from inland to the coast.

Increasing labor mobility allows for the greatest regional economic growth and convergence of regional living standards. People move to seek larger incomes, better education, higher quality of life and, in general, greater opportunities. Because of the problem of its inland economic density, the benefits from labor mobility can go even further in the EAC. Moreover, the benefits can be shared by the places left behind through reduced labor market pressures and remittances sent home (box 3.1).

Box 3.1 Benefits of labor mobility for sending countries

Labor mobility has positive effects on sending countries via remittances, reduced labor market pressures, and strong diaspora networks.

Remittances sent home by international migrants are the most significant positive impact for sending countries. In 2010 alone the top 10 recipients of remittances received between \$7 billion (Egypt and Vietnam) and \$55 billion (China and India) from nationals working abroad. Remittances reduce the vulnerability of households receiving them, acting as a form of insurance against economic, political, and natural shocks. For example, remittances rose during the financial crises in Mexico in 1995 and in Indonesia and Thailand in 1998. Remittance-receiving households in the Aceh region of Indonesia recovered more quickly than other households after the 2004 tsunami. And migrant remittances were important factors in disaster recovery and reconstruction after a devastating earthquake in Pakistan in 2005.

The impact is particularly strong for remittances from highly skilled emigrants such as doctors and nurses. For example, African physicians in Canada and the United States send home an average of more than \$4,500 a year and often as contributions to charities or nonprofit bodies as well as to family members.¹ Remittances also play a role in reducing poverty. A 2010 study found that a 10 percent increase in official international remittances as a share of GDP led to a 2.9 percent decline in the share of people living in poverty in a sample of 33 African countries for 1990–2005, with declines also observed for the depth and severity of poverty.²

Labor mobility also positively affects the labor market of sending countries by increasing domestic wages and reducing unemployment. Labor mobility of low-skilled workers may cause a reduction in the labor supply, allowing workers within the countries to benefit from the labor mobility of local workers as the flow of labor causes the supply of labor to decrease, which in turn causes an increase in real wages.³ In India there are indications that the huge labor mobility from Kerala to the Persian Gulf has helped to raise wages in Kerala. Rural Bangladesh is seeing rapid replacement of workers leaving for work as nearby villagers move in to take their place.⁴

Indonesia is a prime example of labor mobility as an outlet for surplus labor. At the end of 2006 an estimated 11 percent of Indonesian workers (11.6 million) were unemployed, and underemployment was over 20 percent (45 million workers). Labor mobility plays a role in absorbing some of this surplus labor. In mid-2006 the minister of labor reported there were 2.7 million Indonesians working overseas with official permission, representing 2.8 percent of the total national workforce. Most legal labor migrants are unskilled, and the majority of the migrants are women. These women are predominantly employed as domestic workers, particularly in Brunei, Hong Kong SAR, Malaysia, Saudi Arabia, and Singapore. In 2005 more than a million Indonesian female migrant domestic workers were employed in the Middle East and Asia. In addition to legal labor mobility there are substantial undocumented flows out of Indonesia. In 2005 the government estimated that there were more than a million Indonesians illegally abroad.⁵

Whether labor mobility will increase wages or diminish unemployment pressures depends on migrant employment status before departure, the prevalence of surplus labor, the institutional barriers to wage flexibility, the role of international trade in respective product markets, and the ability of those left behind to acquire skills or move to where the vacant positions are.⁶ In the EAC, with significant surplus labor, outward labor mobility could reduce unemployment and allow more citizens to gain access to formal employment.

Large immigrant communities often form powerful diasporas, which can benefit their countries of origin. Because outward-labor mobility rates are on average higher for high-skilled individuals, a diaspora can represent an important concentration of expertise that may serve to stimulate trade, capital flows, and skills transfer to the old country.⁷ Gould (1994) found that a 10 percent increase in immigrants from a specific country to the United States resulted in a 4.7 percent increase of U.S. exports to the country of origin and an 8.3 percent increase in imports from that country.⁸

Case studies have found that returning migrants to Egypt, for example, have higher levels of human capital than nonmigrants and are likely to be more entrepreneurial the longer they work abroad. Elsewhere, migrants have played a valuable role in the transfer of market-based institutions, such as venture capital, entrepreneurship, and corporate transparency, to their countries of origin. Returning engineers to Taiwan, China, for example, engaged policy makers to establish a successful venture capital industry to finance high-risk entrepreneurial activities in technology.⁹

In India the outsourcing services industry has benefited from the skills and business opportunities of its diaspora networks. Many Indian engineers, who moved to the United States in the 1960s, by the 1990s had become entrepreneurs, venture capitalists, and senior executives in large and medium companies. Many of these professionals returned to India either to start their own companies or help in making India an outsourcing destination.¹⁰

Notes:

1. Clemens 2011.
2. Anyanwu and Erhijakpor 2010.
3. Lucas 2008.
4. Katseli, Lucas, and Xenogianni 2006.
5. Hugo 2007.
6. Markova 2010.
7. Katseli, Lucas, and Xenogianni 2006; UNCTAD 2009.
8. Rauch 2001.
9. Tsekpo 2010.
10. UNCTAD 2009.

Labor mobility also creates a challenge: a large portion of social services is publicly financed, and at the moment there are no effective mechanisms for pooling public finances of the EAC member countries. The revenues of partner states where agglomeration will be taking place are likely to grow much faster than elsewhere, and so is their spending on social services—and because of the very nature of agglomeration effects, such spending is likely to rise in the places that are already more developed.

On the other hand, better educated and healthier migrants are likely to be much more productive in the countries they migrate to. (It is also only fair to provide equal opportunities for education and health to people wherever they are born.) This means that in the medium to long run all countries would benefit from reducing spatial disparities in providing social services. Pooling resources among EAC countries for public spending on social services, especially on education, may therefore help in the longer term.

Accelerating the fertility decline in the EAC countries where fertility remains higher would help to increase spending per student without necessarily increasing education spending as a share of GDP. Other policies that may help solving the problem of disparities in education include removing obstacles to investing in education across EAC countries, and developing mobility programs for students from the three landlocked countries and for teachers from the coastal countries.

International labor mobility partly depends on formal agreements among countries and on the number of borders in a region

Most international labor mobility is not over a great distance, and takes place within world regional “neighborhoods,” especially for developing-country migrants. Only 30 percent of immigrants to the United States and 10 percent to Germany come from neighbors, but 81 percent of immigrants to the Côte d’Ivoire, for example, are from neighboring countries. In Sub-Saharan Africa, movements across borders are often short journeys that are rarely monitored, leaving them indistinguishable from movements within a country.

Most migrants maintain strong links with their home communities, often sending remittances and returning with valuable ideas and knowledge. Moreover, the flow of international labor mobility is no longer mainly associated with population growth or demographic pressure as it was in the 1960s and 1970s. Voluntary mobility often originates from countries with expanding economies and falling fertility rates. It is therefore less about desperation than about seeking opportunity—a positive and selective process.

In Sub-Saharan Africa regional labor mobility is higher than in other developing areas, but has fallen since the 1960s. Migrants represented over 3.5 percent of the Sub-Saharan population in 1960 but only 2.3 percent in 2000. The continent’s high labor mobility is partly an artifact due to the high number of land borders, but their relative permeability makes it hard to monitor flows.

Formal agreements make it easier for migrants to move across borders. Since the 1960s coordination among countries has led to greater labor mobility worldwide. In Africa for example, the Economic Community of West African States (ECOWAS), established in 1975, allows for the free movement and right of residence for citizens of member countries. The nine-country Southern African Development Community (SADC), formed in 1980, allows for labor to flow among member countries.

In the EAC, the common market protocol on the free movement of people states that partner states shall “progressively remove existing restrictions and shall not introduce any new restrictions that will impede trade in services among the partner states.” East African borders remain clearly drawn, however, even after the common market came into effect. Free mobility of labor has been obstructed for security reasons, lack of jobs, and fear of competition for the few job openings.

Only Rwanda and Uganda immediately granted visa exemptions to all other EAC member countries. Neither Kenya nor Tanzania exempt citizens of Burundi or Rwanda from visas, and Burundi does not exempt citizens of Kenya or Tanzania. Only Kenya and Rwanda have national identity cards for their citizens, but only Rwanda’s are valid for cross-border travel. Many Tanzanians fear that Kenya’s more qualified human resources would dominate their employment market, and the government requires work permits for citizens from other EAC partner states.

International mobility is largely driven by economic incentives and endowments: Migrants go to the richer, larger, better educated countries; educated people are more employable and more mobile

Labor mobility across borders is motivated by the same reasons as within a country: to find greater opportunity (see box 3.1). General patterns of labor mobility give clues to future mobility in the EAC. Using models to isolate migratory behavior leads to further insights into African mobility as well. This subsection discusses econometric models (in annex 3) to analyze the determinants of migration, and finds that countries in Africa receive more migrants if they are richer, larger, and better educated.

Globally, larger, populous countries attract migrants while smaller remote countries lose them. The top 13 emigration countries in the world are all small states: Antigua and Barbuda, Grenada, and Saint Kitts and Nevis have emigration rates above 40 percent, for example. For poorer small states, the disadvantages of small size include overdependence on a single sector and vulnerability to exogenous shocks. Moreover, small countries cannot take advantage of economies of scale in economic activity and could face high production and consumer costs. Remoteness often leads people in small states to move and take advantage of opportunities elsewhere²⁷—the same factor that drives much rural–urban migration within countries.

The econometric model in annex 3 shows that country income in Africa is a determinant in migration—higher GDP growth tends to attract migrants. This perhaps has the greatest implication for Kenya among the EAC members as it appears the most capable of sustaining economic growth.

The model also shows that movement is likely to enhance educational attainment, particularly among children, as families move to have their children attend better and more advanced schools. (In many rural areas education is only available at lower levels and lower quality than in urban areas.) The same holds true internationally, where international migration for educational purposes is becoming more widespread. Indeed, model results imply that if different education expansion patterns develop across countries in the EAC region, the economies that are more successful at improving educational attainment levels will tend to receive migrants from nations where education expansion is on a slower path. Such developments suggest that persistence of disparities in educational attainment within the EAC may impose extra problems on the labor markets of the fastest-growing economies in the region, which would have to assimilate migrants who do not necessarily possess the skills those markets require.

Educational attainment also determines who moves. Migration of skilled labor has been on the rise, unlike the flow of unskilled labor. The international migration of skilled workers relative to that of unskilled workers has been rising since the 1970s for every developing region in the world, with the highest proportions of skilled emigrants (as a percentage of the educated workforce) coming from Africa, the Caribbean, and Central America. Education boosts the velocity of labor mobility by opening employment opportunities further afield and shortening the job search at destination.

²⁷ Cross-country regression analysis at a global level confirms that the effect of population size on emigration is higher for countries that are far from markets—the more remote a small country is, the more people decide to leave (Human Development Report analysis based on UN 2009, Migration DRC 2007, and Mayer and Zignago 2006).

Box 3.2 The economics of labor mobility: How people exploit opportunities through proximity to each other and to markets

People are more economically productive when they are around others. Starting with Adam Smith's *The Wealth of Nations*, economists have documented how scale economies, with labor and capital movements and falling transport costs, lead to rapid growth. This confluence can be seen at the individual firm level, where division of labor and specialization enable remarkable efficiency, giving rise to trade and expansion.

As people gather, however, scale economies can apply at the level of the industry as well. It partly explains why there is a Silicon Valley in California and an investment banking industry in London. One can see this trend in most cities around the world, where industrial districts arise where similar industries cluster together. The benefits from these external economies of scale, or agglomeration, can be explained by three main reasons: specialized suppliers, labor market pooling, and knowledge spillovers. These external economies demonstrate the benefits of proximity.

Clustering firms can gain from the development of specialized suppliers. In many industries, firms require specialized equipment or support services but do not provide a large enough market to keep the suppliers in business. By collecting in the same area, they provide a market for a range of specialized suppliers. As this takes hold, many of these specialized inputs cannot be found elsewhere, reinforcing the need for industries to locate on one place. Lower logistical and transport costs for input providers further aid development. Moreover, these key inputs become more affordable as companies compete to provide them, leaving each firm free to specialize and concentrate on what it does best.

A second source of external economies comes from labor market pooling. Firms working in the same industry and clustered together can create a market for workers with highly specialized skills. This is beneficial to both producers and workers. Producers are less likely to suffer from labor shortages while workers are less likely to be unemployed. This pooling of labor makes it more efficient for workers and producers to find each other.

Workers and producers can also benefit from knowledge spillovers. Companies, as well as people, can acquire knowledge and information from their own research and study, though an important source of technical understanding is the informal exchange of information and ideas, purely at the personal level. When grouped together, employees of different companies can mix and talk freely about technical issues and their areas of expertise.

In addition to these benefits of localization, firms can gain from urbanization economies. Here benefits stem from proximity to producers of a wide range of commodities and services in the same place. A management company, for example, can benefit from locating near business schools or financial service providers. As cities grow, urbanization economies become increasingly important. Large and established cities are rarely made up of one industry. Moreover, these urban centers provide a stronger market for highly educated individuals and benefit from drawing on the large pool of human capital.

Agglomeration economies are amplified by density and weakened by distance. The natural way to reduce distance is for people to migrate. Reducing distance-related costs or spatial frictions increases movements of people, firms, and ideas—as well as those of goods and services—and thus brings less developed areas into the national system of production. Firms and workers collect in a process where dense areas continually gain workers and firms from less dense areas. Economic production concentrates in a few places and accessing this economic density generally means moving closer to it. People moving to economically dense areas contribute to production and boost their income. This movement also decreases competition in less dense areas and contributes to the convergence of living standards between regions. Providing people with education—human capital—is what frees people to move and seek opportunities through migration.

All partner states need to reduce disparities in social services and human development, but this will take time and require fiscal transfers and a demographic transition

Reasonably equal access to social services among the EAC countries would help to achieve more equal distribution of human development outcomes, which are currently very large (see

subsection 2.1). This would help the migration patterns to follow the patterns of economic opportunity: people would be likely to migrate to where the jobs are for which they are qualified, and not to where their children can get a better education—Kenya, for example, spends about six times as much per child as Burundi.²⁸ The countries receiving migrants would benefit because they would receive more productive migrants and their social service delivery systems would avoid excessive pressure. The sending countries would benefit from remittances and from reduced labor market pressures at home, which may lead to higher wages and lower unemployment (or both).

So, how to reduce disparities in provision of social services? Fiscal redistribution is one approach, but it would require a fiscal transfer mechanism to shift more education spending to the lagging countries, which is politically difficult (see also subsection 4.2).

Education expenditure per child, perhaps the most important indicator for human capital development, depends heavily on demographic variables. Many young dependents per worker hinder per capita human capital investment in the EAC. Growing young age-cohorts leave less money for education expenditure per child if fiscal spending—usually tied to GDP—does not move ahead of growth.

Changes in the population age structure are usually driven by a demographic transition from high mortality and high fertility levels to low mortality and low fertility levels, a transition first observed in Western Europe during the 18th and 19th centuries. It has taken root in East Asia, South Asia, and the Middle East, and is apparent in Latin America and the Caribbean. Many demographers now believe that it has started in most of Sub-Saharan Africa as well.

Changes in the population age structure may bring about a “demographic dividend” and lighten constraints on human capital investment

Increasing the share of working-age individuals in the total population may positively affect income per capita growth—the demographic dividend—through three sets of effects:

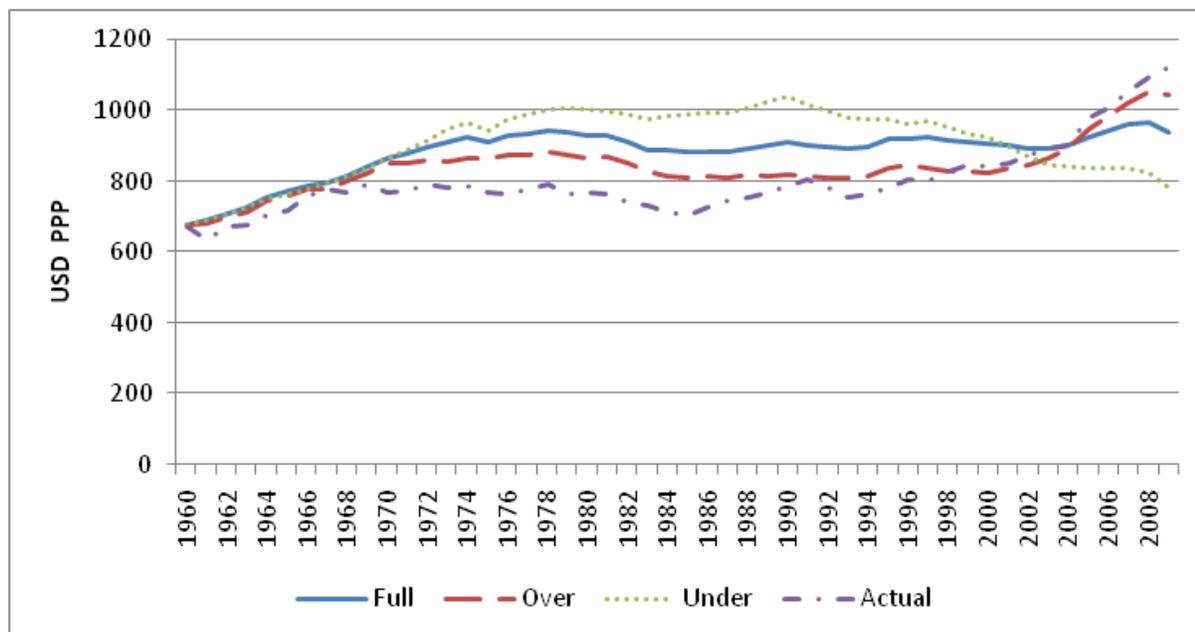
- *Translation effects owing to the differential growth of the total population and the working population.* If the share of the working-age population is increasing, any growth of GDP per worker translates into higher growth of GDP per capita, unless the difference is offset by an increase in the unemployment rate or a fall in the labor force participation rate.
- *Savings effects.* More people of working age mean a higher share of savers in the population. Also, a higher probability of surviving into old age may encourage higher savings rates.
- *Human capital effects.* An increase in life expectancy generally implies better health and increases the demand for education; a lower dependency ratio implies higher per capita expenditure on education.

The impact of demographic variables on the level of income per capita in EAC countries can be shown using a demographically based economic model and historical data from 108 countries

²⁸ While education expenditure per child is only imperfectly correlated with education outcomes—for example, in Kenya strong teachers unions put an upward pressure on this indicator—this variable is still the most convenient for long-term analysis. Annex 4 shows that education spending per child in 2001 was in a range of \$190.0 (Kenya), \$85.0 (Rwanda), \$46.2 (Uganda), \$39.2 (Tanzania), and \$29.2 (Burundi).

(annex 5).²⁹ The model predicts past income per capita trends reasonably well, especially the overperformers (figure 3.1). If it continues this performance in the future, in a context of continued demographic change, per capita income trends will start to pick up (figure 3.2).

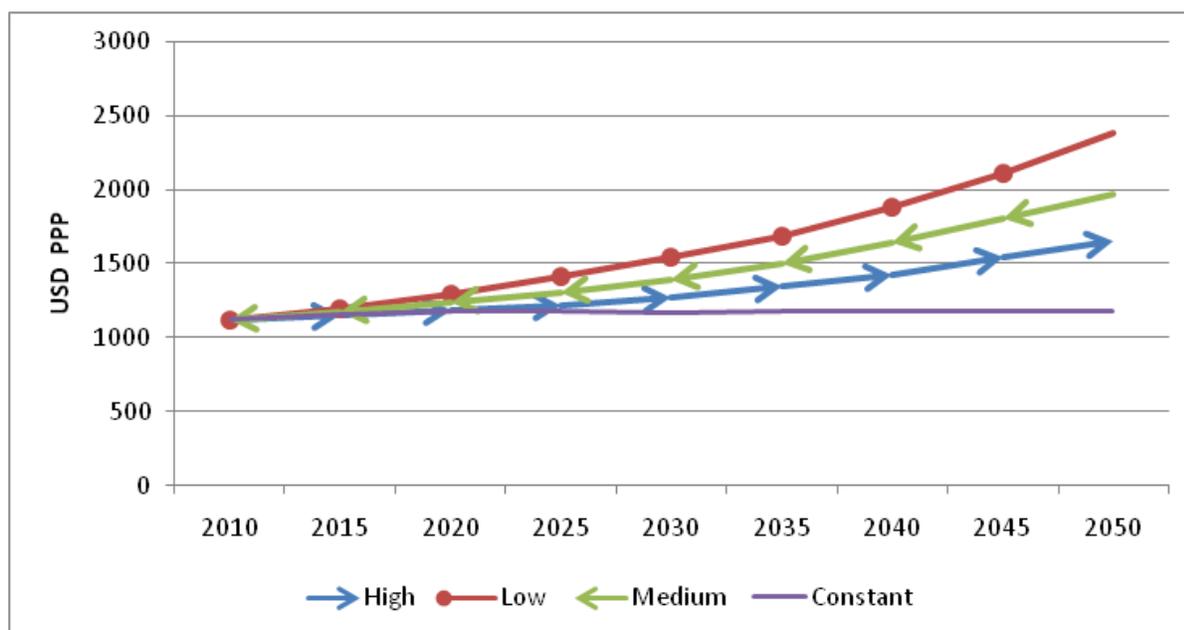
Figure 3.1 Simulations of income per capita 1960–2009 for the EAC, and actual



Source: Penn World Tables and World Bank staff calculations.

²⁹ The model is based on Lindh and Malmberg (2007). It has several demographic variables, such as life expectancy at birth and shares of different age groups in the population, and allows for some systematic country heterogeneity as well as for time-specific effects. The global sample of countries was divided into two subsamples of countries in which growth over the last decade was higher or lower than predicted by the model (dubbed “overperforming” and “underperforming” countries, respectively). Parameters of the model were estimated for these two subsamples, as well as for the full sample. They were then used to project three growth scenarios (optimistic, pessimistic, and baseline, respectively) by applying the model first to the United Nations Population Projections for each of them.

Figure 3.2 Simulations of income per capita 2010–2050 for the EAC (using parameters from the full sample and various fertility scenarios)



Source: World Bank staff calculations.

Note: Baseline simulations for four United Nations demographic scenarios, based on the full sample.

A second possible solution to the problem of unequal provision of social services, therefore, would be to look at the ways to reduce fertility in the countries where it remains high regionally. Lower fertility rates would allow for greater education investments per child, and the demographic dividend would allow households and governments to increase resources for human capital. These combined effects may help to move the economies into a “virtuous circle”—the demographic transition helps to accelerate economic growth, which in turn helps to improve the population’s health and education, in turn accelerating the demographic transition.

With two possible solutions, it is important for policy makers to understand the implications of each. Essentially, policy makers need to assess the size of fiscal transfers that would be necessary to (at least partly) outweigh the imbalance in education expenditure caused by different demographic developments in the EAC.

Transfers of the size implied by the constant fertility scenario would be difficult to design; yet even under sensible assumptions of fertility convergence, fiscal transfers (although much smaller) are still required

Simple projection exercises help to assess the size of fiscal transfers necessary to mitigate the imbalances in education expenditure caused by divergent demographic developments in the EAC (annex 4). The exercises’ aim is to quantify the potential costs of a coordinated policy effort to bring education expenditure per child to the level that would correspond to a scenario where fertility rates across EAC countries have converged. These simulations help to assess the challenges in terms of convergence of education expenditure measures related to the different demographic developments that EAC countries face.

Two sets of simulations were carried out. The first, assuming that education expenditure as a share of GDP remains constant, estimates average education expenditure per child in two scenarios.

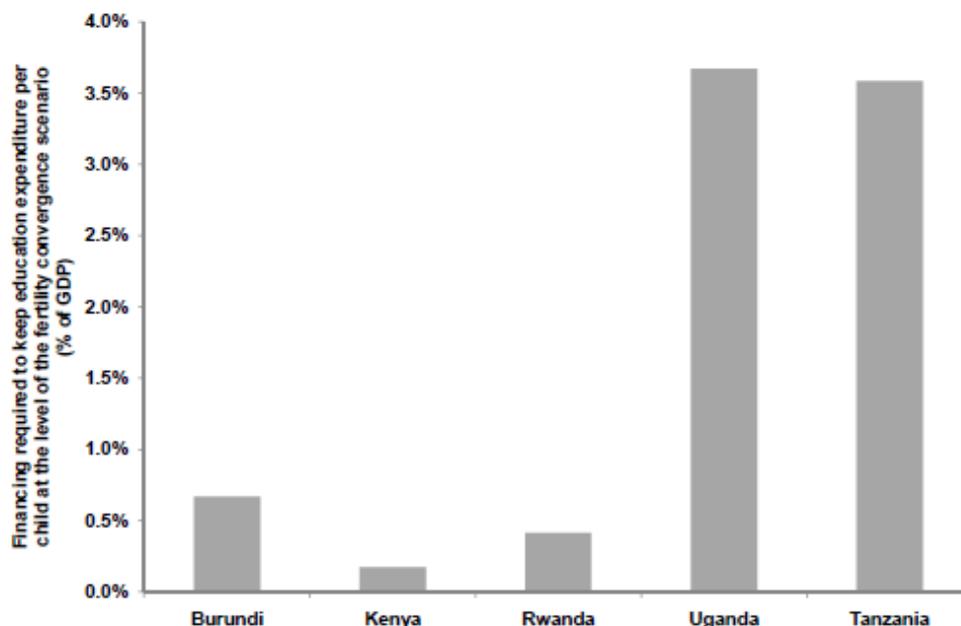
The *constant fertility scenario* assumes that fertility rates remain at the level observed in 2010 in forthcoming decades. (As seen in subsection 2.1, this is a “very high fertility” scenario.)

The *fertility convergence scenario* assumes such convergence in the region and concentrates on the improvements in education expenditure per child until the threshold fertility rate of four children per woman is achieved. According to the fertility projections (medium variant) of the United Nations World Population Prospects, this level will be attained by the countries in our sample in 2010–2050, in different periods: Burundi and Kenya in 2015–2020, Rwanda in 2020–2025, Tanzania in 2025–2030, and Uganda in 2030–2035.

The increase in education expenditure per child (defined as individuals aged 5–14 years) implied by the reduction in fertility in the fertility convergence scenario is calculated and multiplied by the size of the same age group under the constant fertility assumption. The difference between the amount obtained and assumed education expenditure (remaining constant as a share of GDP) represents a measure of potential costs attached to the delay in the demographic transition, or the additional fiscal effort needed to compensate for these costs.

The necessary increase in education expenditure over the period where convergence to a similar fertility rate would otherwise have taken place is presented in figure 3.3 as a share of GDP in 2008 for each EAC country. In particular, large percentage increases in expenditure per child are present in the scenarios for Burundi, Tanzania, and Uganda—the countries with lowest expenditure ratios in 2008. Kenya and Rwanda, where the levels of education expenditure per child are higher and the fertility reduction trend has already started, would see this measure rise less in relative terms.

Figure 3.3 Financing required to achieve the path of education expenditure per child in the fertility convergence scenario if fertility rates remain constant (% of 2008 GDP)



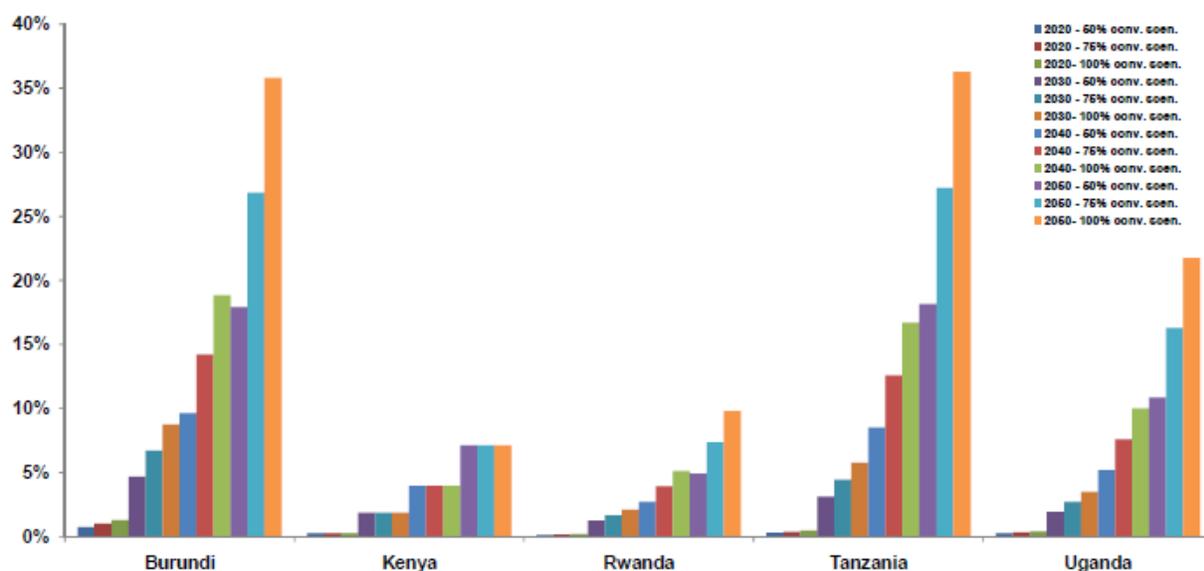
Source World Bank staff calculations.

Note: The years are 2010 through the year indicated in the description of the fertility convergence scenario above.

The second set of simulations assumes a strong trend in convergence in educational expenditure per child in the EAC in 2010–2050.

The path of education expenditure per child for Kenya (the highest in the region) is assumed to be as projected in the fertility convergence scenario. The other countries are assumed to increase educational expenditure in the forthcoming decades so that by a certain year (2020, 2030, 2040, or 2050) they achieve a level of education expenditure per child which equals ϕ percent (with ϕ equal to 50, 75, or 100) of that of Kenya. The extra costs necessary to achieve such a target under the constant fertility scenario relative to the fertility convergence scenario are presented as a share of 2008 GDP in figure 3.4.

Figure 3.4 Difference in financing required for the EAC countries under constant fertility and fertility convergence scenarios to achieve the path of Kenya’s education expenditure per child in the fertility convergence scenario (% of each country’s 2008 GDP)



Source: World Bank staff calculations

Note: For Kenya, $\phi=100$ percent for all scenarios. The years are 2010 though the year indicated in the graph.

The fiscal costs implied by the second set of simulations are greater than the first. Assuming that the fertility rates remain constant until 2050, the simulation estimates the extra costs that would be necessary to achieve the Kenya expenditure per child target relative to the fertility convergence scenario. The results show that financing needs grow strongly over time. Over the whole period, financing needs are particularly large for Burundi, Tanzania, and Uganda, which would require expenditures of 22–36 percent of their GDP to match the Kenyan level of education per child by 2050.

Short-term steps to improve labor mobility include setting up student mobility programs, removing real-world obstacles to teachers’ mobility, harmonizing curricula, and removing impediments to foreign investment in education

These steps could be a win-win game for the coastal and landlocked countries. For example, any of these solutions may not only help Burundi and Rwanda to improve their education systems, but may also help Kenya to reduce the number of its unemployed teachers (box 3.3). Box 3.4 describes one of the programs of the European Union in this area, the Leonardo da Vinci program, which can be of particular interest for the EAC because of its focus on vocational education and training (VET).

Box 3.3 Labor mobility among teachers

Kenya has 40,000 trained but unemployed teachers. In theory they should be able to work in Rwanda, Tanzania, and Uganda thanks to the East African common market treaty. Education is one of the sectors that should initially benefit from free movement of labor following the launch of the common market. The treaty has identified the acute shortage of trained teachers in the three states as a problem that can be fixed by free movement of labor across the four EAC states. Currently, all the EAC partner states are reviewing their internal processes in education, trade, tourism, and other sectors, in line with the treaty. “Labor services will be available where EAC partner states agree to liberalize services in sectors with acute shortages, such as in education, tourism, trade and transport” says Kenya’s EAC Permanent Secretary Mr. David Nalo.

According to the Common Market Annex on the Free Movement of Workers, Tanzania is in dire need of university and higher education teachers, especially PhDs. It is also seeking graduate primary school and early childhood teachers. Kenyans with postgraduate qualifications will also be able to teach in Tanzania’s vocational education training institutions. In addition, Tanzania plans to hire mathematics, biology, physics, and foreign-language teachers for secondary schools and English-language teachers for primary schools. Uganda has declared an interest in hiring administrators in universities and colleges. There is also a shortage of head teachers in high schools, as well secondary and primary teachers. Rwanda wants to hire high school teachers, polytechnic instructors, technical college instructors, and special-education teachers.

However, the movement of professionals who require accreditation will be subject to clearance by partner states. In addition, those willing to work across borders will need to apply for jobs, and obtain work permits and visas to work in Tanzania and Uganda. East African nationals willing to work in Rwanda will not be subjected to the above conditions.

Partner states will need help from private agencies in collecting and disseminating information on job vacancies, and facilitating citizens’ access to job opportunities, to register with the relevant authorities in the respective partner states.

Another challenge is the differences in education systems and curricula. While Kenya runs the 8-4-4 system of education, Tanzania and Uganda have stuck with the 7-4-3-3 system of education. Further, Kenya’s Teachers’ Service Commission does not recognize degree certificates issued by some private universities in Tanzania and Uganda.

Huge differences in wages across the region are another source of concern, for prospective employers and employees. For instance, entry-level salaries for trained primary teachers in Kenya may be half as high again or even double those in Tanzania. It is also feared that nationals seeking employment in neighboring EAC partner states may expect higher remuneration, a factor that may trigger conflict with employers.

The EAC partner states have recently taken some steps in this direction. In 2009 the EAC commissioned a study on harmonizing East African education systems and training. The final report, released in November 2010, made several recommendations (some of which have already been acted on, including a credit transfer system). University accreditation authorities in all member states have teaching of science courses such as medicine, agriculture, engineering, and basic science that will conform to uniform minimum standards. Students pursuing programs covered by the system will be free to transfer their credits to other institutions within the region. The report also proposed that partner states establish training programs for teachers to meet demand at all levels and to share teachers in cases where one country has much more teaching capacity than it needs. Success in this area is evidenced by the recent request by the Rwandan

government and supported by the Kenyan government to hire 4,000 Kenyan teachers. Although different tuition fees across East Africa remain a challenge, the pending establishment of a bursaries pool and the National University of Rwanda's decision to harmonize tuition fees for students from all EAC member states shows movement in the right direction—as was a ministerial workshop in September 2011 titled “A Regional Exploration of Pathways Toward Harmonization of Math and Science Curriculum in the East African Community.”

Box 3.4 European Union's Leonardo da Vinci Program

The Leonardo da Vinci Program funds practical projects in the field of vocational education and training. Initiatives range from those giving individuals work-related training abroad to large-scale co-operation efforts. These include ‘mobility’ initiatives enabling people to train in another country, co-operation projects to transfer or develop innovative practices, and networks focusing on topical themes in the sector. The people able to benefit from the program range from trainees in initial vocational training, to people who have already graduated, as well as Vocational Education and Training (VET) professionals and anyone from organizations active in this field. Leonardo da Vinci enables organizations in the vocational education sector to work with partners from across Europe, exchange best practices, and increase their staff's expertise. During its 15 years of existence, the Leonardo da Vinci Program has supported more than 600 000 training placements for young people. It has also backed 110 000 exchanges of VET teachers and trainers, and more than 3 000 innovative projects.

Source: European Commission, Education and Training, Life Long Learning Program
http://ec.europa.eu/education/lifelong-learning-programme/doc78_en.htm (accessed April 15, 2012).

Yet another effort under way is setting up centers of excellence in each member state. During the first EAC there was a University of East Africa that served the region's higher education needs with constituent colleges in each of the three original partner states.

Countries can facilitate remittances and provide identity cards to migrants in the short term

Providing identification cards to migrants, regardless of their legal migration status, to access banking facilities makes it easier to send remittances formally (some receiving countries such as Tunisia have done this). Mexican immigrants, for example, can obtain a photo-identification card from Mexican consulates abroad. This card is accepted as a valid identity document in 32 U.S. states, more than 1,000 police stations, 409 cities, 125 counties, and 280 banking institutions in the United States to open bank accounts. This approach has drawn more migrants into safer and cheaper remittance modes.³⁰

Spain has initiated agreements between Spanish and Latin American financial institutions to reduce transfer fees and foster the entry of new agents into the financial market, particularly in rural areas. In the past, Germany worked closely with Turkey to encourage remittances into formal channels. In contrast, South Africa's policy of limiting foreign exchange dealings to banks has prompted many remitters to use informal channels—only 5 percent of remittances to other Southern African Development Community countries are sent via formal channels.³¹

Even a small reduction in the sending cost can yield substantial benefits for recipients. The World Bank estimates that cutting prices by at least 5 percent could save \$16 billion a year; the

³⁰ World Bank 2006.

³¹ World Bank 2006.

OECD suggests that a reduction of just 1 percent in the average transfer cost could move up to \$800 million from transfer companies to migrants' families.³² Further, remittance corridor studies show that remittance fees are unnecessarily high and place a disproportionate burden on the poor, who tend to send money in smaller amounts.³³ In a recent survey of Senegalese migrants in Belgium, two-thirds of the migrants said they would send more if the cost of sending went down. In some countries, new remittance tools have emerged, based on cell phones and smart cards.

Finally, government policies to improve transparency in remittance transactions (as in the United Kingdom), to provide financial training to migrants (as in the Philippines), and to establish bilateral initiatives (as between the United States and Mexico) have helped to reduce remittance costs. The cost of sending \$300 from the United States to Mexico declined nearly 60 percent between 1999 and 2005, from \$26 to \$11. The decline can be traced to greater competition.

These positive developments remain the exception, however. In most corridors, particularly the low-volume corridors, remittance fees remain very high. In the New Zealand–Tonga corridor fees are three times as high as those in the U.S.–Mexico corridor.³⁴ In Africa, it can cost as much as \$47 to send \$200 from Tanzania to Kenya, Rwanda, or Uganda—but as little as \$5 to send \$200 from Singapore to Bangladesh.

3.2 Regionalizing connective infrastructure

Reducing transport costs is critical for regional and global integration of the EAC economy in general and for the landlocked partner states in particular—and could be helped by integration. Globally, transport costs have fallen faster where the demand for transport services is greater. Increasing scale in traded production has raised competitiveness and allowed scale economies in transport. The resulting lower costs encourage trade and allow greater specialization and exchange. By reducing economic distances and international divisions, good transport policies and their enforcement can get these virtuous circles moving.

Beyond improving the physical infrastructure it is also crucial to strengthen regional coordination and trade facilitation and to mitigate the negative effects of market structure in transport. Success in these areas will promote agglomerative forces and will sometimes provide greater payoffs than more physical infrastructure investments. It will also generate positive externalities from “network economies”—adding a link to a road or rail network does not just provide the benefits of connecting two places, it increases the value of all other connections on the network by tightening overall connectivity. These effects can be large, particularly for cross-border infrastructure, and can be promoted through regional coordination.

The corollary also applies: lack of an effective regional institutional framework for managing and regulating cross-border infrastructure may curtail new projects and even the maintenance of current stocks. Badly kept roads raise transport costs by increasing vehicle maintenance costs and journey times, slowing spatial transformation and reducing gains from specialization.

Monopolies encourage corruption. In smaller markets, users often have no substitutes—or very expensive alternatives—for the services of, say, large ports or even major roads. The higher the

³² OECD 2010.

³³ World Bank 2006.

³⁴ World Bank 2006.

substitution costs, the greater the potential for steep markups (private systems) or bribes (public networks).

In the EAC, one thorny issue is that many of the benefits of investment in the connective infrastructure of the coastal countries accrue to firms and consumers in the landlocked countries, but neither they nor their governments bear their fair share of the costs of such investments. They do, though, bear the costs of police roadblocks, but the benefits of these activities accrue to neither the governments of the coastal countries nor any private entities investing in infrastructure—hence their underinvestment and the higher transport costs associated with it.

This subsection reviews obstacles to regional connectivity in East Africa, discusses the ways in which regionalization of infrastructure may help to address these problems, identifies general principles and sector-specific content of regionalization policies, and suggests that differences in the natural resource endowments between the coastal and landlocked countries create political-economy reasons for combining connective and other types of infrastructure, such as energy, in specific regionalization packages.

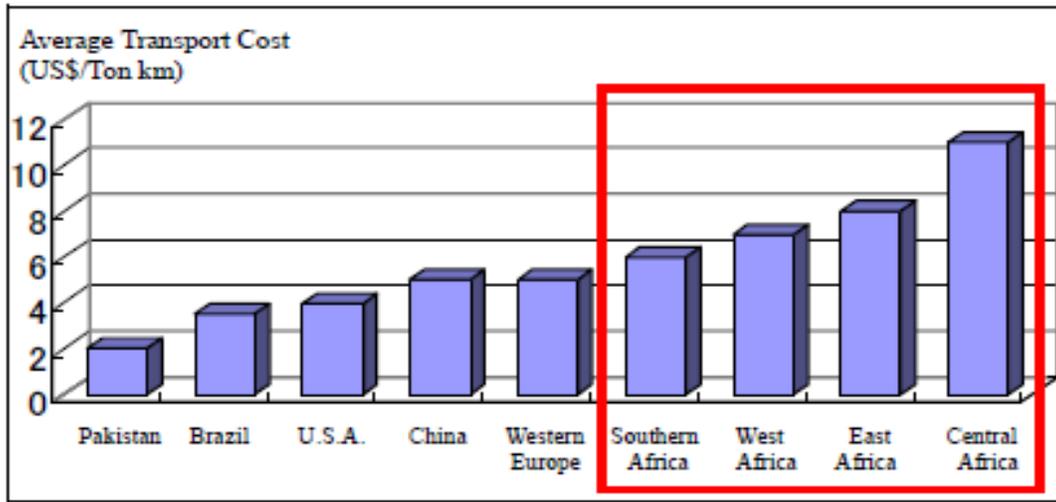
Many factors hinder regional connectivity

Years of extraordinarily weak operating performance due to poor governance, organizational deficiencies, revenue inadequacy, and underinvestment have led to deficient and in some cases what are in effect decapitalized regional infrastructure networks. Regional connectivity is hampered by ports with high berth and yard congestion, slow customs clearance, and excessive dwell times for ships; rail systems with poor service reliability (especially at transfer and locomotive exchange points), and low operating efficiency; too many graveled roads that are poorly maintained, overloaded, and badly managed; delays along transport corridors due to informal checkpoints and bribes for the police, transit authorities, and local communities; and border crossings with antiquated infrastructure, poor coordination, and congestion.

Such deficiencies seriously undermine the region's competitiveness. Freight costs per kilometer are estimated to be 60–70 percent higher than in the United States and Europe and 30 percent higher than in Southern Africa (figure 3.5). For the landlocked countries, transport costs can be as high as 75 percent of the value of exports.³⁵

³⁵ EAC and USAID 2011.

Figure 3.5 Comparison of average transport costs

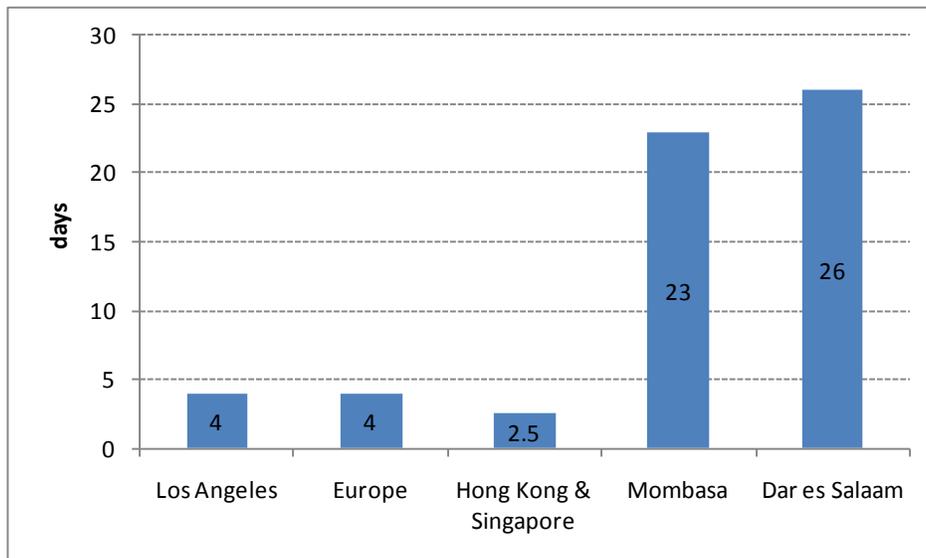


Source: Compiled from Teravaninthorn and Raballand (2008).

Seaports have high levels of berth and yard congestion and lack customs clearance coordination—hence excessive dwell times

The two main international ports of the region—Mombasa in Kenya and Dar es Salaam in Tanzania—suffer from heavy congestion and berthing delays, mainly caused by their inadequate container terminal capacity. Analysis of all the different transport alternatives between selected origins and destinations for exports and imports along the Northern and Central Corridors show that most of the transit delays are at these two ports.³⁶ Their average vessel dwell times are well above those of well-functioning ports around the world (figure 3.6).

Figure 3.6 Vessel dwell time at major ports in East Africa and elsewhere



³⁶ JICA 2010.

Source: JICA 2010.

In the port of Mombasa, the recent introduction of progressively larger container vessels and rapid growth in container freight volumes driven by the growth of the regional economy and trade have run up against too shallow water to accommodate vessels over 30,000 deadweight tons and storage yard width incompatible with the volume of container cargo. Cross-border cargo at the port of Dar es Salaam, especially that for Zambia and the Democratic Republic of Congo, takes longer to clear, compounded by delays in dispatching cargo on backhaul truck services, thereby increasing cargo dwell time at the port.

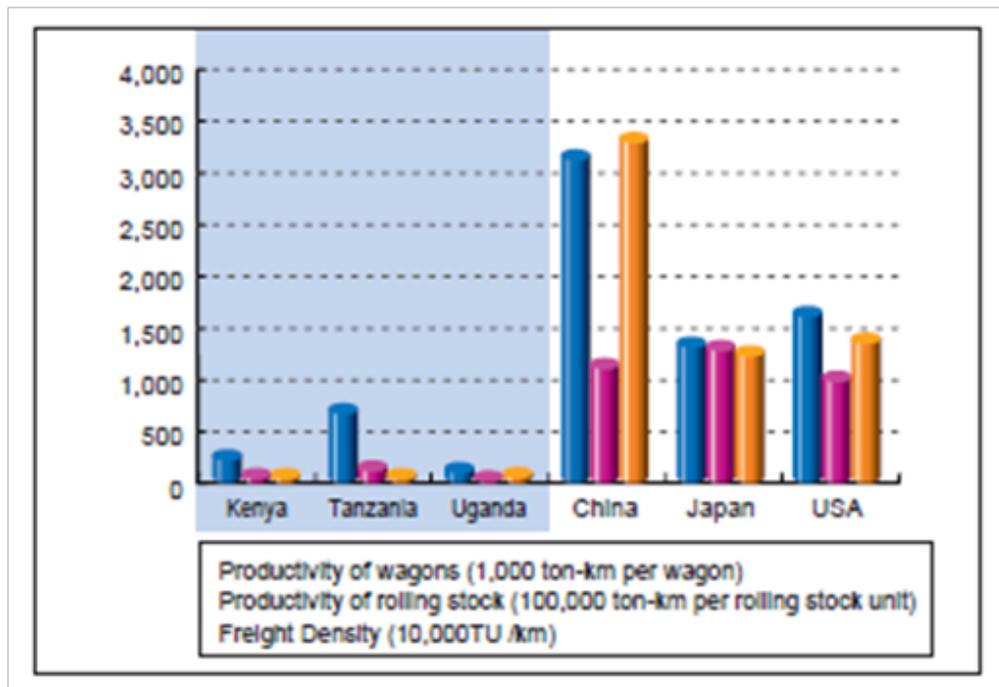
Rail networks have poor service reliability, and very low operating efficiency

The regional rail systems are operating well below their original design capacity and have low transport productivity (figure 3.7), and face tight capacity constraints because of poor track conditions, and poor locomotive and wagon availability. The Northern Corridor, for example, has a theoretical design capacity for the Tanzania–Zambia railway of 5 million tons per annum, but throughput is only about one-tenth of that. That corridor also has about 20 derailments per month. The condition of the rolling stock in the Central Corridor—109 locomotives and 1,670 wagons—is uncertain, but likely poor because of lack of maintenance. Operating speed restrictions of 13–50 km per hour are in force on many sections of the track because of its poor condition. Train turnaround time between Dar es Salaam and Mwanza or Kigoma is typically 18 days, rather than the scheduled 10.³⁷

The need for substantial investment to repair and upgrade the region’s rail track, rolling stock, and other equipment is self-evident. Without it, the rail systems will be unable to handle more traffic—indeed, maintaining current freight levels may be at risk.

³⁷ JICA 2010.

Figure 3.7 Productivity of rail transport in East Africa and elsewhere



Source: JICA 2010.

A large portion of regional roads have gravel surface and suffer from inadequate/deferred maintenance, overloading, and inefficient management

As in other Sub-Saharan African subregions, the majority of the trunk roads in East Africa were developed during the colonial era. Not only were roads designed to moderate to low standards in the first place, but overloading of trucks has caused serious damage, exacerbated by intermittent maintenance and poor management. Thus the entire region is affected by the higher costs stemming from weak road infrastructure.

Things are better than they were, however: most sections of the Northern and Central Corridors across Kenya, Uganda, and Tanzania have been rehabilitated or reconstructed in recent years (with assistance from the World Bank, the EU, the African Development Bank, and other development partners), and road conditions have improved. Yet despite the upgrades, an assessment by JICA (2010) rated 45 percent of the road capacity in the Northern Corridor poor and gave it a level of service grade of E or F.³⁸ The Central Corridor Road Project—nearing completion—involved rehabilitation (517 km), construction (527 km), and routine maintenance (200 km) of trunk and regional roads.

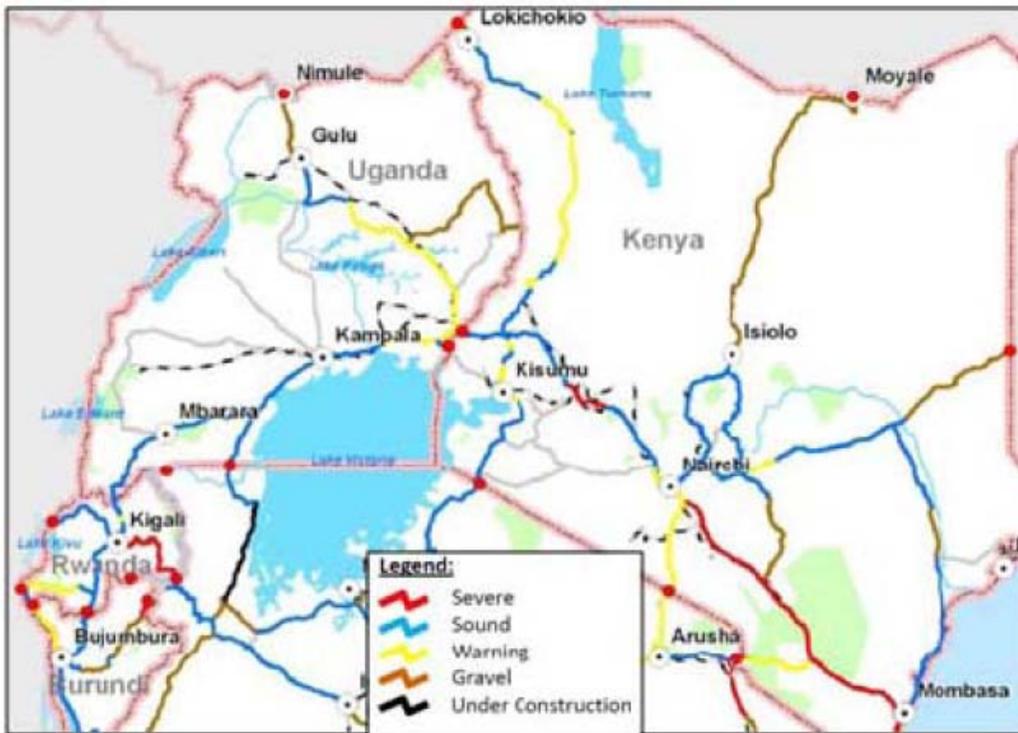
JICA’s overall road assessment at end-December 2009 indicated that 73 percent of Tanzania’s roads were good, 23 percent fair, and 4 percent poor (against 25 percent good, 40 percent fair, and 35 percent poor in December 2001, when projects started).

³⁸ Grades range from A (best) to F (worst).

Many highways remains unpaved, and over 3,500 km of regional roads have a gravel surface (figures 3.8 and 3.9). And there have been persistent problems in maintaining pavements due to capacity problems at road bureaus and the private companies undertaking road repair projects.

Despite recent upgrading, the regional road network needs several types of improvement: upgrading road capacity, especially the segments with level of service grades E or F; rehabilitating paved roads where the condition has deteriorated beyond the point at which preventive and routine maintenance works; paving many of the gravel roads; and filling in missing links.

Figure 3.8 Condition of Northern Corridor roads



Source: JICA 2010.

Figure 3.9 Condition of Central Corridor Roads



Source: JICA 2010.

Regulatory and administrative hurdles raise costs and delay freight movements along the region's transport corridors

Transport along the corridors suffers from serious delays due to informal stops and checkpoints (formal or informal). Trucks are forced to go over weighbridges, either mobile or grounded, to ensure their compliance with regional axle load and gross vehicle weight standards. The lack of proper equipment and design problems in weighbridges causes congestion and delays. Most often, trucks are stuck in long lines. Weighbridges should normally require three minutes for transit. According to East Africa Business Climate Index 2008 survey of the East African Business Council, however, trucks on average spend 92 minutes and some weighbridges occupy trucks for up to five hours.

There are also frequent unwarranted roadblocks and checkpoints. Inspections are notorious for their lack of procedural transparency. Officials regularly deviate from agreed inspection procedures and subject drivers to administrative harassment and extortion. According to the same survey, 172,236 days are lost each year as a result of delays at weighbridges, roadblocks and customs offices, and \$9.8 million is paid in bribes.

Many border crossings have antiquated infrastructure, inadequate coordination between the countries, and congestion. The key problems that plague border crossings have been extensively documented and include excessive documentary requirements and anachronistic official procedures; insufficient use of information and communications technology systems; questionable due process (lack of transparency, predictability, and consistency in customs activities and determinations); unclear demarcation of responsibilities; and lack of efficient cooperation among a country's customs and other governmental agencies.

Customs procedures in East Africa, as elsewhere on the continent, are opaque and unpredictable. Firms have to spend much time searching for information and frequently have to pay bribes, penalties, and fees for administrative or judicial appeals. All these expenditures represent extra costs of doing business that put small firms particularly at a competitive disadvantage.

Lack of policy harmonization holds back cross-border infrastructure in promoting intraregional trade

Cross-border infrastructure helps promote intraregional trade only when supported by harmonized regulatory frameworks and administrative procedures—still a work in process in East Africa. Regulations on vehicle dimensions, axle-load limits, road transit charges, and highway codes have yet to be harmonized. Even common definitions of road classes and route numbers are missing. Similarly, rail connectivity is gummed up by minimal integration of national technical standards, such as those for building and maintaining railway facilities. Shipping on inland waterways and lakes needs to set common regulations on ship registration as well as safety standards, including those on periodic ship surveys, staffing requirements, and aids to navigation and radio communication.

Regionalizing infrastructure may help to remove critical infrastructure bottlenecks

Upgrading regional “backbone” infrastructure and removing nontariff (regulatory and administrative) barriers to trade are among the key priorities the EAC has identified. These measures will require:

- Reforming the institutional framework of the region’s infrastructure so as to improve its performance through greater reliance on forces of competition and exploitation of economies of scale and scope;
- Striking an appropriate balance between the functions of government and the private sector in a complementary way, and attracting large-scale foreign private investment; and
- Improving regional institutional capacity and harmonizing regulatory frameworks and administrative procedures.

Both economic integration and technological progress have expanded the natural market areas of infrastructure industries, frequently transcending national borders, which in East Africa reflect historical colonial empires rather than common cultures and markets. Transport, electricity, and telecommunications operate more efficiently if their networks are organized according to the patterns of transactions, and trade liberalization has made these patterns increasingly transnational. Moreover, adjacent networks can often minimize costs by sharing capacity to take advantage of differences in the time-pattern of usage of infrastructure services. Infrastructure networks for the national market are thus becoming inadequate with growing integration. (Annex 6 provides a more detailed conceptual framework for regionalizing infrastructure.) South America has already taken some steps (box 3.5).

Box 3.5 Initiative for the Integration of Regional Infrastructure in South America

The Initiative for the Integration of Regional Infrastructure in South America (IIRSA) was adopted at a meeting of South American presidents held in Brasilia, Brazil, in August 2000, at which the region's leaders agreed to take joint action to promote South American political, social and economic integration that includes the streamlining of regional infrastructure. The IIRSA is based on two fundamental areas of action:

- *Spatial planning.* Recognizing the geopolitical and socioeconomic situation of the continent, governments agreed to organize the South American space into transnational corridors which concentrate population as well as current and potential production and trade flows of the region, and which are intended to gradually converge into a common standard of quality of transport, energy, and telecommunications infrastructure services. These transnational corridors, known as integration and development hubs, are large regions of South America that generate intraregional and global business opportunities or have the potential to generate large investment and trade flows.
- *Convergence of institutional standards and mechanisms.* Governments have set up a series of working groups to improve understanding and promote the eventual dismantling of regulatory, legal, operating, and institutional barriers and restrictions that limit the efficient use of existing infrastructure and hinder investments in new infrastructure, with the aim of promoting free trade in goods and services within the region.

The IIRSA's action plan calls for strengthening national investment planning and coordination among countries; standardizing and harmonizing regulatory and institutional aspects; and developing a portfolio of projects that encourages private sector participation and innovative financing schemes.

The countries agreed on a common portfolio made up of 348 infrastructure projects in 41 project groups with an estimated investment amount of \$38 billion at the start of 2007. Additionally, the governments selected a limited set of high-impact projects for physical integration in South America to which special attention will be paid for their short-term funding and execution, with an estimated investment amount of \$6.3 billion.

Because, as said, infrastructure networks exhibit significant economies of scale and scope, such economies could be more fully exploited if the market boundaries of these industries were expanded beyond national borders. Moreover, in the face of global financial instability and retrenchment, many multinational utilities are rationalizing their operations and are exiting countries with small infrastructure markets that are noncore to their global activities. Individual countries in East Africa may well be below this threshold size for attracting the interest of foreign utilities and other investors.

The region's infrastructure as a whole may though easily overcome the national size disadvantage. Cross-border infrastructure may therefore yield investment benefits that go beyond exploiting economies of scale and scope in production. Every strategy for addressing the issue of infrastructure bottlenecks should consider the region a single entity and seek to facilitate investments on regional rather than national lines.

Benefits from better connectivity through cross-border infrastructure tend to be indirect and long term, as well as asymmetric across countries. Costs tend to be incurred immediately. This mismatch makes it hard for countries to agree on the appropriate allocation of costs, especially for large projects. Consequently, there is a tendency for individual governments to underinvest in such infrastructure.

In addition, because cross-border infrastructure typically extends over several countries, it also gives rise to potentially important coordination problems. (In fact, “missing links” in major cross-border roads are too common.) Such problems are exacerbated if the project has asymmetric country effects.

Taken together, the above factors—inadequacy of infrastructure networks designed for national markets in the face of growing integration, potential underinvestment due to spillovers, and the risk of coordination failures—suggest an important role for regional institutions in overseeing and managing cross-border infrastructure. The role of supranational institutions is especially crucial when the distribution of the investment burdens differs substantially from the distribution of expected benefits. Regional institutions can analyze economic and financial feasibility, as well as the distributional consequences of cross-border infrastructure projects, in a nonpartisan manner. Thus they could facilitate regional agreements and compensation schemes—a task usually beyond the wit of national institutions.

Regionalizing regulation may help to enhance policy credibility and commitment

Services delivered by infrastructure are economically and politically important, and are ubiquitous. For these reasons, prices are scrutinized by interest groups and even the general public, and so receive much political attention. Governments can also behave opportunistically with privatized utilities, as many of their costs are fixed and “sunk,” such that once the investment is made the assets cannot be redeployed elsewhere. Utilities are therefore vulnerable to expropriation of their investments.

Given the public sector’s constrained fiscal space in East Africa, the private sector will have to play an increasingly large role in providing the resources for regional connectivity. But private utilities and investors vulnerable to administrative intervention in East Africa are likely to demand high risk premiums and to underinvest unless regional governments can make a credible commitment not to expropriate sunk investments—difficult, given their long histories of arbitrary administrative intervention and political instability.

However, regionalizing regulation creates institutions whose policies and decisions can be changed only by mutual agreement among several nations. Political change or government opportunism in one country is therefore insufficient to cause a radical change in regulatory governance regionwide unless that government is willing to sacrifice all the other benefits of regional cooperation. Thus regionalizing regulation could enhance the ability of EAC governments to make the necessary credible commitment.

Regionalizing may also help to overcome constraints in technical capacity

Effective regulation in infrastructure sectors requires professional personnel who are experts in the relevant economic, accounting, engineering, and legal principles, and familiar with good regulatory practice elsewhere. These skills are also needed in the regulated firms. So, do EAC countries have enough specialists to staff their regulatory agencies, run their utilities, and provide for policy capacity within the sectoral ministries?

A pragmatic response to limited national regulatory capacity in East Africa is to increase regional policy and regulatory coordination and cooperation, and ultimately to create regional regulatory authorities. By pooling resources, such authorities can alleviate some of the problems

that arise from national scarcity of technical and economic expertise. This approach also spreads the often high fixed costs of regulation among the larger EAC population.

Regionalizing infrastructure should have two strategic pillars: removing cross-border infrastructure bottlenecks and promoting regional policy harmonization (with institutional capacity building)

These two strategic pillars can be applied to individual sectors in the following ways.

Ports. This is a high-priority subsector. The two main international seaports (Mombasa and Dar es Salaam) suffer from significant congestion and berthing delays linked to capacity problems of their respective container terminals. Both “hard” infrastructure development and “soft” infrastructure improvement will be crucial for this subsector. It is essential to improve cargo-handling volumes at regional ports in the short run and to address the shortage of regional ports in the longer term. Demand for port capacity in East Africa is rising rapidly, and the scope for expansion in the existing ports is rather limited.

In hard infrastructure these steps require:

- Port capacity and efficiency improvements in terms of yard space, number and length of berths, and loading/unloading facilities of major international ports;
- Improving ports connected with international corridors to achieve world-class standards; and
- Improvements in intermodal connectivity with railways and roads, and development and strengthening of inland container depots.

In soft infrastructure these steps require:

- Assistance for moving to a “landlord” model of port operation (involving concessions to private operators); and
- Improving port operation efficiency through single-window port procedures, electronic forms submission, simplified port procedures, certification of clearance and forwarding agents, and other measures.

Eight projects have been proposed in the ports of Mombasa and Dar es Salaam and are expected to reduce prices and time of port operations, and greatly improve the reliability of port services. These projects include, in Mombasa port, enhancement of the short-term container handling capacity, a new container terminal (Kipevu West), an offshore petroleum offloading jetty, and a dry bulk terminal facility; in Dar es Salaam port, enhancement of short-term container handling capacity, a single-point mooring facility, a new container terminal, and dry bulk and break bulk facilities.

In June 2011, Kenya’s Port Authority announced a K Sh 10 billion rehabilitation and expansion project for Mombasa port. The project includes dredging of mud and silt to accommodate bigger vessels and the simultaneous construction of a new cargo berth. The project is expected to address the problem of congestion at the port and thus to improve its operational efficiency in line with the government’s Vision 2030.³⁹ In March 2011, Tanzania’s Port Authority embarked on an equally ambitious rehabilitation and expansion project to enhance the efficiency of Dar es

³⁹ Mwangasha 2011.

Salaam port. The project is designed to increase the channel depth. It also includes building two new berths and turning the port's single-point mooring facility into a multipurpose facility. The project cost, excluding the channel deepening, is put at around \$460 million.⁴⁰

Rail. After years of decline due to underinvestment and poor operating performance driven by organizational deficiencies, the rail sector and associated rail marine services could make a large contribution to regional integration and the future economic development of the EAC. Rail could play a major role in long-distance freight and bulk transport and in medium-distance intercity passenger transport. Thus rail should be a focus for improving long-distance transport between ports and inland countries as well as providing access to mine resources.

To address aging infrastructure, a second-generation rail concession model is needed (one that clearly identifies and secures upfront government financial commitment to track rehabilitation while leaving to private operators the task of track maintenance and fleet renewal and maintenance).

There is also a need to gradually shift to the more cost-efficient international standard rail gauge of 1,435 millimeters. This huge investment is likely to require phasing-in, depending on demand. In addition, only once the existing rail networks have improved their ability to compete in a financially sustainable way against road haulers should this shift be considered.

A detailed study is also needed for the following: analyze the cost structure and performance of regional rail systems, and compare them to those of roads; identify priorities for system upgrading and restructuring and estimate the needed investment for increasing operating speed from the current regional average low of 30 km an hour; analyze regional demand and estimate threshold traffic volumes for regional railroads to achieve financial viability; identify and clarify the deficiencies in the current rail concession agreements in regional rail networks; and identify potential financing schemes for revitalizing regional rail systems.

In hard infrastructure these steps require:

- Rehabilitation of facilities and track of general freight railways (concessioned and public); and
- Improving intermodal connectivity, and developing transshipment facilities.

In soft infrastructure these steps require:

- Adopting a second generation rail concession model; and
- Designing affordable and sustainable rail public service obligations (mainly for passenger services).

Several key elements of the strategy for revitalizing the rail sector in the Northern and Central Corridors are being put through. The African Union and regional governments have adopted a policy requiring all new railway projects to conform to standard international gauge specifications. Key projects in Tanzania include a performance management contract (after the government took full control of Tanzania Railway Limited from 1 August 2011), as well as track infrastructure upgrade, repair, and maintenance to improve reliability and reduce train transit and turnaround times. Similarly, revitalizing the Rift Valley Railroads (RVR) includes rehabilitating

⁴⁰ Elinaza 2011.

track between Mombasa and Nairobi; repairing and upgrading the existing RVR locomotive fleet in Kenya and Uganda; and upgrading the RVR Mombasa intermodal yard and equipment.

Roads. Constructing important missing links in the main corridors and developing rural roads are key priorities, as is strengthening operation and maintenance capacity. Cross-border transport laws and regulations are some of the bottleneck areas. Technical assistance is first required to help partner states align their laws on vehicle limits to regional standards and to adopt new regulations imposing administrative penalties for noncompliance. Such assistance can be extended in the longer term to develop a regional overloading control strategy with targeted enforcement provisions based on risk management, including databases that develop profiles of frequent offenders and additional enforcement measures to target high-risk truckers.

In hard infrastructure these steps require:

- Developing international corridor networks connecting key international ports with inland areas;
- Developing a branch (feeder) road network that connects key cities, production sites, trunk roads, and key rail stations;
- Developing rural roads that link poor areas with trunk roads; and
- Developing inland container depots at strategically important points of large cities, rail stations, seaports, and airports.

In soft infrastructure these steps require:

- Improving regulatory aspects associated with the cross-border transport system (e.g., weighbridges, checkpoints, escorts);
- Harmonizing traffic rules and transport institutions (e.g., third-party transport insurance, axle-load control, driving on the right or left side of the road);
- Strengthening operation and management institutions for roads and bridges as well as securing funds;
- Strengthening contractors' competence and capability;
- Introducing a participatory road traffic policy; and
- Human health measures, in particular, measures against HIV/AIDS at international borders.

Several infrastructure projects have been proposed or are being implemented in the Northern and Central Corridors. These include capacity upgrades (additional lanes), rehabilitation of roads with roughness levels above 6 IRI (International Road Indices), and upgrading of roads from gravel to paved.

A key regional network project is the transnational Arusha–Namanga–Athi River Road (235 km) linking Nairobi (Kenya) to Arusha (Tanzania). The road, which began construction in early 2008, will provide northern Tanzania with an alternative trade route to external markets via the port of Mombasa. It will facilitate movement of traffic from Zambia, through Tanzania, from Kenya to Ethiopia, and Uganda. The road will also enhance import and export traffic from the port of Mombasa.

Other regional road projects include the Arusha–Holili–Voi (240 km) road linking Northern Tanzania to Mombasa, and the Malindi–Lunga Lunga–Bagamoyo (400 km) road running along the coast between Kenya and Tanzania. More recently, in November 2011, Kenya and Ethiopia signed a \$743 million agreement to construct a road network connecting them. The 888 km Addis Ababa–Nairobi–Mombasa road will further interconnect the two countries with the rest of the region.⁴¹

Customs and transit. One of the most important commitments in this area is that of the EAC to introduce one-stop border posts, drastically transforming all borders.

A strategy to improve the performance of customs could focus on the following:

- *One-stop border posts*—establishing a regional convention to provide a basis for an international framework for them, covering institutional arrangements, site configuration, status of the land of the control area, status of the infrastructure and equipment, modality of the inspection process, status of expatriate staff, extraterritorial jurisdiction, and miscellaneous facilitation measures.
- *Measures to reduce corruption*—reducing the level of bureaucracy by streamlining and simplifying clearance procedures and making them transparent; establishing a code of conduct for both customs officers and clearing and forwarding agents, which should include standards for customs clearance in terms of duration as well as a provision of appeals of customs decisions; capacity enhancement, including information technology solutions, which will reduce documentation requirements and increase transparency, and workshops for clearing and forwarding agents, so that they can more effectively handle clearance documentation procedures; and anticorruption campaigns.

Several one-stop border posts are planned. Namanga town on the Tanzania–Kenya border is expected to be the largest (and the first in Africa) followed by Malaba between Kenya and Uganda and Gatuma on the Rwanda–Uganda border. Similar facilities are planned for Horohoro and Sirari, also on the Tanzania–Kenya border, Rusumo (Tanzania–Rwanda), Mtukula (Tanzania–Rwanda), and elsewhere. The posts are being set up with financial help from Japan.

Regionalizing infrastructure policy and regulation is a critical component of infrastructure regionalization

The distribution of the costs and benefits of regional cooperation and integration vary greatly among countries and the different components of cross-border infrastructure. Landlocked countries benefit substantially from road and rail corridors to the sea, as well from intracontinental fiber-optic backbones that link them to submarine cables. For their part, coastal countries depend on sound management of water resources and sometimes energy resources upstream. Yet failure to address these distributional issues was one of the main reasons why the first EAC collapsed in 1977.

The task of designing an effective redistribution mechanism would be much easier if it was based on cross-border infrastructure as a whole. For example, regionalizing transport and energy simultaneously might be politically more acceptable to both Kenya (benefiting from energy because of Uganda’s hydro and Tanzania’s natural gas resources) and Uganda (benefiting from road and rail improvements in Kenya, which would facilitate access to Mombasa). Further, both

⁴¹ All Africa 2011.

returns and political feasibility of the regional infrastructure projects might be improved if they help the coastal economies to improve their access to markets and natural resources of inland countries beyond the EAC, such as the Democratic Republic of Congo or Southern Sudan.

Regional energy integration could help to alleviate East Africa's growing energy deficits

The East African region has huge electric power potential, yet it has the lowest access to electricity and the smallest per capita generation on the African continent. Moreover, persistent and widespread energy deficits, largely due to drought conditions (lower water levels in rivers and dams) and continuing organizational deficiencies in the state-run electricity supply industries, are undermining the region's economic gains and constitute a major impediment to regional trade and expansion of investment. Kenya, Rwanda, Tanzania, and Uganda are facing electricity shortages and have instituted power-rationing schemes that are disrupting the civic and economic life of their citizens. Power shortages are also undermining the region's agriculture, commerce, and industry.

Lake Victoria is the second largest freshwater body in the world, giving rise to significant ecological, economic, and social opportunities. The region is also rich in energy resources: geothermal, mainly in Kenya and Tanzania; hydro in Tanzania and Uganda; natural gas in Rwanda and Tanzania; oil reserves in Uganda; and coal and uranium in Tanzania. The diverse energy resources and endowments among partner states provide a strong rationale for promoting regional electricity trade and ultimately integrating electricity markets.

The Great Rift Valley, an area of Eastern Africa with strong tectonic activity, offers immense geothermal potential. Some estimates put its resource potential at 15,000 megawatts (MW)—around 70 percent of the entire continent's geothermal potential—much of it concentrated in Kenya and Tanzania, and Ethiopia. With a potential of over 7,000 MW and over 210 MW of projects completed, Kenya is the leader in African geothermal power production. The country's main power plant developer, KenGen, announced plans to develop 280 MW of geothermal power by 2013. The government-owned developer, Geothermal Development Company, set a target of 200 MW per year over the next decade.

The River Nile, the only major river flowing out of Lake Victoria, crosses Uganda before eventually debouching in Egypt. With a high volume flow rate of approximately 600 cubic meters per second, it gives Uganda a huge hydropower potential of over 2,000 MW, only a small fraction of which has been exploited. By some estimates, Tanzania's hydropower potential is even greater—over 4,000 MW—but less than 10 percent of it has been developed.⁴²

Extensive offshore gas fields at Songo Songo and Mnazi Bay in Tanzania contain an estimated 44 billion cubic meters of natural gas. Songo Songo's natural gas resources are being exploited by Songas under a gas-to-electricity project. However, the resources at Mnazi Bay are underused. Rwanda's gas reserves are estimated to be over 50 billion cubic meters.

Most regional countries have planned and developed their electricity systems in an isolated manner. Most of their policies and efforts have narrowly focused on satisfying growth in their national energy demand and so these countries have neglected opportunities for energy trade. (Although some bilateral power exchange agreements exist, the volume of power exchanged has

⁴² According to EAPP and EAC (2011), total hydro potential in the region is estimated at around 32,000 MW, with about half of it in Ethiopia.

been very low. Moreover, exporting countries were often unable to meet their contractual obligations to deliver power because of emerging deficits in their own electricity systems.)

The region's diverse and unevenly distributed energy resources offer major opportunities for guaranteeing energy security and resolving the energy crisis under the aegis of a regional approach. Indeed, the scope for regional development and for optimizing the electricity system from a regional perspective is enormous.

Integration of electricity markets in East Africa could yield significant benefits by the following: exploiting complementarities and comparative advantages in primary energy endowments and thus facilitating more efficient utilization of existing generating resources and giving access to lower-cost supplies; reducing supply risks through the provision of multiple links between system loads and cross-country generating resources; sharing generation reserve margins among several utilities or countries; providing the basis for actual and potential competition, and hence increased efficiency, in national markets that are otherwise too small to permit significant competitive entry; exploiting economies of scale through large regional projects; reducing investment requirements through sharing of reserve capacity; and facilitating benchmarking of costs, managerial efficiency, and operational practices.

The creation of the East Africa Power Pool (EAPP) in 2005 marked an important step toward realizing such benefits.⁴³ EAPP's overall objective is to facilitate successful regional integration by pooling generation resources, coordinating system planning and operation, and establishing common principles, rules, and procedures for settling disputes and equitably sharing benefits. Integration is estimated to yield, in 25 years, total operational cost savings of over \$80 billion for the member states of EAPP (excluding Egypt).⁴⁴ However, electricity trade is inhibited by the relatively few interconnections between countries, which are anyway weak and consequently suffer from control and stability problems. Until recently, electricity trade was limited to the Kenya–Uganda and Burundi–DRC–Rwanda networks, mainly through bilateral contracts.

Some studies have identified opportunities for cross-border connections, and several important regional initiatives are under way, which promise to rectify some of the current interconnection deficiencies. For example, under the auspices of the EAC, Kenya, Tanzania, and Uganda are developing plans to more fully interconnect their national grids and to further extend their interconnections to countries outside the region. Ongoing EAPP/EAC regional interconnection projects include (the estimated earliest year in operation is in parentheses) Tanzania–Kenya, 400 kilovolts (kV), 260 km (2015); Rusumo–Rwanda, 220 kV, 115 km (2015); Rusumo–Burundi, 220 kV, 158 km (2015); Rusumo–Tanzania, 220 kV, 98 km (2015); Ethiopia–Kenya, 500 kV, 1,120 km (2016); Ethiopia–Sudan, 500 kV, 570 km (2016); Uganda–Kenya, 220 kV, 254 km (2014); Uganda–Rwanda, 220 kV, 172 km (2014); Rwanda–DRC, 220 kV, 68 km (2014); DRC–Burundi, 220 kV, 105 km (2014); and Burundi–Rwanda, 220 kV (2016).

Some promising decisions have been made in other areas of regional power integration. In July 2011, for example, the Council of Ministers approved the adoption of a grid interconnection

⁴³ Recognizing the potential benefit from developing a regional power pool, energy ministers from seven East African countries signed an Inter-Governmental Memorandum of Understanding for the establishment of the Eastern Africa Power Pool (EAPP) on February 24, 2005. The EAPP was adopted by heads of state and government at the 11th Summit of COMESA in Djibouti in November 2006 as a specialized institution of COMESA for electrical power for Eastern Africa. Tanzania joined the EAPP in 2010 and Libya in 2011. Uganda has not joined yet.

⁴⁴ Eastern Africa Power Pool, "EAPP Projects," www.eappool.org/eng/projects.html.

code. Its objectives are to implement common operational security, reliability and quality of supply standards in the region’s interconnected transmission system; facilitate integrated planning of generation and transmission capacity; and ensure nondiscriminatory access to the EAPP transmission system.

Aggressive competitive restructuring, deregulation, and rebalancing of public–private sector roles are needed to enhance connectivity

Relative to other parts of the continent, East Africa has performed poorly in several areas of infrastructure (table 3.1). Underdeveloped and inefficient telecommunications, transport, and electricity networks lead to micro and macro imbalances and represent large obstacles to the region’s connectivity, competitiveness, and full achievement both of economic and social development goals and of integration objectives.⁴⁵ Hence the need for renewed efforts to foster investment, bring in managerial capability, and create a policy environment that is conducive to efficiency, especially in trade-related infrastructure. Moreover, the EAC infrastructure industries need to be restructured in order to contribute best to the economy and to avoid being significant impediments to growth and prosperity.

Table 3.1 Infrastructure benchmarked in various parts of Africa

	Western	Eastern	Southern	Central
Paved road density	38	29	92	4
Fixed-line telephone density	28	6	80	13
Mobile telephone density	72	46	133	84
Generation capacity	31	16	176	47
Electricity coverage	18	6	24	21

Source: Ranganathan and Foster 2011.

Bridging the region’s infrastructure gap will require heavy new investment and the participation of all economic agents—private and public. Recent studies suggest that total annual infrastructure spending to meet both national and regional demands would amount to over \$4 billion over 10 years for East Africa as a whole and about \$500 million for the EAC countries alone. But as EAC countries do not have the fiscal space for this, they require private sector participation.

Although incremental reforms may have been successfully implemented in countries with fully developed infrastructure networks supported by well-functioning institutional arrangements, an incremental approach to sectoral reform may not be the right prescription for the EAC, where the physical and institutional infrastructure is inadequate, and where business users and ordinary citizens will increasingly need new, higher-quality, infrastructure services. In the face of the region’s huge investment requirements, far-reaching reforms that contemplate substantial competitive restructuring, deregulation, and major rebalancing of the roles of the private and public sectors in core infrastructure should not necessarily be viewed as a radical program for reform—instead they may involve a sensible, even a conservative, response to a substantial need for new investment.

One key element of restructuring is to unleash market forces of competition, to the fullest extent that is consistent with opportunities and other elements of efficiency. The emerging international

⁴⁵ WEF 2009.

experience confirms what theory predicts: decentralized market-oriented decision making that is freed from excessive regulatory controls and that is energized by markets incentives is the surest means of finding and implementing efficient and innovative solutions to problems posed by the region's infrastructure needs.

Regulatory reform and deregulation could lead to fundamental changes in how infrastructure firms conduct business. By and large, these changes should reflect efficiency-enhancing structural reorganization, increasing diversity in price–service options, and greater responsiveness to consumer demands, as well as to marketplace opportunities for innovation. The deregulation of the trucking industry in Rwanda provides a good example: it not only led to lower prices (they declined by more than 30 percent in nominal terms and by almost 75 percent in real terms) but also led to growth in the country's trucking fleet.

Taking the first steps

As long as regional integration provides a substantial economic dividend to some of the participating countries, designing compensation mechanisms that benefit all of them should be possible.

Obtaining consensus from all governments in East Africa for regional infrastructure policy and regulation is problematic because of different attitudes and commitments toward reform, as well as concerns about national sovereignty. It requires considerable cooperation and trust between countries—perhaps more than now exists in the region. Thus initially, regionalization efforts could focus on promoting regional regulatory cooperation as a more realistic option for alleviating scarce country-regulatory expertise and resources. Initially, regional regulatory entities in rail, roads, and energy could be established to facilitate information exchange and to offer nonbinding advice on technical matters. But consensus for regional regulatory agencies could increase as more countries reform, gains from regional policy coordination and trade become more apparent, and countries (especially the smaller ones) confront the costs and staffing challenges of creating and maintaining national regulators.

Donors, too, have a role. Focusing on transport and energy, they are well placed to help in three main areas. First, by conducting a comprehensive review of the countries' legal, regulatory, and institutional frameworks and assessing progress made toward regulatory and overall policy effectiveness. Second, by identifying regulatory and other microeconomic policy issues that could be incorporated into regional trade negotiations and the elements of regional regulatory policy⁴⁶ to remove the frictions and distortions among regional economies. Third, by identifying practical options for implementing regional harmonization of market structures and regulatory convergence.

3.3 Piloting regional institutions on the coast, where they have higher chances of success

When a country or a region manages to leverage global demand for manufactured goods, it is usually from a coastal production base. These areas are less economically distant from external

⁴⁶ Such as rules governing the following: access to bottleneck infrastructural facilities; tariff rebalancing; competitively neutral mechanisms to promote universal service and free choice of suppliers; and licensing and other administrative procedures.

markets because of the much lower costs of the water transport. (In coastal Mombasa, for example, 12.5 percent of all sales are exports outside Africa, compared with only 4.4 percent in Nairobi.) The fundamental problem in the EAC is that the main industrial and urban agglomeration is Nairobi—500 km inland.

An economic integration zone (EIZ) on or near the coast, with a port, governed and taxed jointly by the EAC partner states, and with several functions outsourced to the private sector may well improve the business climate and increase private investment infrastructure in an area potentially offering the highest (increasing) returns to investment. It would allow all EAC partner states to benefit from a concentration of economic activity, even if that is outside the borders of all countries but one. The EIZ would be modeled on the special economic zone (SEZ) approach.

SEZs may help to leverage agglomeration but need to be carefully designed and located in the areas with high market potential

Many developing countries have used SEZs to kick-start regional development. Their number has grown enormously according to the ILO database, which reported 3,500 zones in 130 countries in 2006, up from 176 zones in 47 countries in 1986.⁴⁷ SEZs are delimited areas in a country, which function with administrative, regulatory, and often fiscal regimes that are typically more liberal from those of the rest of the economy. Operating through a variety of different names, such as “export processing zones,” “economic processing zones,” “free zones,” and “foreign trade zones,” SEZs aim to overcome barriers that hinder investment in the wider economy, including restrictive policies, poor governance, inadequate infrastructure, and problematic access to land. They have been an important policy instrument for many governments seeking to attract foreign investment, promote export-oriented growth, and generate employment.

The evidence suggests they can be highly effective when targeting regions that already have natural or economic geography advantages, although there is a long history of failure around the world in using instruments like SEZs to promote investment in remote regions.⁴⁸ SEZs are unlikely to be a trigger for agglomeration in lagging regions with low population densities, but they have proven to be powerful catalysts for growth in places like China, which targeted coastal trade gateways. Thus while governments should approach SEZs cautiously, hard and soft infrastructure should be used to reinforce existing geographic advantages.⁴⁹

In an open regional integration context, SEZs may have significant spillover effects across the region—giving them the potential to help entrench the integration process in the region in three main ways.

First, by concentrating core infrastructure around themselves, SEZs reinforce processes of agglomeration and help industries to reach scale thresholds that will allow them to compete better in regional and global markets. The benefits of creating competitive conditions for private sector development and an efficient trade gateway at the core will, however, spill well beyond the firms based in the zones to include firms through the regional supply chains that feed into them, taking the benefits of SEZs well beyond the core.

⁴⁷ Boyenge 2007.

⁴⁸ World Bank 2008a.

⁴⁹ World Bank 2008a.

Second, SEZs may offer sector-specific public goods, such as warehousing and logistical platforms, shared processing facilities, and design centers that facilitate competitiveness of wider industry clusters in the region.

Third, they have the potential to serve as pilots for broader economic reforms in the region. The best-known case is in China, where SEZs were used explicitly as testing grounds for major economic reforms. The public good here stems primarily from the demonstration effect that such zones can have on the wider national environment (and eventually on economic efficiency). In the EAC specifically, a regional EIZ has the potential to facilitate institutional convergence both by these demonstration effects and through greater interaction among policy makers and technical officials.

An EIZ jointly managed by the EAC partner states on the coast may be a win-win solution

The East African EIZ is conceived as a regional SEZ, located near EAC's economic "core." It would most likely be based around a port jointly operated by the EAC countries on the coast and close to an area of concentrated economic activity. The zone would be administered through a multilevel structure, with an autonomous local administration overseen by a regional supranational body. Investment, as well as taxes and revenues, would be shared among the members. Its objective is to promote regional competitiveness directly (through the channels discussed above) as well as by providing demonstration effects not only on how to create a competitive investment climate, but more broadly on the potential benefits of key provisions of integration, including labor and capital mobility.

In one paragraph, the concept of an EIZ for the EAC is as follows. A commercially focused, regionally designed SEZ can tackle many of the political-economy concerns of agglomeration. If implemented effectively and with truly open labor, capital, and goods markets, such a zone could help to ensure that some of the benefits of agglomeration are distributed as evenly as possible across partner states. Thus a regional SEZ may offer a politically expedient and practical way of piloting federation, allowing each partner state to test how processes of federation may play out within a tightly defined commercial "pilot" in advance of committing itself on an economywide basis.

The EIZ could be designed in line with the "wide area" SEZs usually associated with the Chinese model. These occupy a surface area greater than 10,000 hectares, with mixed-use developments (including industrial, commercial, and real estate), and normally with a resident population. It would function as a new city or municipality. The EIZ bears similarity to two recent economic policy concepts—charter cities⁵⁰ and early reform zones.⁵¹

Charter cities were born from the observation that bad rules and bad enforcement of rules is one of the critical factors holding back growth in many developing countries. Inspired by the success of former colonial trade hubs like Hong Kong SAR and, more recently, China's SEZs, they aim to use unoccupied land to establish a new city that operates outside the existing arrangements of the country, establishing their own tax regimes and legal structures. In this concept, countries can act as host, source, or guarantor: the host country provides the land, source countries provide the residents, and guarantor countries ensure that the charter is enforced. Honduras, for example, recently amended its constitution to allow for charter cities (box 3.6).

⁵⁰ Romer 2010a,b.

⁵¹ Auty 2010.

Box 3.6 Charter cities in Honduras

In 2011, the Honduran National Congress amended the constitution to grant the government the power to create special development regions (known by their Spanish acronym, RED, which also means network). REDs would have independent jurisdictions, with their own laws and administrative systems. Laws developed by the governing authority of the RED, however, must be ratified by the Honduran Congress with a simple majority.

The President has set aside 1,000 square kilometers in a yet to be defined location for the charter city.

Source: Adapted from Charter Cities (2011).

Early reform zones are geographic areas in distorted economies, and offer world-class infrastructure, business-friendly services, strong property rights, and the rule of law. They are executed as part of an economywide dual-track strategy, which uses such zones to kick-start a dynamic market economy—“track 1” rapidly expands employment, skills, taxes, and exports. Track 1 also builds a proreform political coalition that can eventually take on opponents of reform and neutralize or coopt them. Reform proceeds slowly in the rent-distorted sector (“track 2”) to avoid early confrontation with rent seekers, which a reforming government is likely to lose. Successful dual-track economic reform in economies as diverse as China, Malaysia, and Mauritius shows that early reform zones can expand a dynamic market economy within 15 years to a scale that dominates the total economy.

In the EAC context, it may not be necessary to develop an EIZ on the scale Romer proposes (a population of around 10 million), but will, though, almost certainly be necessary to have a city of some size not only for practical reasons such as housing workers, but also for commercial and political reasons, such as ensuring a significant tax base in order to compel interest and commitment from EAC members.

In line with the concept of SEZs, a critical characteristic of the EIZ would be its extraterritoriality. Almost all SEZs operate under a different fiscal and legal framework from the national economy’s in areas like the tax regime, rules on foreign currency, and sometimes labor law. Many SEZs also operate outside the control of the local municipal government authorities.

The EIZ would differ from traditional SEZs in two critical ways, however. First is its regional nature. Because it is designed as a regional space and may straddle two existing countries, no single nation-state would act as its “natural sovereign.” Second, and following from this, there is potential (and perhaps need) to operate the EIZ under a fiscal and legal regime that differs more than for most SEZs. The EIZ is unique in this way—the authors are aware of no other such regional SEZs⁵²—and potentially very much in line with the charter city approach.

The extraterritoriality of charter cities does not just allow the city to operate under a new set of rules. Of equal importance is the way in which those new rules are interpreted and enforced—governance, in short. As Romer (2010b) argues, if the point of charter cities is to get around a system of rules that has failed, it will not be sufficient to simply establish a new set of rules outside the old borders and govern it by the same individuals and institutions. What is critical to the charter city model is that it sits outside the traditional governance structures of the country in which it is located. In the charter city model, sovereignty of the city would come under some sort of third party “guarantor.” A country respected for good governance (perhaps Mauritius) or some

⁵² There are attempts at harmonizing SEZ regimes at the regional level, as in the EAC (and earlier in the BIMP-EAGA Growth Triangle in Southeast Asia). But none involves zones governed on a regional or supranational basis.

other credible third party (an international organization, say) would have control over the zone at least for a certain period, to guarantee that the necessary governance reforms are institutionalized.

The charter city approach to extraterritoriality for an East African EIZ therefore requires a departure from traditional modes of governance. This break is likely to be critical to the EIZ's success, not because of problems with governance in Kenya, Tanzania, or any of the EAC states, but rather for the political economy of dealing with a zone that is intended to serve the region.

Whether the EIZ actually requires external governance through, for example, a "guarantor" is unclear. Would collective participation by East African states, under a supranational body like the EAC, be enough to ensure its credibility?

Ensuring credible commitment is key for a successful EIZ

While the EIZ is an appealing concept for testing federation, its regional nature aggravates some of the difficult challenges in carrying forward an SEZ, as political-economy considerations come to the fore. First is the challenge of convincing the host government (or governments) to give up control over the land on which the EIZ is to be based, and to maintain this detachment over time. Establishing a territory as a separate jurisdiction requires careful consideration and often much political compromise within a country. But when one or more states are required to give up control of their sovereign territory to a collective or supranational authority, these political considerations become acute. As mentioned, the authors are aware of no precedent of a truly transnational special economic zone, especially not one in which a country has voluntarily given up control over a portion of its land. But assuming the political will, the potential benefits to a host country should be sufficient to facilitate an arrangement on the land for an EIZ (discussed later in this section). This may be somewhat easier to overcome in the EAC, as the partner states have already agreed to gradually cede portions of their sovereignty to the Community.

Perhaps the bigger challenge, however, is in maintaining the commitment of the host government (or governments) and other partners over the long term. This is the challenge of managing the investment risk—the issue of credible commitment. But how do governments—particularly those in developing countries—show a credible commitment to potential investors?

Part of the answer lies having a track record of policy stability. Unstable political regimes are inherently more risky, because the shorter time horizon raises the incentive to confiscate (nationalize) assets,⁵³ or to undertake radical policy shifts. The stability of the polity, not whether it is democratic, is the crucial element. Indeed, a stable autocracy can often offer commitment (at least in the medium term) that is more credible than what a democracy can offer. Growing democracy in the presence of still-weak institutions and the emergence of political competition can make enforcing the commitments of previous policies particularly tricky. This is the situation in many low-income and African countries today (in the EAC, Kenya is an example).

The issue of credible commitment is particularly critical for developers and investors in zone infrastructure (with longer-term payoff horizons). But it also affects perceptions among individual firms investing in EIZ operations. Although smaller and more likely to have shorter-term payoffs than those for infrastructure, these investments would still factor in additional risk that the project may be less stable than a traditional SEZ project backed by a single sovereign.

⁵³ North 1994.

The greater the firms view the risk, the smaller their willingness to make commitments such as paying for long-term leases upfront.

Beyond the investors, the risks to commitment that the EIZ would face are threefold. First is that the host government (or governments) may renege on its EIZ commitments. It could, for example, reclaim sovereignty over the zone or put up barriers to the interaction between the zone and the national economy. Some of the most likely triggers would be political, social, or economic issues in the host country, including fiscal crisis, economic or political nationalism, and elections and subsequent policy instability.

Recent research has found that 57 percent of the 412 arbitration and expropriation events in a global foreign direct investment dataset between 1970 and 2009 took place in an election year or the previous year.⁵⁴ One need only look at some of the situations that have affected EAC countries in recent years, including the postelection violence in Kenya in 2007–08 and, to a far lesser degree, the constitutional referendum in Uganda in 2005. One can also imagine a scenario where natural resources were found in or near the EIZ and the implications this might have on the host government's commitment to share revenues from the zone. Finally, the success of the zone itself might raise (or equally reduce) the incentive of the host government to go back on the agreement in an effort to capture more rents or reduce liabilities.

The second risk is that other EAC members renege on their own commitments to the EIZ. This would most likely occur for commitments to support some infrastructure expenditure, to commit necessary funds to the operational budget, or to meet their responsibilities for managing certain aspects of zone governance. One of the most likely reasons would be if partner states (particularly non-hosts) felt they were getting too little benefit from it.

The main concern here is the distribution of gains—the fact that the EIZ will contribute to a concentration of investment and economic activity, at least in the short term, in the country (or countries) in which it is based, with the perception (if not necessarily reality) that it would detract from possible investment in other partner states. Other partner states may feel they could enjoy greater benefits by, for example, setting up a competing economic zone (perhaps with a more generous set of fiscal incentives) outside the EIZ. This underscores the importance of any agreements made on competition between the EIZ and other, existing or future, regional SEZs. Failure to ensure a clear agreement among EAC partner states on the presence of other SEZs in the context of the EIZ—and perhaps more important on the permitted incentives in zones—presents a potentially serious risk to zone investors (developers). For example, in the years after the agreement to establish the Singapore–Suzhou Industrial Park (a joint venture between the Chinese and Singaporean governments), the local government in Suzhou opened a competing industrial park close by with much lower land prices—one of several factors that dramatically lowered the project's economic returns.

Third is the perceived risk of a wider breakdown of the EAC, or more likely of a delayed (or stalled) process of implementation, and the implications for the EIZ. If the zone is developed in an EAC institutional framework (with, for example, EAC institutions involved in the board or in operational management, or with aspects of EIZ law depending on EAC law or regulations), a delay in implementing the EAC could threaten the project. Even if the EIZ is not set up in this

⁵⁴ Wellhausen 2010.

way, the political implications of delay or stalling would raise the risk that the host country (or other members) might renege on its commitments.

As discussed in subsection 4.1, this risk is relatively low, but its perception by investors is not necessarily remote, given the history of the EAC and the overlapping nature of Africa's regional agreements. However, even the dissolution of the EAC would not necessarily bring the EIZ down, if member countries found it useful. For example, the East African Development Bank survived the collapse of the first EAC and has operated continuously for more than 40 years, because the leaders of the three partner states found it in their interests to maintain it.⁵⁵ Furthermore, governments can be bound together through regional agreements like the EAC. If the EAC is delivering real benefits, renegeing on EIZ commitments could have severe implications for members, either the risk of breakdown of the EAC or some sort of sanction within it.⁵⁶

Two main conditions are necessary for a regional trade and investment agreement—or wider regional integration arrangement—to serve as an effective commitment mechanism: the benefit of continued membership must be greater than the immediate gains of exit or returning to alternative policies; and the regional agreement must have a credible punishment threat against a renegeing country. If the cost of exit from the agreement is low or punishment for failing to carry out rules is weak (or both), the regional arrangement is unlikely to ensure commitment.⁵⁷

Equitable distribution of benefits from the EIZ among partner states is the key element for meeting commitment challenges

Before outlining possible solutions to commitment, we summarize the benefits that are expected to flow from the EIZ, and to which groups these benefits are likely to accrue (table 3.2). It is only from understanding the relative winners and losers from a project like the EIZ that one can begin to consider the fiscal and institutional solutions by which to reach compromise.

Two things will become clear from this brief assessment. First, the core will benefit more than the periphery (and to some degree at its expense) in terms of investment and trade flows, at least in the short term. This highlights the importance of the redistributive potential of the EIZ and the need to ensure that solutions are found to facilitate short-term employment gains for nationals from the landlocked states. Second, that within the core of the EAC, the state (or states) in which the EIZ is based will benefit disproportionately. This is good news from the perspective of convincing that government (or governments) to give up land for the project.

⁵⁵ Specifically, they were concerned about the possibility of significant capital outflows should the bank be dismantled.

⁵⁶ The experience of the EU shows that regional agreements can also be an effective disciplining force to lock a country into economic or political reforms.

⁵⁷ Once more, the example of the EU is invoked, but in the other direction: the current euro area crisis and its links to the EU's inability to enforce agreements on fiscal discipline provide a telling example of the failure to deliver credible commitment.

Table 3.2 Summary of likely benefits from an EIZ

Benefits	Main beneficiaries
Taxes and fees	All partners have the potential to benefit equally. Benefit flows depend on formulas agreed—i.e., are open to negotiation (table 3.3)
Land value	Host country (or countries)
Employment	Host country (or countries). Other countries: Dependent on labor mobility and degree to which affirmative action on employment is taken Peripheral regions to benefit from remittances
Spillovers: Infrastructure and logistics	Host country (or countries)/regions around the EIZ Businesses in the periphery to gain from improved trade environment, particularly if zone developed along a corridor model
Spillovers: Supply links, technology, and knowledge	Regions close to EIZ (although supply links may extend well into periphery) Technology and knowledge spillovers likely to remain close to the core (Crescenzi, Rodríguez-Pose, and Storper 2007)

Source: World Bank staff.

In the remainder of this section we outline potential approaches to overcoming the commitment challenge for the EIZ, bearing in mind the likely distribution of gains from the EIZ outlined in table 3.2. The approaches are organized in three broad categories. First, commercial and financial mechanisms that can establish an effective incentive system from the outset, enabling encapsulated trust, are addressed. Second, the formal, institutional approaches to ensuring commitment—these are largely related to legal constraints and enforcement mechanisms through which to bind parties to commitments (imperative credibility). Finally, informal approaches to align mutual interests of stakeholders (which can facilitate both imperative and motivational credibility). These approaches are by no means mutually exclusive—indeed, overcoming the commitment challenge likely relies on using all three.

Establishing an effective incentive system

One of the first ways to align incentives in the zone is through its location. The most appropriate to serve international markets, from a natural agglomeration perspective, is probably on the coast, perhaps near a major metropolitan area like Mombasa. By locating the prospective zone on land encompassing an existing or new port, or along an existing growth corridor, it may be possible to benefit from natural agglomeration forces while helping to lock in the participation of key partner states, thus helping to offset some of the political risks and sharing some of the benefits. The regions surrounding the EIZ would of course benefit directly through the spillovers of economic activity outside the zone. But the landlocked states, and specifically those regions far from the core—which currently face major barriers to participating in international trade as a result of inefficiencies and nontariff barriers at the ports in Mombasa and Dar es Salaam—would also benefit by securing access to a more efficient gateway through a port and trade facilitation operated collectively (or by the EAC) for all partner states.

The next critical step to maintaining commitment of the participating governments is to get the financial incentives right over the long term. As we know, one of the key challenges is to convince the host government (or governments) to give up authority over a part of its territory. Part of the solution is commercial. The host government may lease the (most likely, unused) land to the EIZ for a period, probably a minimum of 30–40 years. If the EIZ works well, the value of the EIZ land should shoot up—a significant asset from which the host government will benefit. Of course, this must be balanced against the need to keep land prices low enough to attract developers and investors. Land values around the EIZ should also climb steeply.

It is also critical that rising land values do not become an incentive for renegeing on the project. Various approaches can help prevent this. First is setting a clear time limit on the charter agreement, returning the land to the host government after a specified period. Even before the land is returned to the host’s jurisdiction, it might be possible to establish an agreement compensating the government for the increase in land value after a certain period (every 10 or 20 years, say).

Another option is through an incremental purchase agreement on the EIZ land. For example, 10,000 hectares are set aside for the EIZ. The host government might lease 2,000 hectares to the EIZ project for the start-up phase, keeping the rest undeveloped. If the EIZ is successful enough to merit further development, land values would presumably rise considerably, allowing the host government to benefit from the sale or lease of the next tranche. These land-based financial mechanisms also offer a way for the host government to negotiate with regional and local governments, as well as for local communities to garner their commitment to the project.

A more obvious issue is sharing revenues arising from the project. This is the main mechanism by which the EIZ can help to ensure a “win-win” situation for all EAC members. Managing revenues in the EIZ is likely to be tricky, as the issue is not just how to share them among EAC members, but also about how much and what revenue streams can be retained by the EIZ itself (including its developers and operators) and how much should revert to EAC partner states.

The basic principle of the EIZ is that the tax revenues generated from the project would be shared among EAC countries, to ensure that they all have the fiscal incentive to concentrate SEZ investments in the EIZ. So revenue sharing needs to be sufficient to keep their commitment while reflecting the potential unequal investment, risk, or commitment of member governments. In assessing how revenue allocation might help support credible commitment, it is useful to distinguish the likely revenue streams (table 3.3).

Table 3.3 Revenue streams in typical SEZ arrangements

Revenue stream	Typical recipient in SEZ regimes
Customs	National government. In case of existing regional agreements (EAC) there may already be a revenue-sharing model
Corporate tax	National and sometimes state/provincial governments (often waived or reduced as a fiscal incentive)
Municipal taxes	Local government (often waived or reduced as a fiscal incentive and to simplify tax administration for investors)
Value-added tax/sales taxes	National government and sometimes state/provincial government (often zero-rated or reduced as a fiscal incentive)
Personal income taxes (individuals living in zone)	National government
Service fees (such as operating licenses)	SEZ developers; SEZ authority; individual government agencies
Land/facilities sales and leasing (for prebuilt facilities in the zone)	SEZ developers

Source: World Bank staff.

Deciding how these revenue streams flow to different stakeholders and creating the redistribution formula come from commercial and political negotiation, but must take into account the practicalities of revenue generation and collection. Many approaches are possible.

In Chinese SEZs, the zones have significant authority and financial responsibility. They have legislative power to develop municipal laws and regulations under basic, national principles, not only, for example, in regulating the labor market (which were transformed in some of the zones) but also in setting and administering local taxes (structure and rates). Strong fiscal devolution was fundamental to their development. SEZs were given responsibility for collecting all taxes and were required to return none, or only a small portion, to the national government during the initial stages of zone development. The Shenzhen SEZ, for instance, did not have to remit taxes to the national or provincial government during its first decade.

In the Singapore–Suzhou Industrial Park (SIP), however, the revenue-sharing model failed to give the appropriate incentives to local government to ensure its commitment (box 3.7).

In the case of SIP, the solution was to better align the incentives of the partners to ensure that all stakeholders could benefit from SIP’s growth. Value-added tax (VAT) generated from SIP, which was allowed to be kept in SIP initially, was eventually shared between central government, Jiangsu provincial government, Suzhou municipal government, and SIPAC (the local primary development body and local government authority for the zone). The central government now gets 75 percent, Jiangsu provincial government 12.5 percent, Suzhou municipal government 10 percent, and SIPAC just 2.5 percent. The main tax revenue source for SIPAC is corporate and personal income tax, 60 percent of which it retains. SIPAC is also allowed to keep all revenues from land sales. The Suzhou New and High Tech Development Zone, a major competitor of SIP, took a 5 percent stake in the main developer in 2005.

Box 3.7 Challenges of partnership alignment in the Singapore–Suzhou industrial zone

The Singaporean partners focused on using SIP as a platform to transfer developmental experience, and so they intended to build SIP infrastructure to international standards, which implied high development costs. By the end of 2000, infrastructure investment in the 9 square kilometers developed at SIP totaled Y 7.8 billion (\$1.14 billion), while in the other four state-level development zones in Suzhou 50 square kilometers were developed with an investment of only Y 6.9 billion (\$1.01 billion).¹ That is, infrastructure investment in SIP was six times as much as in the other parts of the zone. As a result, the land had to be sold or rented at a rate high enough to recover this development cost.

But for the local government (Suzhou municipal government), which had only a minor share of the project, the incentives were quite different. They cared less about commercial returns and more about social and economic returns including job creation, GDP, and perhaps most important, tax revenue. In China, local governments are responsible for providing most public goods and services, and their main source of revenue is the value-added tax paid by industrial firms. Thus their incentive is to attract as many industrial investors as possible, as quickly as possible. Land rents or prices that are too high to attract such investors generate lower tax revenue and fewer jobs.

Incentives between the Singaporean majority stakeholders and the local government were therefore misaligned. This was exacerbated by the fact that the central government made a commitment in the initial project agreement to allow SIP to keep all tax revenues generated in the zone. So the local government had no incentive to invest in the critical connecting infrastructure.

Perhaps the biggest difficulty in the partnership was the fierce competition that arose between SIP and neighboring industrial parks promoted by the China. Before the launch of SIP in 1994, there were already four state-level economic development zones in Suzhou, as well as numerous provincial zones. Most of these zones targeted industrial investors. As the other industrial parks were all government sponsored, land developers in those industrial parks were usually state enterprises. Their interests were naturally much more closely aligned with local governments'. Attracting investors, rather than short- or medium-term commercial returns, were top of their agenda. Industrial land was therefore rented to industrial investors at subsidized rates, creating serious competition for SIP and making it almost impossible to maintain rents at the levels needed to deliver commercial returns.

Moreover, free-riding could hardly be avoided. As SIP is an open area, roads built inside or connecting to SIP could also be used by users outside SIP, including those from adjacent industrial zones. At the time that SIP attracted interested investors with the help of Singapore's promotional activities, other industrial parks and towns watched and learned from SIP, recruited staff who received on-the-job training in SIP, and even lobbied to attract investors away from SIP.

Source: Zhao and Farole 2011.

Note:

1. *Suzhou Statistical Yearbook*, various issues.

In the Aqaba SEZ in Jordan, locally derived revenues—including lease income, license fees, and customs receipts—are collected and retained by the Aqaba Special Economic Zone Authority. Sales, excise, income, and land and building taxes were shared equally between the local authority and the national government (with 75 percent of excise and income tax reverting to the national government during first seven years of operation, after which the sharing arrangement was to be 50/50). The master developer company was structured as a 50/50 joint venture between local and national government to maintain a constructive tension between delivering revenues and reinvesting in the SEZ.

In Aqaba, the incentives were generally well aligned, but the local authority found that revenues were insufficient to support growth and development in the long term, and that it had too little flexibility to raise additional revenue.⁵⁸

Sharing and redistribution of revenue streams from the EIZ would be administratively simplest under a fiscal pooling of revenues under the authority of the EAC, with subsequent redistribution through budgetary mechanisms. While this would not remove the need for negotiation, it would offer the potential to separate negotiations on redistribution of EAC revenues from the specific case of the EIZ.⁵⁹ But without fiscal pooling, it would be necessary to consider both the administrative practicalities as well as the political-economy concerns of revenue sharing in the EIZ.

The main revenue streams that may be shared among the EAC partner states are residents' income taxes, corporate taxes, and VAT. While residents of the EIZ would maintain their citizenship, a simple model for revenue sharing of income taxes would be to retribute taxes to the resident's home country. Of course, this is almost certain to favor the host country, even with fully open labor markets, given geographic proximity to the EIZ. But most states are likely to see this approach as the fairest, which could perhaps be combined with some model of affirmative action, short of quotas, to promote employment of workers from regions and partner states outside the core.

Sharing corporate tax revenues is probably the simplest of the various tax-sharing arrangements to manage from an administrative perspective, and one that is likely to be most amenable to a negotiated solution (as well as having the greatest potential to be used in a redistributive way). A host government might argue that having the EIZ on its land inherently reflects the comparative advantages and so, other things equal, most of the investment would come to it anyway—while the landlocked countries would undoubtedly argue that the EIZ is drawing investors away from them.

Various models can be used to develop an appropriate revenue-sharing formula for corporate taxes based on these considerations. One might be to retribute tax revenues to the home country of the investors, based on their nationality, with the share of any non-EAC holding being shared equally among partner states. Another is to base the formula partly on the markets that the companies serve (a kind of “customs union” revenue-sharing approach).

VAT revenue sharing would likely be the most complex administratively, particularly for revenues derived from trade between firms inside and outside the EIZ. From a pure revenue-sharing perspective, however, it could be treated similar to corporate tax.

Formal, institutional mechanisms for addressing the credible commitment challenge may include substantive restraints on reneging, procedural constraints limiting change in the substantive constraints, and credible enforcement

Levy and Spiller (1996) argue that three conditions are required for credible commitment in industries with high sunk costs. First are substantive restraints on reneging. These should have some legal basis. Given that our focus is on restricting the risk of a sovereign state reneging on

⁵⁸ As a result the 75 percent local retention was extended.

⁵⁹ If revenues from the EIZ revert to the EAC common budget (as is EU practice) and are pooled with other transfers from customs revenues, government contributions and the like, the debate on redistribution of those revenues would be at the macro level.

its commitments to the EIZ, it is critical that the legal restraint be in the hands of an independent regulator. Second are high-level procedural constraints limiting change in the substantive constraints. An example of a procedural constraint would be a constitutional provision that restricts the ability of the government of the day to change certain laws or to undo the autonomy of the regulator. Third, they argue that commitment requires credible enforcement of both types of constraints.

How can these conditions in practice be addressed in the context of the EIZ? Some traditional legal approaches to managing risk in international investments may form part of the solution. First, bilateral and multilateral investment treaties may play a role in mitigating the risk that any one of the partner states renege on their commitment to the EIZ (and thus to individual foreign investors in the zone). Investment treaties legalize a government's commitment to fair treatment toward foreign investors, requiring among other things national or most-favored-nation treatment of in-country foreign investors and protection of contractual rights.

Such investment treaties are normally enforced through the provision of independent dispute-resolution mechanisms. With bilateral investment treaties, the theoretical literature suggests that national governments will uphold their commitments out of concern to maintain their reputation, both with the bilateral partner and more widely.⁶⁰ Such bilateral treaties alone do not, however, offer any guarantee of commitment. Indeed, Wellhausen (2010) finds that since the 1990s there has been huge growth both in bilateral investment treaties and in the number of "expropriation incidents"⁶¹ and investment arbitrations, suggesting that even if bilateral investment treaties do contribute to greater investment in the short term, they may not overcome the commitment challenge.

A second element of the solution may reside in the use of political risk insurance. This can be provided through private markets or, for example, the World Bank's Multilateral Investment Guarantee Agency (MIGA). Its guarantees can also help secure a binding commitment from governments because of the reputational risk they would run if they renege and because of the implications such action might have on their access to finance through the World Bank and other international financial institutions.

A third element may be international dispute-resolution mechanisms. Usually involving binding arbitration, they can play a role in helping to offset project-related commitment risk. Such mechanisms are often an important feature of political risk insurance schemes. Again, international organizations play an important role, such as the World Bank-hosted International Centre for the Settlement of Investment Disputes (ICSID).

But the most important institutional channel for managing commitment risk will be the EIZ governance structure. International best practice suggests a multilevel structure with:

- A master developer of the EIZ (responsible for development and operations of the zone), which in turn may parcel out sections of the zone as well as infrastructure to subdevelopers;

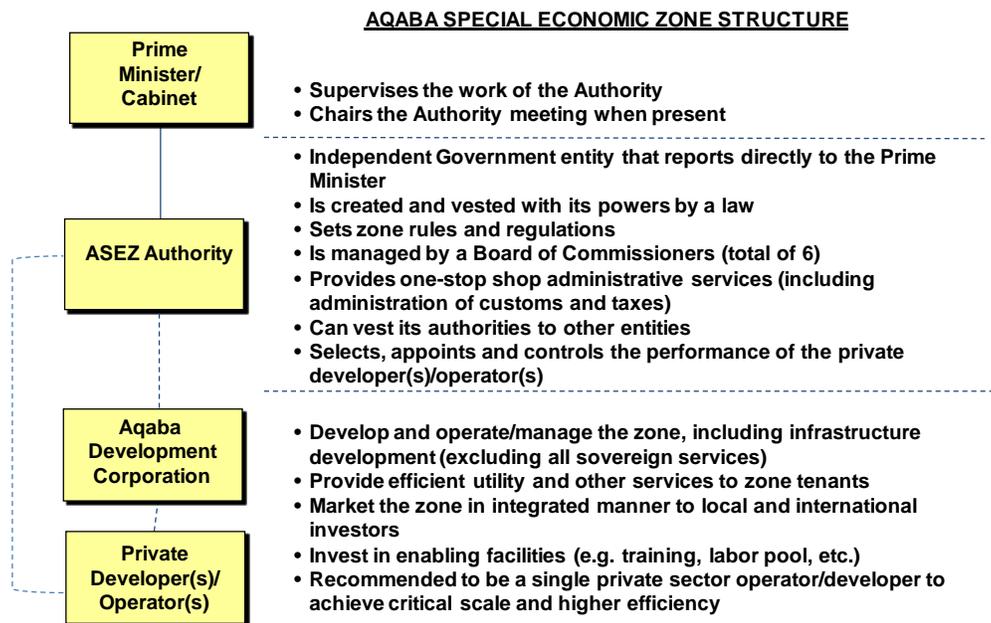
⁶⁰ Goldsmith and Posner 2005.

⁶¹ Defined as "forced divestment of equity ownership of a foreign direct investor" according to Kobrin in Wellhausen (2010).

- An EIZ regulatory authority, which operates as an autonomous governmental agency overseen by a board—the regulatory authority may also act as the local government authority; and
- A national or supranational government that oversees the authority.

Figure 3.10 illustrates the structure that governs the SEZ in Aqaba. The master developer—the Aqaba Development Corporation (ADC)—is a private shareholding company that was initially established and remains a 50/50 joint venture between the government of Jordan and the regulatory authority (ASEZA). ADC is governed by a six-member board of directors. For the EIZ, the master developer could also be formed through a joint-venture development corporation set up by partner states. Alternatively, it could be an all-private company or consortium. The original intention with developing Aqaba was in fact to attract a private developer, and a plan remains to eventually shift ownership to private shareholders.

Figure 3.10 Aqaba SEZ Structure



Source: Fakhoury 2011.

In Aqaba, ASEZA is responsible for establishing rules and regulations within the zone, providing all administrative services (including licensing, customs, and security), and appointing and monitoring the performance of the master developer and any subdevelopers. This is a fairly standard approach for SEZs. In Aqaba, ASEZA operates as the municipal authority, not only for overseeing the investors in the zone but also its residents. It is managed by a board of directors, which is appointed by the government (elsewhere in the country municipal authorities are elected). Again, this is similar to the approach taken in most SEZs around the world, although best practice is to ensure balanced participation in the board by key stakeholders including, ideally, a majority from the private sector; wherever possible, board members should be elected or at least selected by the membership they represent, rather than being appointed by the board chairperson or other governmental authority.

The EIZ would most likely establish a regulatory authority with similar responsibilities, but due to its regional nature, the board structure would need to be designed carefully to address the commitment challenge. Three aspects of its composition are likely to be critical. First of course the board must include representation from all EAC states involved in the project. Second, however, it may be necessary to give the governments of the countries in which the zone is hosted some additional power on the board, either through additional representation, their position on the board, or perhaps through having veto power over certain decisions.

Third, the board should include other stakeholders who can play an important role in checking the power of the governments and ensuring that they maintain their commitment to the project. One important representative group would be an association of all the investors in the project. Another might be a collection of private developers. A third important stakeholder group would include representatives of the private sector from the wider region affected by spillovers from the EIZ. Finally, other respected external and neutral parties on the board who have some power to encourage commitment can be critical. This may include international financial institutions or a third-party national government, as proposed in the charter city model.

Experience from jointly invested (government-to-government) SEZ programs suggests that a high-level steering council or committee, composed of senior political figures from partner states, can be a powerful mechanism to encourage commitment. In the SIP example, the steering committee cochaired by the Chinese vice premier and the Singapore deputy prime minister, and includes ministerial chiefs of the two countries, senior officials of Jiangsu provincial and Suzhou municipal governments, and the head of Singapore's Jurong Town Corporation.

As the EIZ regulatory authority would have jurisdiction and responsibility for delivering all aspects of governance in the zone (such as immigration, customs, policing, and licensing) independently of the national institutions of the host country (or countries), the EIZ offers a useful opportunity for the EAC to test different configurations of institutions, drawing on good practices from the EAC and beyond. Thus the EIZ may become a model of what effective integration might look like in the EAC.

One option may be to set up a bidding mechanism for the various governance and public service functions inside the zone, with the selection of the preferred bidders made either by the EIZ board or (perhaps better) by an independent selection panel consisting of technical experts. This is for two reasons. First, at the outset there is unlikely to be consensus as to which institutions are "best" in any specific domain. Second, even if there are "first-best" institutional approaches to individual aspects of governing the EIZ, taken together there is no guarantee that these institutional forms will work as effectively as some alternative configuration on the ground.

Thus regional cooperation must be seen not only from its perspective as a commitment risk but also as an important institutional mechanism that can help render more binding the various commitments of EAC members. Laursen (2003) outlines a set of institutional requirements to ensure commitment of members for different types of issues (table 3.4). For the EIZ, the commitment challenge most likely involves "coordination problems with distributional issues." Laursen's model, too, suggests the need for pooling and delegating sovereignty as well as securing the funds to support redistribution, possibly in combination with sanctions against defection. How might this be achieved in practice?

Table 3.4 Nature of issues and institutional requirements

Nature of issue	Conflicting interests/pure conflict	Dilemmas of common interests; temptation to defect	Coordination problems with distributional issues	Simple coordination problem	Harmony of interests
Institutional requirements	Institutions to no avail' convergence of interests required	Pooling and delegation of sovereignty; sanctions against defection	Pooling and delegation of sovereignty; budgetary means	Open method of coordination sufficient	Institutionalization not necessary; parallel unilateral action sufficient

Source: Laursen 2003 p.18; shaded areas (by author of this section) identify those most relevant to EIZ commitment issues.

The EU is particularly instructive in identifying some of the institutional mechanisms for securing commitment. There, pooling of sovereignty involves member states ceding real power over certain issues to regional bodies and accepting binding majority decisions.⁶² Such pooling relies on the primacy of European over national law, which is enforced by “commitment institutions”⁶³ such as the European Commission and the European Court of Justice. In the EAC, the precedence of national law and the lack of strong regional legal authority place tight limitations on the potential for EAC institutions to act as a strong, binding force.

To support redistribution to “losing” regions, revenue streams from the EIZ could be used (see above). EAC institutions still have the potential to play an important role in resolving conflicts between partner states over issues related to the EIZ. Specifically, mechanisms could be set up so that the EIZ board could raise issues for negotiation or arbitration through the EAC Secretariat and ultimately the East African Court of Justice.

Informal mechanisms can check the governments with power over the EIZ

Organized, a group of stakeholders affected by any breakdown of commitment by the host government (or governments) is more likely to keep that government in check. Wellhausen (2010) shows that firm-level collective action against expropriation or nationalization is more likely when the foreign investors have things in common, such as nationality, industry of operation, or mode of entry. In many SEZs (as, for example, in Colombia, the Dominican Republic, and Honduras, where private zones dominate) associations of zone developers represent developers’ interests. They may even have a formal seat on the board of the zone regulator. In some cases, as in the Dominican Republic, associations are also formed of individual investors in each industrial zone.

Absent an association, one option is to assemble a coalition of interested parties that stand to gain from the success of the project and that have a strong incentive to ensure that the host governments, and all stakeholders, maintain their commitments. It might include local governments, potential local and foreign investors, labor unions, and (possibly) groups representing residents of the EIZ and neighboring communities. It might also include

⁶² Moravcsik 1998.

⁶³ The term is from Laursen (2003).

international financial institutions and donors that support the EIZ. Such a coalition could have a formal governance role in the EIZ (perhaps on the board).

3.4 Integrating EAC financial sectors

Financial sectors worldwide exhibit significant economies of scale

Given the enormous strides in information and communications technology (ICT) over the last few years it is not immediately apparent why there continues to be a spatial dimension to realizing agglomeration economies in finance. In fact, one school of thought has been predicting the “end of geography” in finance for about two decades now.⁶⁴ Nevertheless, despite the growing globalization of financial activity it is still easy to identify spatially concentrated centers of international financial trade such as New York, London, and Hong Kong SAR. Even nationally the financial industry tends to be hubbed at specific locations, such as Mumbai (India) or Sao Paulo (Brazil). Why? Is this merely because of regulatory barriers to the flow of money, or are there externalities from the clustering of financial institutions?

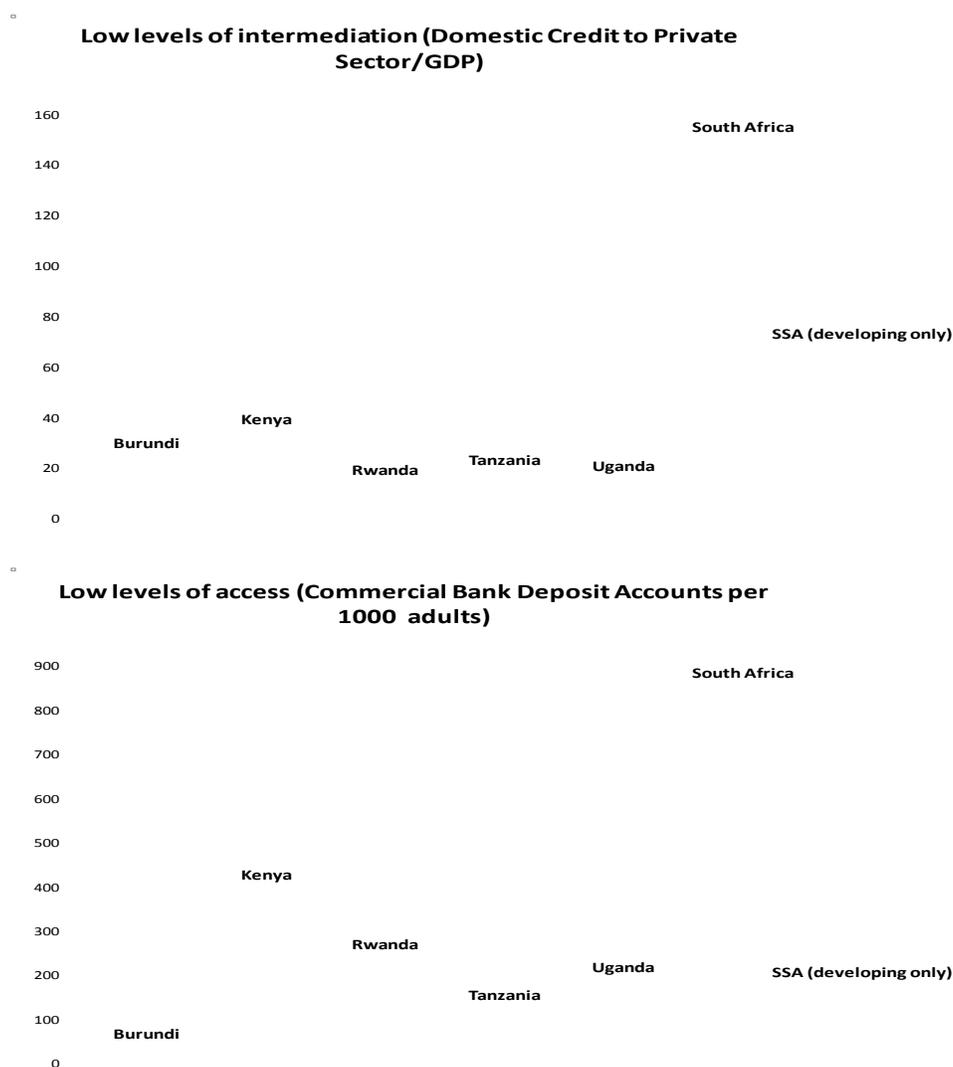
The most apparent answer relates to the intensive use of high-skilled labor in the financial services industry. Not only is the pool limited, especially in developing countries, but these professionals also tend to be hypermobile between employers. Thus the localization of the industry builds on, and at the same time feeds into, the concentration of financial professionals. Moreover, since access to ICT is relatively constrained in most far-flung parts of developing countries, localization economies (see subsection 2.3) for the financial sector are likely to persist for a while.

Small financial systems can garner huge scale economies from pooling resources and risks. Integrating financial markets can create a pool of scarce savings, viable investment projects, and financial infrastructure. In addition, increased competitive pressures mean that financial institutions in these markets offer a wider range of products and services, including those tailored to previously excluded or underserved market segments.

Such integration is especially relevant to many countries in Sub-Saharan Africa, including those in the EAC (figure 3.11). Kenya is by far the most developed financial sector in the region, but even then the market capitalization of the Nairobi Stock Exchange is just 32 percent of Nigerian exchange and a mere 1.5 percent of the Johannesburg exchange. Thus getting to scale in the financial sector will require, eventually, a single market in financial products and services among the five partner states, and a spatially concentrated financial center.

⁶⁴ O'Brien 1992.

Figure 3.11 Financial sector indicators for East Africa and comparators



Source: World Development Indicators, CGAP, FinScope Tanzania. All data are for the latest available year.

One should not frame the debate between the regional and global integration of the economies of East Africa as “either/or.” Liberalizing trade in financial services regionally rather than globally might be an advisable first step for financial markets that cannot immediately cope with the volatility of global financial markets. Regional integration is an opportunity for small financial markets to build capacity, including regulatory and supervisory capacity, that will help them better manage free flows of capital.

Moreover, the step-by-step opening of financial markets has implications not just for stability but also for growth. Research has shown that a premature opening of financial borders without having built up the necessary capacity in domestic financial markets can limit the benefits of capital inflows. Conversely, a threshold of financial sector development can amplify the growth

effects of foreign direct investment in particular.⁶⁵ For the small financial systems of East Africa, regionalizing presents the best shot at achieving this threshold.

Financial sector integration is of course just one part of the overall regionalizing agenda in East Africa. Commodity trade integration can act as a powerful motivation for financial integration. And although the flow of money in the very early stages is likely to follow the flow of commodities, further financial integration in East Africa now will boost the volume and help formalize the trade in goods and services. A regional market in financial services not only makes it easier to pay for goods and services as they cross borders, it can also develop commodity trade via financing facilities for regional infrastructure development that would lower the time and cost of such trade. Thus it is critical that regional financial integration keep pace with the overall integration agenda of the EAC.

The financial sector in East Africa is small, mainly bank-based, with low access levels and little term finance

The size and development of the EAC partner states' financial systems vary widely, ranging from Kenya at one end of the spectrum to Burundi at the other. Still, certain issues are common, and with a small market size (given a total regional population of under 125 million people and low per capita income), resolving these common issues regionally offers the potential of large benefits of scale.

As in most parts of Sub-Saharan Africa, the key issues that characterize the financial sectors of the EAC partner states can be summarized as small, predominantly bank-based financial sectors; low levels of access to finance; and paucity of term finance.

The financial systems are small even relative to GDP and are dominated by banking.⁶⁶ The commercial banking industry in Kenya is the fourth largest in Sub-Saharan Africa, after South Africa, Nigeria, and Mauritius (in that order). Its banking sector has 43 commercial banks and two mortgage finance institutions, and is the largest provider of funds in the Kenyan financial system.

Tanzania has 26 commercial banks, 17 of which are foreign, one is government owned, and eight are domestic. The three largest banks were previously government owned. The system has seven small domestic community banks, whose operations are restricted to particular geographic areas, and three government-owned financial institutions.

Uganda has 21 commercial banks operating (almost half of which have entered the market since 2005). Rwanda has eight commercial banks, one primary microfinance bank, one discount house, one development bank, and one mortgage bank. Burundi's seven commercial banks dominate the financial sector but suffer from weaknesses, particularly in governance, internal controls, and granting and monitoring loans.

Despite the dominance of banks, East African financial systems have low levels of intermediation and access to finance is a critical issue. Certain economic agents, such as small

⁶⁵ For a detailed survey of this literature see Kose and others (2006).

⁶⁶ Even Kenyan nonbanking financial institutions—regionally among the most advanced—occupy a marginal space. Total assets of the country's insurance sector are less than 1 percent of GDP (in South Africa, just under 40 percent). Fifty-five companies are listed on the Nairobi Stock Exchange and seven on the Dar es Salaam Stock Exchange, against 425 on the Johannesburg Stock Exchange. Market capitalization is 38 percent of GDP in Kenya, 177 percent in South Africa.

and medium enterprises and rural populations, are more affected by access constraints than others.

Kenya has shown a significant increase in its formally served population, in some part due to the availability of mobile money payments but also because banks and donors have expanded their outreach efforts. Yet almost 60 percent of its population is still without access to finance or uses informal financial services. Similarly in Tanzania, although access to formal finance has risen, the share of people with no access to finance (formal or informal) has climbed to almost 60 percent, as the number of those using informal financial services has fallen. In Uganda, the share without access to formal services is 62 percent, and is higher in rural areas.

In Rwanda, 79 percent of the adult population has no access to formal finance (26 percent are served by informal institutions). In Burundi, only 1.9 percent of the population has a bank account and 4 percent are served by donors. The majority of these two countries' populations have no access to finance.

The development of the securities market in the region is constrained on both the supply and demand sides. On the supply side, only a few private firms have the capacity to raise funds through the capital markets, few products are tailored to the market, and even where the law allows them, there are no second-tier markets. On the demand side, significant disarray in the pension and insurance sectors means that there are certainly untapped opportunities to shore up demand from institutional investors.

The level of development of capital markets varies greatly among EAC partner states, from Burundi which does not have a stock market, to Kenya which has the third biggest stock market in Sub-Saharan Africa. Capital market regulation and supervision are also very different. Insurance penetration is particularly low in Burundi but is growing fast in Tanzania. The underdeveloped pension sector is very dissimilar in terms of programs but shares the common feature that access to them is limited to a small share of the population. In short, all the partner states have underdeveloped capital markets relative to their potential.

Kenya-based banks are leading financial sector integration in East Africa

Banks have generally been ahead of governments in spotting the potential of the regional market.⁶⁷ Several banks have a regional business model stimulated by client demand and by opportunities along the regional trade corridors to Southern Sudan and the eastern Democratic Republic of Congo. These banks display a fair degree of operational integration not just within EAC markets but all the way along the trade corridors.

Kenya-based banks are leading regional integration. About 11 multinational and Kenyan-owned banks use the country as a hub for their operations in the EAC. Four indigenous Kenyan banks have 63 branches in the region outside Kenya—31 in Uganda, and 16 each in Tanzania and Rwanda. Banks domiciled in other EAC countries operate only in their home markets.

Several regional banks have integrated operations in the East African region with hubs mostly in Kenya. Most of the banks have yet to fully integrate their regional operations, but ICT, risk management, customer service, and treasury operations lead the way.

⁶⁷ This subsection draws extensively on Wagh, Lovegrove, and Kashangaki (2011).

The growing presence of cross-border banks raises a question about interconnectedness of EAC financial markets based on the extent of operational integration of bank subsidiaries: to what extent are banks already pooling resources and functions across subsidiaries and operating as a single regional entity (even though EAC rules do not yet allow single licensing or cross-border branching)?

Two-thirds of the banks have stated that regionalization has helped them to introduce financial products and services that would have been impossible without such scale—which supports the earlier arguments for going to scale. A majority believe that a single licensing regime would promote integration.

The banks cite the major impediments to full integration as the lack of a common tax regime; resistance from bank supervisors (particularly in Tanzania and Uganda); ICT connectivity (caused by weak physical infrastructure); regulatory requirements; restrictions on the mobility of labor; and different policies on capital movement in the EAC.

Kenyan insurance companies have branches within the region, estimated at 30. No Tanzanian or Ugandan companies have a regional presence. Kenyan stockbroking firms also have regional subsidiaries.

EAC stock exchanges are planned to integrate in 2012. The first move was to develop common automated trading and clearing platforms. Uganda adopted the same automated trading system as used in Kenya. Tanzania and Rwanda are expected to follow suit. Shares are already cross-listing in the EAC, increasing private capital flows. All cross-listed and regionally traded companies are (so far) headquartered in Kenya.

Institutional investors—national pension funds, fund management firms, and insurance companies—dominate EAC stock and bond markets. Information provided by Kenyan investment banks suggests that Kenyan investors in other EAC markets account for about 10 percent of their market turnover; equivalent shares for Ugandan investors are 2–5 percent, and for Tanzanian investors a maximum of 0.5 percent. The lack of restrictions on capital flows from Kenya enable a greater number of its retail investors to deal with other EAC markets, unlike Tanzania and Uganda where institutional investors are the main players.

Further financial integration requires spatially blind institutions, spatially connective infrastructure, and spatially targeted incentives

Market participants and policy makers largely agree that the path forward for the EAC entails stronger regional ties on several fronts, including their financial sectors. The policy path needs to facilitate the flow of funds between EAC members while ensuring more detailed tracking of such flows and greater capacity to deal with the consequences. For the small financial systems of East Africa, getting to scale involves a similar three-pronged approach to the thrusts proposed earlier.

Spatially blind institutions. A legal and regulatory framework in banking and accounting, securities markets, insurance, pensions, payment systems, and investment funds harmonized regionally is critical to effective functioning of an integrated market in financial services. This can be achieved through three alternative approaches: adopting regional directives (level one—laws; and level two—regulations) and transposing them into the national laws and regulations (the EU approach); adopting acts and regulations at the EAC level, and these acts and regulations supersede national laws (no need for transposition into national law); and adopting model

directives at the EAC level (without force of law), and harmonizing national laws and regulations of individual partner states to approximate these.

The next step is to set up a regional “passporting” system for financial institutions and market intermediaries. Under this system, a financial institution or market intermediary licensed by the supervisory authority in one partner state is allowed to operate in all partner states on simple notification to the supervisory authority of the host state. Such a system requires mutual recognition among the supervisory authorities.

Spatially connective infrastructure. Interoperable market infrastructures have to be established for an integrated market in financial services to function. For example, the wholesale payment systems (real time gross settlements or RTGS) of Kenya, Tanzania, and Uganda are being integrated. RTGS systems are being developed in Burundi and Rwanda and will need to be integrated with the regional RTGS system in order to establish a regional wholesale payment system. This will not, however, address the problems of cost and accessibility of payment services for individuals and small businesses that either cannot access formal financial institutions or are deterred from doing so by cost and inconvenience. Payment-system accessibility will require the development of retail payment systems at national and regional levels, in conjunction with the further development of the mobile banking industry.

Similarly, efforts to achieve integration of central securities depositories in the region will have to be completed and supplemented, with their linking to the RTGS systems to achieve delivery versus payment both domestically and regionally.

Not all the connectivity required is technological. Building up the channels for sharing information is just as important once the links between markets get closer. Thus a centralized source to share credit information regionally, a ratings agency, and improved communication and information-sharing arrangements between home and host supervisory agencies are all important elements of a stable, regional financial market.

Spatially targeted interventions. Always among the more contentious of recommendations, spatially targeted regional interventions can greatly increase the buy-in for an integrated financial market. This is especially relevant for the EAC where financial sector development is highly uneven. Creating a regional financial market will be guided at least as much by political-economy considerations as by economic logic. The EAC is not a single political entity, thus the differences between losers and gainers from integration are likely to be thrown into sharper relief. For this very reason the process itself is more tenuous than in India or China.

Specifically, the less developed financial sectors in Burundi and Rwanda are prone to the problems of small scale. The inherent danger is that the direction and development of their financial systems will be largely handed over to institutions in other EAC countries, which will choose to serve only larger clients in these two countries. Targeted technical assistance to develop the financial systems of Burundi and Rwanda can help to avert this.

4 Sequencing and sustaining integration

Optimal sequencing of economic integration and designing the safeguards to ensure its political sustainability depend not only on the substance of the integration policies to be sequenced, but also on the risks that the overall process faces. This section identifies these risks, then addresses the issues for sequencing and sustaining East African integration.

4.1 Risks of the integration process

At this stage of the process, risks of the EAC collapsing are limited, but risks of integration stalling are greater.

Risks of the EAC collapsing are limited because of convergence in economic policies and institutions, outward orientation of landlocked states' economic policies, and common security interests

Convergence in economic (and political) institutions was among the factors helping to reestablish the EAC (see subsection 2.1). It is also helping to sustain it: having common institutions and more deeply integrated economies may help to further promote institutional convergence, which in turn cements the Community.

Technical analysis in annex 7 looks at these issues. It constructs a measure of institutional integration, originally developed for European integration, which captures five main stages of institutional integration: free trade area, customs union, common market, economic union, and total economic integration. Economic integration is measured by several economic indicators suggested by the optimum currency area. These include convergence of inflation rates, exchange rate correlation, trade openness, convergence of real interest rates, and convergence of real GDP per capita.

The analysis finds that regional integration in the EAC is faster than what the founding members of the EU achieved initially. The current degree of institutional integration in East Africa is comparable to the one achieved by the EU in the mid-1980s. While this probably involves some overstatement because the methodology may not be capturing well the imperfections of implementation, the level of integration achieved is still likely to have some positive impact on the convergence of national institutions.

Another reason to believe that East African integration will not collapse like it did in the 1960s is that all governments in the region now recognize that economic development depends heavily on access to international markets.

After Kenya, Tanzania, and Uganda attained their political independence, the perception that Kenya was benefiting disproportionately from the regional trade arrangements became a major stumbling block. Today, an outward shift in priorities toward the greater importance of global markets makes a difference. For the three landlocked countries, access to international markets depends on transit via Kenya and (less so) Tanzania. Under these conditions, even if a future Ugandan government, for example, thought that Kenya was benefiting too much from the trade arrangements, the idea of going it alone would become much less appealing.

Yet a further factor suggesting why formal East African integration will not fall apart is that security concerns are a leading factor in moving toward regional integration. One of the main

lessons of European integration is that common security concerns can play a very important role in solidifying economic integration arrangements between states. If one state feels that it is losing out, if only temporarily, from an economic agreement, it may also feel that the security benefits from continued cooperation outweigh this concern.

While the states of the EAC do not face a threat from a single external power, they are bordered by an arc of unstable states, each of which poses a constant security threat to one or more EAC members. The EAC governments have already considered how security cooperation may help to insulate them.⁶⁸

Risks of stalled integration are higher because of asymmetric impacts of integration policies

Economic concentration in the coastal states and the consequent reforms to level the playing field in the landlocked partners have asymmetric—and sometimes opposite—impacts. The same issues that led to the EAC's collapse in the 1970s—failure to agree to larger redistributive transfers—can slow integration, even if they are unlikely to cause the current Community to disintegrate.

The main risk now is of a stalled form of integration in which a common market, although existing on paper, still allows substantial barriers to commerce in practice, an issue of particular concern for the landlocked countries. These countries depend on access to the coast through other states, and the cost of this access depends on both immutable, natural features (distance) as well as those that can be modified by policy (quality of infrastructure, secure right of free passage).⁶⁹ However, precisely because African regions are divided into multiple states, with some landlocked and some coastal, coastal states do not fully internalize the benefits of policy measures that improve coastal access for others.

Deepening regional integration also raises a question on how institutional, economic, and trade integration interact and whether they deepen each other. The technical analysis in annex 7 suggests that these three dimensions of integration work together to deepen regional integration, with different volumes of impact. The volume is greater from economic and trade integration to institutional integration than in the other direction.

4.2 Starting small and scaling up: How to sequence integration policies

The discussion in this subsection starts from outlining several ways in which there could be fiscal cooperation between EAC states to address common problems and reduce the risks of stalled integration without wholesale abandonment of national sovereignty over public finances. Proceeding with such a gradualist approach—involving one or more of the relatively simple arrangements—might both be feasible and potentially lay some groundwork for deeper fiscal cooperation.

But this subsection also shows that connecting and concentrating economic activity may require more complex forms of fiscal pooling, while leveraging global demand for agglomeration of economic activity on the coast may create incentives for better connectivity policies and regionalizing infrastructure. Monetary integration might be also less beneficial for the EAC before the issues of fiscal pooling and deeper economic integration are addressed.

⁶⁸ *The New Times* 2010.

⁶⁹ Limao and Venables (2001) analyze the effect of geographic disadvantages and infrastructure on trade.

Fiscal pooling may help to mitigate problems associated with the asymmetrical impact of integration policies, but faces political and technical problems

Fiscal pooling is partial integration of the fiscal policy of nations, which come together to establish a pool to coordinate expenditure or revenue decisions (or both). One benefit of such a pool is the smoothing of asymmetric fiscal shocks related to policies, terms of trade, or business cycles, as partner states diversify their economic base.

Fiscal pooling will help East African integration in four areas: reducing spatial disparities in provision of social services, financing cross-border infrastructure, improving connectivity by charging customs tariffs at the point of entry and avoiding delays inherent to the current system, and mitigating asymmetric economic shocks. These issues make fiscal pooling a priority for EAC integration, though not necessarily one that is easy to implement.

The challenge is to find a way to start small—to avoid political complications related to sharing the costs and benefits of such pooling among the partner states—and scale up gradually. Fiscal pooling may imply delegating decisions about the collection and spending of taxes to common institutions, shared by governments. Nations traditionally consider control over fiscal policy as central to national sovereignty and are reluctant to surrender it. Conceding revenue raising power to a supranational authority is politically very difficult for politicians in a sovereign state. Even if there is an agreement to transfer certain revenue sources to a fiscal pool, sharing the proceeds of that agreed source is delicate and complicated. If there are obvious winners and losers from the revenue pooling arrangement, it would be impossible for losing states' politicians to sell the fiscal pool idea domestically. In addition, there is uncertainty about costs and benefits of various policies. Thus the scale of any feasible fiscal pool is likely to be moderate compared with the overall fiscal resources of its participants.

Another challenge is to avoid credible commitment and moral hazard issues. Fiscal pooling requires credible commitment to certain benchmarks on the expenditure side or pooling certain revenue sources with other partner states. As observed with the EU (the Maastricht criteria), commitment to certain expenditure, debt, and borrowing targets is not credible. The issue gets even more complicated on the revenue side. Moral hazard involves the incentive for a country to lessen effort to collect revenues, expecting that this will prompt greater transfers from other members.

Finally, the design of a fiscal pool requires attention to four issues: expenditure responsibilities, revenue sources, allocation of funds across nations in the union, and borrowing. These pillars of the fiscal pool must be very well linked to the broader political, social, and economic objectives of the union.

The first and most important of these four issues is assigning service delivery responsibilities to an authority other than a nation. This authority can be a supranational or private entity. The economic reason for this decision is the spillover effects of certain investments and coordination failures across multiple players. If cross-border infrastructure investments produce benefits to multiple nations, unless individual nations coordinate, some—free riding—may underinvest in these types of infrastructure. To decide on a particular service delivery responsibility, decision makers should ask the following questions:

- What is the justification for assigning a service delivery responsibility of a certain type of service to a supranational authority?

- Is there a need for public expenditures? Can the private sector provide the service?
- Is there a need for regulation of service delivery?

The next question is how to finance delivery of those services. This is a major sovereignty issue as nations will be allocating certain types of revenues for financing common goods and services. The options are generating user fees from the service, providing support to the union from countries' budgetary resources, and allocating a certain share of certain taxes (such as import taxes). Beyond this, managing the revenue administration is politically sensitive.

Once the service delivery responsibilities are defined for the union and the revenue sources identified, the next question is allocating funds across projects in a way that will benefit multiple nations. Funds can be distributed in four ways. The derivation principle requires some proportion of the amount collected in a nation to be returned to that government. An alternative is to distribute the total transfer amount among all governments on the basis of a formula. A third way is to reimburse the costs of certain expenditure items. Or funds can be distributed ad hoc, as at annual summits of heads of state or finance ministers.

If the first three issues are resolved, there is a good chance for the union to borrow additional funds in international capital markets.

The EAC partner states might consider an arrangement for pooling revenues that helps to insure member economies against asymmetric revenue shocks

It should in principle be possible to design a scheme primarily for insurance that has no redistributive effects (at least from the point of view of a decision maker before shocks hit). Absence of these effects would make the first stage of fiscal pooling easier to implement, both technically and politically, and could also help to pave the way toward an eventual monetary union. For example, all states could pay their customs revenues into a common pool, as with the “distributable pool” arrangement of the EAC during the 1960s. Then, instead of drawing out equal shares (as was done then), the EAC states could draw revenues out of the pool in proportion to their level of contributions/imports over several previous years. Since external tariffs are now set collectively by the EAC states, the arrangement would not be subject to moral hazard, and the EAC states now derive a fairly small amount of their total revenue from taxes on international trade.

An important further issue is that, as Uganda becomes an oil exporter, its government will derive an increasingly large share of its total revenues from hydrocarbons exports. Policy analysts have frequently debated how oil-producing states can cushion themselves against the volatility induced by reliance on oil revenues in an environment where the world price for oil is subject to rapid and unexpected swings.

One idea is for a country to establish an oil stabilization fund—when annual revenues or the world price rises above a certain level, excess revenues are set aside in a fund to be used in future periods where revenues are low. Some evidence suggests that such funds are associated with greater macroeconomic stability,⁷⁰ though the causal interpretation is uncertain—it may simply be that governments that are more committed to managing revenues well in the first place are more likely to establish such a fund. Furthermore, proper design of these funds depends on policy makers' ability to distinguish between temporary and permanent shocks to global oil

⁷⁰ Davis and others (2001) and Shabsigh and Ilahi (2007).

prices—not easy.⁷¹ Finally, oil stabilization funds create an important problem of intertemporal commitment: once revenues accumulate in a fund, political pressures may emerge for drawing revenues out in response to exceptional circumstances—and “exceptional circumstances” may start cropping up with greater regularity than before.

The EAC and the fact that it will soon include both net exporters and net importers create the possibility for considering a new type of oil stabilization fund. It might, in theory, be possible to design a mechanism whereby net exporters of oil pay into a fund when oil prices are high, net importers draw out of the fund at the same time, and the reverse happens when world oil prices are low. Such a transfer mechanism would not be subject to the rising political pressures to spend as reserves accumulate. This could be a significant advantage. However, the other above problems would apply to a community stabilization fund. It would be difficult to design a system that effectively distinguishes between permanent and transitory shifts in world oil prices. In addition, to the extent that even transitory shocks to oil prices can be quite persistent, it might be difficult to politically sustain a mechanism whereby one set of EAC states was transferring resources to others over a lengthy period.

Connecting and concentrating economic activity may require more complex forms of fiscal pooling, while leveraging global demand may create incentives for better connectivity policies

Regionalizing infrastructure and concentrating economic activity where it is most likely to enjoy economies of scale would benefit the EAC economy, but may have asymmetric implications for the EAC partner states (see section 3). An important question is how the policies encouraging concentration and connectivity need to be sequenced to facilitate their implementation. If simpler forms of fiscal cooperation such as providing insurance against shocks demonstrate viability of the idea, the EAC partner states may also want to consider further forms of such cooperation. Dealing with such issues as reduction in disparities in provision of social services across the EAC, construction and maintenance of efficient cross-border infrastructure, and integration of financial sectors, which have a strong tendency to concentration while being an important source of tax revenues, would require some form of fiscal pooling involving redistribution.⁷²

This, however, involves a problem of circular causality, and as seen, the experience of EAC integration shows that the impact of economic on institutional integration is much stronger than the other way around. This suggests that better connectivity and greater concentration of economic activity are needed to facilitate fiscal pooling. (Subsection 4.3 looks at how donors can help to circumvent this problem.)

Finally, if the EAC economy manages to leverage global demand and develop economic agglomeration on the coast, this is likely to create political-economy pressures for better connectivity, by means of regionalizing infrastructure or otherwise. This is because the private sector will have the incentives to reduce costs of obtaining natural resource inputs from elsewhere in the EAC, and is therefore likely to both invest in connective infrastructure and to create pressures on governments to improve the sector’s institutional and policy framework. The latter would also help to eliminate or at least reduce the non-tariff barriers to trade.

⁷¹ See in particular the evidence in Davis and others (2001).

⁷² For example, an EAC development fund under the umbrella of the East African Development Bank is under discussion. Its objective is to pool resources from EAC partner states and development partners for regional projects.

The EAC should improve transport infrastructure and customs administration before moving to monetary integration

As a long-term goal, it is natural that EAC states seek to eventually adopt a common currency on the road to a possible political federation. (For the shorter term, the primary rationale of East African policy makers for establishing a monetary union is that it will reduce the costs of transacting across national boundaries.)⁷³

The main question for sustainability is how soon this step should be made, because the costs of fast-tracking monetary union may well outweigh the benefits. In the near term, improvements in transport infrastructure and customs administration are likely to have a much greater impact on the functioning of the common market.

The principal cost in adopting a common currency involves the loss of ability to use monetary and exchange rate policy to respond to shocks that affect one member (or members) of a union but not others.

For the EAC states, the biggest issue involves differential terms-of-trade shocks stemming from the fact that partner states export different commodities. This is emphasized in the ECB (2010).⁷⁴ Debrun and others (2010) show that correlations of changes in terms of trade between EAC members are generally quite low, the principal exception being a high correlation between Uganda and Tanzania. So one must ask: Will any losses implied by an inability to use monetary policy to adjust to these shocks be outweighed by the benefits of reduced transactions costs and increased policy credibility? We consider each of these in turn—and the issue of fiscal discipline.

The experience of the WAEMU states suggests that in a region with very significant nontariff barriers and poor infrastructure along core transport routes, a single currency may do relatively little to reduce the transactions costs of trade.

A further, more political argument posits that a common currency may be necessary to maintain a common market. In the European case it has been argued that a system of managed or fixed exchange rates was necessary because large swings in exchange rates between national currencies would have very significant effects on the competitiveness of major economic sectors, leading to political pressures for trade protection. As a system of managed exchange rates like the European Monetary System became increasingly impractical in a world of mobile capital, it was then suggested that EU states necessarily needed to move to full monetary union.⁷⁵ According to this argument, in the 1990s European states did not face a choice between monetary union and the status quo; they instead faced the choice between monetary union and a floating exchange rate system that might jeopardize the common market.

Does the above political-economy argument imply that East African states also need to adopt a common currency in order to preserve their common market? This seems unlikely. For EU states during the 1990s the level of intraregional trade was far higher than it is for EAC states today, given that EAC states trade principally with economies outside the region. The implication is

⁷³ Tumusiime-Mutebile 2010.

⁷⁴ See also Buigut and Valev (2005) for evidence from structural vector autoregression analysis on supply and demand shocks.

⁷⁵ See Eichengreen (1994) in particular for the argument regarding exchange rates and the political economy of protection.

that a depreciation of the Kenya shilling relative to the Uganda shilling, to take an example, might result in political demands for protection, in particular by Ugandan industrial firms, but the share of the Ugandan economy affected by this shift is much smaller than would be the case with a movement between national currencies in Europe. Over time this situation might change if the EAC states begin to trade much more with each other, but that will first require removal of the significant nontariff barriers that hinder the functioning of the common market.

Some argue that membership of a monetary union benefits the members because it allows them to commit to more stable monetary policies than would otherwise be the case—that is, strengthening their policy credibility. Europe offers possibly the best example.⁷⁶ In the African context, there have also been arguments about the credibility-enhancing effect of joining a monetary union with a supranational central bank.⁷⁷ Given the fact that many countries in the region have suffered from severe macroeconomic instability, the credibility benefits of monetary union could be expected to be proportionately larger. Guinea Bissau, for instance, in the early 1990s regularly had inflation rates in the high double digits. A few years after it joined WAEMU in 1994, its inflation had dropped to single digits.

Would the EAC states enjoy substantial gains in terms of monetary policy credibility if they adopted a common currency? Their recent macroeconomic experience suggests that they have less to gain than would other African states that have more unstable recent macroeconomic histories. In Uganda, for example, following macroeconomic stabilization in 1992, the central bank has consistently pursued a stable monetary policy, and experience elsewhere among the EAC states has not been dramatically different, with the potential exception of Burundi where macroeconomic management was complicated by civil conflict. It would appear then that at the national level in the EAC states, conditions are already favorable for pursuing stable monetary policy.

It is widely recognized that when states with independent fiscal policies share a common currency, fiscal indiscipline in one country can have negative externalities on other states.⁷⁸ This was a very prominent subject of discussion during the design of the European Monetary Union. As observers of current European events will recognize, it remains a major concern. Among African monetary unions it has also been a frequent issue for the members of the CFA Franc Zone. In the absence of any supranational control of fiscal policies, existing monetary unions have opted for explicit quantitative limits on fiscal deficits and debt. The EAC states appear to be considering the possibility of establishing a similar rule-based framework.⁷⁹ It is worth considering in this regard what experience from Europe and the WAEMU (see section 3.2) suggests about the likelihood that such a framework would actually be effective.

⁷⁶ For the European case, it was frequently suggested that those states, such as France, that had more unstable monetary histories during the postwar period could benefit by joining a currency union with Germany. A supranational central bank, particularly if it was modeled along the same lines as the Bundesbank, would enjoy a great degree of independence from political control than could be the case with any national central bank. There is clear evidence that French policy makers saw monetary union with Germany as a way to commit future French governments to a low inflation policy. In retrospect, it is reasonable to suggest that their expectations have been borne out; the European Central Bank has in practice demonstrated a very high degree of independence from political control, even if the severity of the current crisis has obliged it to compromise on the issue of government bond purchases.

⁷⁷ Collier 1991; Masson and Pattillo 2005; Debrun and others 2010; and Guillaume and Stasavage 2000.

⁷⁸ For a contribution establishing when this is the case see Chari and Kehoe (2007).

⁷⁹ Tumusiime-Mutebile 2010.

To sum up, indicators of economic convergence in the EAC need to be improved before monetary union can have a good chance of success (they are currently generally similar to the indicators of WAEMU, where monetary union has experienced and created a number of serious problems, and they may deteriorate further after Uganda begins to export oil). But even if nontariff barriers are removed and regional infrastructure is improved, the transactions costs benefits of moving to a common currency are unlikely to be huge, because the EAC states trade primarily with countries outside the region.

If one or more of the EAC states had very unstable monetary or exchange rate policies, there might be an argument for fast-tracking—but this is not the case. And, while fiscal discipline becomes a common concern when states share a currency, no monetary union has yet found an ideal solution.

In the near future, the benefits of monetary integration may not exceed its costs, and institutional capacity of the central banks of the EAC partner states will be used better for financial sector integration (see subsection 3.4).

4.3 Compensating the least fortunate: Donors' role in catalyzing EAC integration

The political problems from the asymmetric costs and benefits of integration might—and eventually should—be reduced by fiscal pooling. But fiscal pooling, particularly its forms involving redistribution, is technically and politically difficult. Its design also has to overcome some circular causality problems (see subsection 4.1). Donors should therefore step into the breach.

Donors can help make the regional and global integration of East African economies more politically sustainable

Potentially, the World Bank (and other international financial institutions) can catalyze the process of integration and make it more politically sustainable by emulating and encouraging fiscal pooling in its lending practices. It can do this through policy lending and investment lending.

Policy lending to implement integration policies with asymmetric impacts on partner states

Potentially, any policy removing economic divisions between the EAC partner states, such as removing obstacles to labor mobility, regionalizing cross-border infrastructure, establishing one-stop border posts, or establishing regional payment systems, may qualify. This would partially substitute for fiscal pooling and help to achieve some of its objectives. The challenge will be to estimate the costs in benefits of the policy for each participating partner state in a way that is both technically sound and convincing for the political leadership.

Policy lending to encourage fiscal pooling

Many integration policies cannot be supported through one-time lending and require development of continuously operating regional institutions. Donors may therefore not only partially substitute for fiscal pooling to encourage implementation of individual policies, but also encourage development of the fiscal pool financed by the EAC partner states themselves. At the early stages of the process, this could mean lending to the partner states on concessional terms to

subsidize their contributions to the pool. At later stages, when the regional fiscal pooling reaches a certain advanced level, which would include stable revenue sources, donors could lend to the EAC against future revenues of the pool, thereby helping to leverage the pool's resources.

Investment lending for connective and productive infrastructure of landlocked countries

While activities exhibiting increasing returns to scale, such as high-end manufacturing, are unlikely to concentrate in the landlocked countries, some others, such as agricultural processing, certainly can—and demand for their output is likely to increase if the coastal economies grow faster. To facilitate their development, donors—and eventually the EAC itself—can help to invest in connective and productive infrastructure.

Investment lending for provision of social services

Given incomes per capita and demographic dynamics of the landlocked countries, reducing disparities in provision of social services would mean greater investments in landlocked countries. Since a fiscal pool large enough to reduce disparities in human capital investment per student is unlikely in short to medium term, donors may need to step up their support.

5 Conclusions

The new EAC has adopted a more gradual integration strategy than its predecessor, reflecting growing institutional convergence, and it has achieved some successes. A customs union was phased in between 2005 and 2010, and a common market was launched in 2010. (Many nontariff barriers to trade remain though, despite official commitments to remove them.) Talks about monetary union are under way, but because economic convergence indicators are quite dispersed and may deteriorate further once Uganda begins to export oil in a few years, such union is not on the front burner. (Many social indicators show disparities, too.)

This dispersal is partly because three out of five EAC partner states are landlocked, making the “economic distance” from large global markets highly unequal, and partly because of poor hard connective infrastructure and—even more important—weak soft infrastructure. Moreover, the EAC’s economic density is higher, and becoming more so, in those areas more distant from world markets. All these strictures create a risk that agglomeration effects will concentrate economic activity in the areas where such concentration will be less conducive to global integration.

International experience suggests that relatively low and equal economic distance from major world markets creates incentives for integration driven by global private demand. East African economic integration will therefore be faster and more effective if it helps to reduce economic distance between the EAC economy and large global markets—hence the need to make policies that strengthen the link between regional and global integration at the heart of the EAC integration strategy. But partner states need to highlight feasible policies, given limited capacity at national and regional institutions (which requires expansion), and gradually scale up integration as partners gain confidence.

Yet policy effects will not be even across the region. They will likely spur concentration of economic activity in a few key areas where scale and access to global markets can best be exploited—perhaps in an economic integration zone on the coast. Such agglomeration may in turn create incentives for better connectivity policies and regionalizing infrastructure, but this highly asymmetric impact may also create political obstacles to integration.

To keep politicians (and their constituents) on board, sequencing therefore has to be got right—starting with removing nontariff barriers and unofficial obstacles, and raising the quality of physical infrastructure. Only then can the EAC move on to more complex areas, such as fiscal pooling, and perhaps ultimately, monetary union.

Fiscal pooling may help to mitigate the problems of asymmetric benefits, though it comes with inherent political and technical problems. Still, proceeding gradually with the simpler arrangements might be feasible and, potentially, lay the groundwork for still deeper fiscal—and perhaps political—cooperation.

The specter at the table is of course the risk of collapse, which materialized in the 1970s at the demise of the first incarnation of the EAC. The authors of this report are optimistic, however: beyond today’s tighter economic and political convergence, greater outward orientation, and closer security interests, lies the immutable fact that the world is globalizing—and a more regionalizing EAC offers the best way to turn that fact to East Africa’s advantage.

References

- All Africa. 2011. "East Africa: Ethiopia, Kenya Sign U.S. \$743 Million Road Corridor Project." November 9. Available at <http://allafrica.com/stories/201111100237.html>.
- Anyanwu, J. C., and A. E. O. Erhijakpor. 2010. "Do International Remittances Affect Poverty in Africa?" *African Development Review* 22 (1): 51–91.
- Arvis, J.-F., G. Raballand, and J.-F. Marteau. 2010. "The Cost of Being Landlocked: Logistics, Costs, and Supply Chain Reliability." Policy Research Working Paper 4258, World Bank, Washington, DC.
- Auty, R. 2010. "Early Reform Zones: Catalysts for Dynamic Market Economies in Sub-Saharan Africa." World Bank, Washington, DC.
- Baldwin, R. 2005. "Sequencing and Depth of Regional Economic Integration: Lesson for the Americas from Europe." Graduate Institute of International Studies, Geneva.
- Boyenge, J. P. S. 2007. *ILO Database on Export Processing Zones, Revised*. Geneva: International Labour Office.
- Brulhart, M. 2009. "An Account of Global Intra-Industry Trade: 1962–2006." *The World Economy* 32 (3): 401–459.
- Buigut, S., and N. Valev. 2005. "Is the Proposed East African Monetary Union an Optimal Currency Area? A Structural Vector Autoregression Analysis." *World Development* 33 (12): 2119–33.
- Canuto, O., and M. Sharma. 2011. "Asia and South America: A Quasi-Common Economy Approach." Economic Premise 65, World Bank, Poverty Reduction and Economic Management Network, Washington, DC.
- Chari, V. V., and P. J. Kehoe. 2007. "On the Need for Fiscal Constraints in a Monetary Union." *Journal of Monetary Economics* 54: 2399–2408.
- Charter Cities. 2011. "A New City in Honduras." Charter Cities blog, February 2. Available at <http://chartercities.org/blog/191/a-new-city-in-honduras>.
- Clemens, M. A. 2011. "The Financial Consequences of High-Skill Emigration: Lessons from African Doctors Abroad." In *Diaspora for Development in Africa*, ed. S. Plaza and D. Ratha. Washington, DC: World Bank.
- Collier, P. 1991. "Africa's External Economic Relations, 1960–90." *African Affairs* 90: 339–356.
- Crescenzi, R., A. Rodríguez-Pose, and M. Storper. 2007. "The Geographical Processes behind Innovation: A Europe-United States Comparative Analysis." Working Papers 2007-13, Instituto Madrileño de Estudios Avanzados (IMDEA) Ciencias Sociales, Madrid.
- Davis, J. M., R. Ossowski, J. Daniel, and S. Barnett. 2001. "Stabilization and Savings Funds for Nonrenewable Resources." IMF Occasional Paper 205, International Monetary Fund, Washington, DC.
- Debrun, X., P. Masson, and C. Pattillo. 2010. "Should African Monetary Unions be Expanded?" IMF Working Paper 10/157, International Monetary Fund, Washington, DC.
- EAC (East African Community) and USAID (United States Agency for International Development). 2011. "Corridor Diagnostic Study of the Northern and Central Corridors of East Africa: Integration of Maritime Ports with Inland Container Depots." Volume 2: Technical Papers. Nathan Associates Inc., Arlington, VA.
- EAPP (East Africa Power Pool) and EAC (East African Community). 2011. "Regional Power System Master Plan and Grid Code Study. Final Master Plan Report, Executive Summary." SNC-Lavalin, Montreal, Canada.
- ECB (European Central Bank). 2010. "Study on the Establishment of a Monetary Unions among the Partner States of the East African Community." ECB, Frankfurt, Germany

- Eichengreen, B. 1994. *International Monetary Arrangements for the 21st Century*. Washington, DC: Brookings Institution.
- Elinaza, A. 2011. “Dar es Salaam Port on Massive Expansion Drive.” Daily News, Tanzania, March 4. Available at <http://dailynews.co.tz/home/?n=17800&cat=home>.
- Fakhoury, I. 2011. “Realizing the Vision for Aqaba: The Creation of the Aqaba Special Economic Zone.” Paper presented at the AFZA Convention 2011, Dar es Salaam, May 11–13.
- Goldsmith, J. L., and E. A. Posner. 2005. *The Limits of International Law*. New York: Oxford University Press.
- Gould, D. M. 1994. “Immigrant Links to the Home Country: Empirical Implications for U.S. Bilateral Trade Flows.” *Review of Economics & Statistics* 76 (2): 302–316.
- Guillaume, D., and D. Stasavage. 2000. “Improving Policy Credibility: Is There a Case for African Monetary Unions?” *World Development* 28:1391–1407.
- Hazlewood, A. 1975. *Economic Integration: The East African Experience*. Portsmouth, NH: Heinemann.
- Hugo, G. 2007. “Indonesia’s Labor Looks Abroad.” Migration Information Source, April.
- IMF (International Monetary Fund). 2011. *West African Economic and Monetary Union: Discussions with Regional Institutions—Staff Report and the Executive Director’s Statement*. Washington, DC: IMF.
- JICA (Japan International Cooperation Agency). 2010. “The Research on Cross-Border Transport Infrastructure: Phase 3. Final Report.” JICA, Tokyo.
- Katseli, L., R. Lucas, and T. Xenogianni. 2006. “Effects of Migration on Sending Countries: What Do We Know?” Development Centre Working Paper 250, Organisation for Economic Co-operation and Development, Paris.
- Kaufmann D., A. Kraay, and M. Mastruzzi. 2010. *The Worldwide Governance Indicators: Methodology and Analytical Issues*. World Bank, Washington, DC.
- Kee, H. L., A. Nicita, and M. Olearra. 2009. “Estimating Trade Restrictiveness Indexes.” *Economic Journal* 119 (534): 172–199.
- Kose, M. A., E. Prasad, K. Rogoff, and S.-J. Wei. 2006. “Financial Globalization: A Reappraisal.” IMF Working Paper 06/189, International Monetary Fund, Washington, DC.
- Laursen, F. 2003. “Comparing Regional Integration Schemes: International Regimes or Would-be Polities?” Jean Monnet/Robert Schuman Paper Series 3 (8), University of Miami, Miami European Union Center, Miami, FL.
- Legewie, J. 2000. “The Political Economy of Industrial Integration in ASEAN: The Role of Japanese Companies.” *Journal of the Asia Pacific Economy* 5 (3): 204–233
- Levy, B., and P. Spiller. 1996. “Framework for Resolving the Regulatory Problem.” In *Regulations, Institutions and Commitment: Comparative Studies in Regulation*, ed. B. Levy and P. Spiller. Cambridge, UK: Cambridge University Press.
- Limao, N., and T. Venables. 2001. “Infrastructure, Geographical Disadvantage, Transport Costs, and Trade.” *World Bank Economic Review* 15 (3):451-79.
- Lindh, T., and B. Malmberg. 2007. “Demographically Based Global Income Forecasts up to the Year 2050.” *International Journal of Forecasting* 23 (4): 553–567.
- Lucas, R. E. B. 2008. “International Labor Migration in a Globalizing Economy.” Carnegie Papers 92, July, Carnegie Endowment for International Peace, Washington, DC.
- Markova, E. 2010. “Effects of Migration on Sending Countries: Lessons from Bulgaria.” Hellenic Observatory Papers on Greece and Southeast Europe 35, London School of Economics and Political Science, London.

- Masson, P., and C. Pattillo. 2005. *The Monetary Geography of Africa*. Washington, DC: Brookings Institution Press.
- Mayer, T., and S. Zignago. 2006. “Notes on CEPII’s Distance Measures.” CEPII Working Paper, Centre d’Etudes Prospectives et d’Informations Internationales, Paris.
- Moravcsik, A. 1998. *The Choice for Europe: Social Purpose and State Power from Messina to Maastricht*. Ithaca, NY: Cornell University Press.
- Mwangasha, W. 2011. “Mombasa Port Expansion to Begin This Month.” *Construction Business Review*, June 16. Available at www.constructionkenya.com/2116/mombasa-port-expansion-to-begin-this-month
- The New Times*. 2010. “East African Community to Increase Defence Cooperation.” *The New Times*, Kigali, January 14.
- North, D. C. 1994. “Institutions and Credible Commitment.” *Journal of Institutional and Theoretical Economics* 149: 11–23.
- O’Brien, R. 1992. *Global Financial Integration: The End of Geography*. London: Chatham House.
- Ranganathan, R., and V. Foster. 2011. “East Africa’s Infrastructure: A Continental Perspective.” Policy Research Working Paper 5844, World Bank, Washington, DC.
- Rauch, J. E. 2001. “Business and Social Networks in International Trade.” *Journal of Economic Literature* 39: 1177–1203
- Romer, P. 2010a. “Technologies, Rules, and Progress: The Case for Charter Cities.” Center for Global Development Essay, March, Washington, DC.
- . 2010b. “Note on Credible Commitment and Charter Cities.” September. Mimeo.
- Shabsigh, G., and N. Ilahi. 2007. “Looking Beyond the Fiscal: Do Oil Funds Bring Macroeconomic Stability.” IMF Working Paper 07/96, International Monetary Fund, Washington, DC.
- Stasavage, D. 1997. “The CFA Franc Zone and Fiscal Discipline.” *Journal of African Economies* 6:132–167.
- Teravaninthorn, S., and G. Raballand. 2009. *Transport Prices and Costs in Africa: A Review of the Main International Corridors*. Washington, DC: World Bank.
- Tsekpo, A. K. 2010. “Making Migration a Development Factor: The Case of North and West Africa: Outward Migration, Labour Markets and Development in Selected North and West African countries.” University of Ghana, International Labour Organization.
- Tumusiime-Mutebile, E. 2010. “The Road to Monetary Union in East Africa.” Keynote address at the Validation Workshop of the Draft Final Report of the Monetary Union Study, January 18–20, Kampala.
- UN (United Nations). 2009. *Human Development Report 2009—Overcoming Barriers: Human Mobility and Development*. New York: United Nations Development Programme.
- . 2011. *World Population Prospects, 2010 Revision*. Department of Economic and Social Affairs, Population Division. <http://esa.un.org/unpd/wpp/>.
- UNCTAD (United Nations Conference on Trade and Development). 1999. *Foreign Direct Investment in Africa: Performance and Potential*. New York: UNCTAD.
- . 2009. *Trade and Development Report 2009*. New York: UNCTAD.
- . 2010. *Non-Tariff Measures: Evidence from Selected Developing Countries and Future Research Agenda*. New York: UNCTAD.
- UNECA (United Nations Economic Commission for Africa), AU (African Union), and ADB (African Development Bank). 2010. *Assessing Regional Integration in Africa IV: Enhancing Intra-African Trade*. Addis Ababa: UNECA.

- Van den Boogaerde, P., and C. Tsangarides. 2005. "Ten Years after the CFA Franc Devaluation: Progress Toward Regional Integration in the WAEMU." IMF Working Paper 05/145, International Monetary Fund, Washington, DC.
- Viner, J. 1950. *The Customs Union Issue*. New York: Carnegie Endowment for International Peace.
- Wagh, S., A. Lovegrove, and J. Kashangaki. 2011. *Scaling-up Regional Financial Integration in the EAC*. Policy Note 22, July, World Bank, Washington, DC. Available at http://siteresources.worldbank.org/INTAFRREGTOPTRADE/Resources/EAC_financial_integration_07_14_11.pdf.
- WEF (World Economic Forum). 2009. *The Africa Competitiveness Report 2009*. Geneva: WEF.
- Wellhausen, R. 2010. "When Governments Break Contracts: Foreign Investment and Political Risk in Emerging Economies." Prepared for September 2010 APSA Meeting, Washington, DC.
- World Bank. 2006. *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*. Washington, DC: World Bank.
- . 2008a. *World Development Report 2009: Reshaping Economic Geography*. Washington, DC: World Bank.
- . 2008b. "Non-Tariff Measures on Goods Trade in the East African Community: Synthesis Report." Report 45708-AFR, World Bank, Washington, DC.
- . 2009. "Project Paper on a Proposed Additional Financing Credit in the Northern Corridor Transport Improvement Project." World Bank, Washington, DC.
- . 2011. *Migration and Remittances Factbook 2011*. Washington, DC: World Bank, Migration and Remittances Unit.
- Zhao, M., and T. Farole. 2011. "Partnership Arrangements in China (Suzhou) Industrial Park: Lessons for Joint Economic Zone Development." In *Special Economic Zones: Progress, Emerging Challenges, and Future Directions*, ed. T. Farole and G. Akinci. Washington, DC: World Bank.