Policy brief

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Raising exports and attracting FDI in Rwanda

In brief

- Increasing exports and attracting foreign direct investment are central priorities of the Government of Rwanda and of DfID in its Invest Africa initiative. Rwanda must create some 200,000 jobs per year to absorb its expanding population and even more are required to relieve the pressure on rural land.

- While export growth has slowed recently, the export portfolio has become more diverse in terms of both products and markets – though some vulnerabilities remain. These include shrinking global market shares in certain sectors and a lack of focus where world trade is expanding.

- Economy-wide efforts to deepen the supply chain and improve incentives in key sectors such as tourism, coffee and tea, mining, livestock products, and horticulture offer many opportunities that should be further explored by policymakers.

- This policy brief summarises recent export and FDI performance and some of the key sectoral and cross-cutting issues. It sketches out some policy priorities and areas where additional donor support might contribute to increasing exports, attracting more FDI, and accelerating growth in national incomes.

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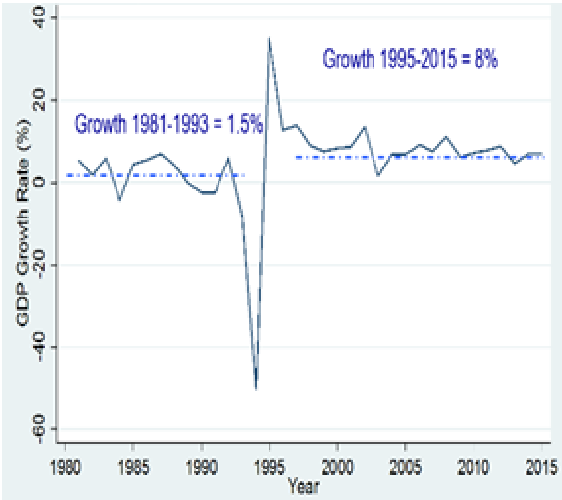
Context: The new urgency for export growth

Rwanda has enjoyed remarkable economic performance over the last 20 years, growing at an average rate of 8% per annum. This continued in 2015 with GDP growth of 6.9%. However, it remains a small, poor, land-locked country, with one of the highest population densities in the world. With limited land, and 80% of the population still engaged in farming, the average farm size has dwindled to 0.33 ha. At the same time, the country is urbanising quickly, the urban population increasing from a mere 5% of the total in 1990 to 20% today. The economy is dominated by services, whose share of GDP has been expanding. With higher than economy wide average productivity, its contribution to GDP growth has been expanding steadily (Figure 1b).

Figure 1a: Rwanda's high growth plateau

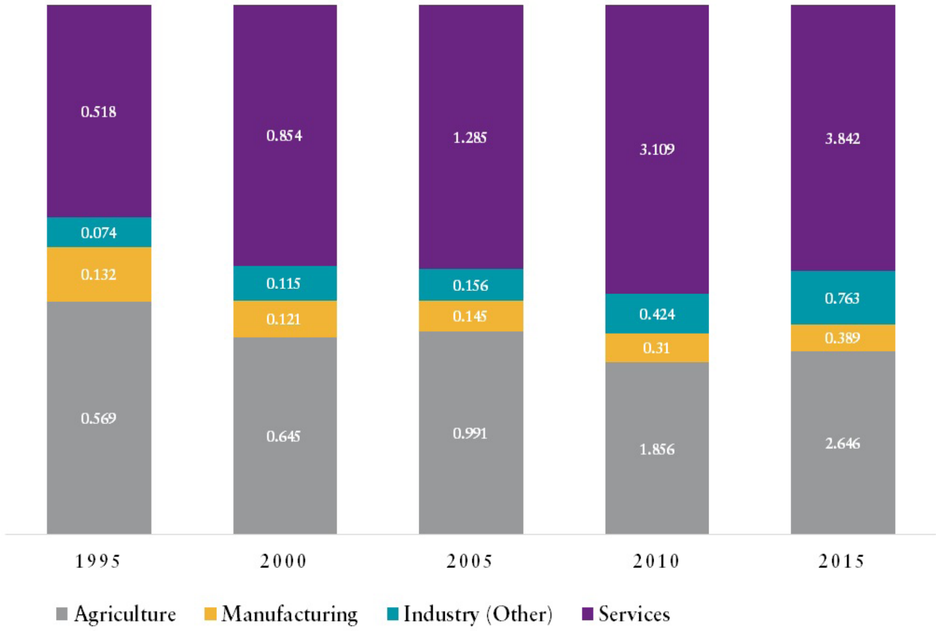


Source: World Bank, World Development Indicators (Accessed November 14, 2016).

The government's strategy recognises that off-farm jobs must be created urgently, even as on-farm productivity must be improved. And given the very small domestic market of 12 million, and the low level of exports-to-GDP (14%), the country must learn to sell more to the rest of the world. The national strategy also underlines the importance of foreign direct investment, which indeed has often been critical for the development of non-traditional exports in Africa.

The Vision 2020 strategy planned for export growth of 15% per annum. The National Export Strategy for 2010-15 pushed this up to 18% annually. The Economic Development and Poverty Reduction Strategy 2013-2018, written at the peak of the commodities boom, envisaged accelerated export growth of 28% per annum. Building on a sector-by-sector analysis of opportunities, the revised national export strategy for 2015-18 proposes a slightly less ambitious annual rate of export growth of 20%.

Figure 1b: Sector contribution to GDP (USD millions)



Source: World Bank, World Development Indicators (Accessed November 14, 2016).

The total value of exports has indeed grown at a very fast rate of 20% annually in the decade up to 2014. However, a significant part of this growth was due to the global commodity boom which pushed up mineral prices to historic levels. This ended in 2015 and Rwanda lost US$85 million that year. A further decline in mineral revenues is expected in 2016. Other exports have been unable to compensate, and the total value of goods exports declined by 7% in 2015, in spite of an increase in volume. With imports of goods three times the size of exports and also growing at about 20% per annum, the current account deficit is large and widening.[1] In 2015, it reached 18% of GDP. Meanwhile, aid flows, which had covered much of the deficit, have fallen by 50% as a share of GDP and the government now faces a foreign exchange constraint.[2] Reserves are projected to fall to the equivalent of only 3.2 months of imports in 2016. Thus expanding exports has become critical for macroeconomic stability as well as job creation.

Trade performance

Recent developments

After two decades of growth, exports have leveled off

The rapid rise in exports of goods and services since 2000 emerges clearly from Figure 2a. But so does the even more rapid rise in imports and hence the burgeoning trade deficit. Figure 2b provides a more nuanced picture by comparing exports to GDP. It underlines that up until 2000, the growth was largely a matter of recovering from a collapse in exports in the late 1980s. Only in the last five years

1. MINICOM, Revised National Export Strategy, 2016, p. 10.

2. Foreign aid has fallen from 13% of GDP in 2010 to 6%. IMF, Staff Report, July 2016.

have exports-to-GDP reached levels significantly above the historical average pre-1985. Even then, they remain below the peak achieved in 1979 when coffee prices were booming.

Figure 2a: Evolution of trade balance, 1960-2015

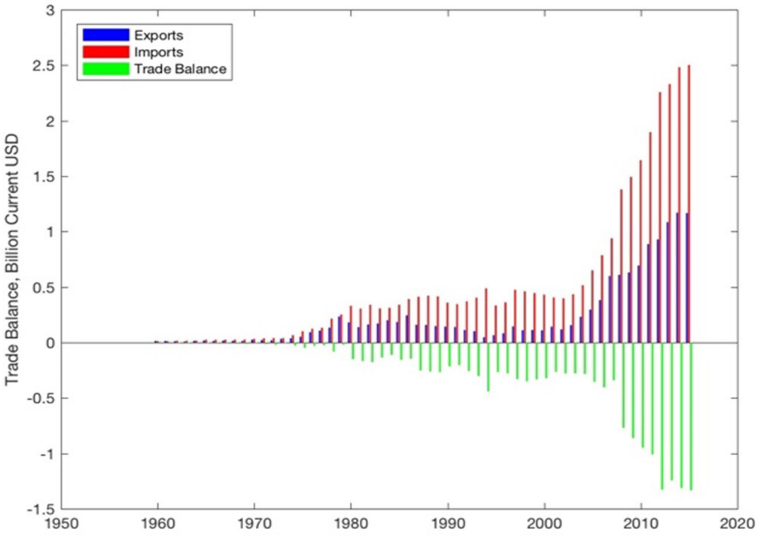
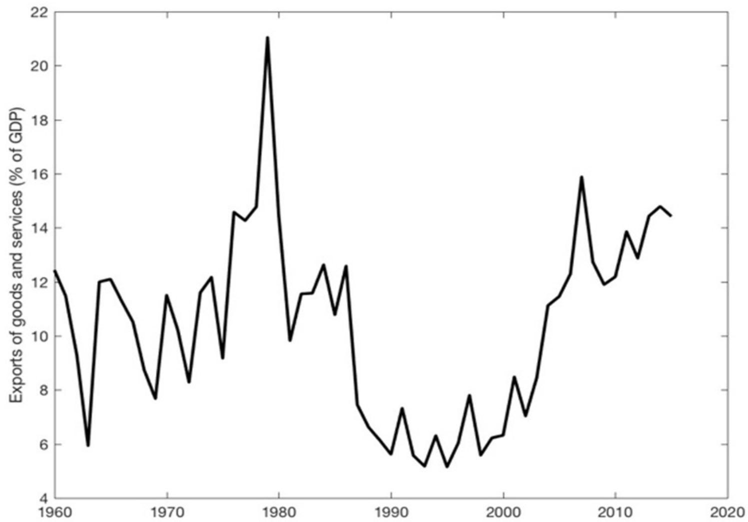


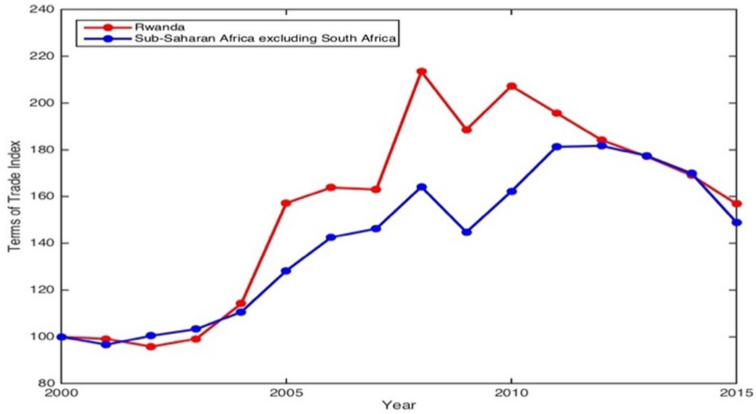
Figure 2b: Evolution of exports/GDP, 1960-2015



Source: World Bank, World Development Indicators.

Until about 2010, the increasing trade deficit was not due to deteriorating export prices. In fact, Rwanda enjoyed a major improvement in its terms of trade, even better than the average for sub-Saharan Africa (Figure 3). However, since 2010, the world economy has become less favorable. Export prices have declined, from 22% to 38%, for the three main mineral exports. This has been partially offset by a fall in imported petroleum prices, so the overall terms of trade have fallen by about 20%.

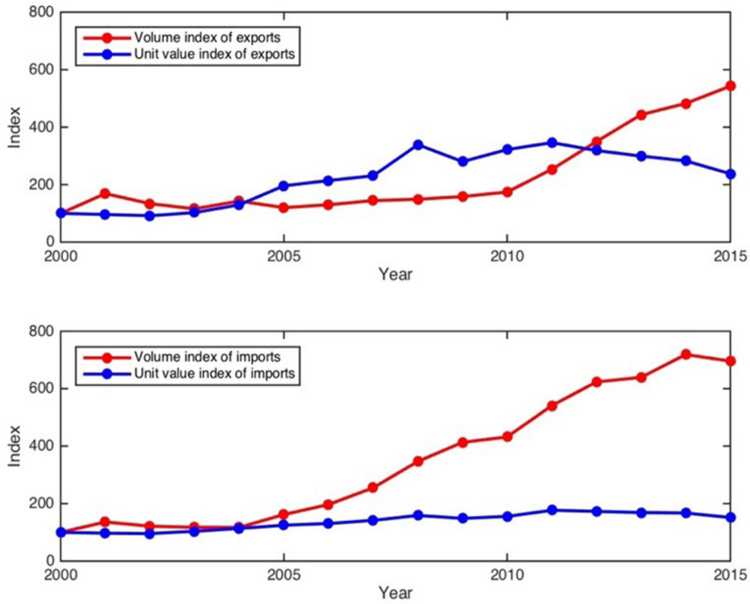
Figure 3: Evolution of terms of trade: 2000-2015



Source: UNCTADStat website.

Export volumes rose substantially after 2010 even though unit values fell somewhat (Figure 4). This suggests that rising prices propelled growth in exports until 2010 when volumes took off. (These trends may be partly due to the inclusion of re-exports and cross-border trade as data became available). Import volumes have been rising steadily since 2004, while prices have stayed relatively stable. The growth in imports reflects the rapid growth in the economy supported by significant inflows of aid and foreign investment. With the recent decline in both foreign aid as a share of GDP and mineral prices, a renewed push for expanded exports and private capital inflows has become an urgent priority.

Figure 4: Evolution of imports and exports: 2000-2015



Source: UNCTADStat website.

Exports from Rwanda consist of five broad categories: traditional commodities, other formal exports, informal cross-border trade, re-exports, and services (Table 1). The total value amounted to almost US$1.1 billion in 2015. Data on informal cross-border trade only became available starting in 2010 when an annual survey was launched. This survey estimated the value of such trade at US$45 million in 2010, rising to US$110 million in 2014. Since this trade was not included prior to 2010, its addition has somewhat inflated the overall growth rate of exports.[3]

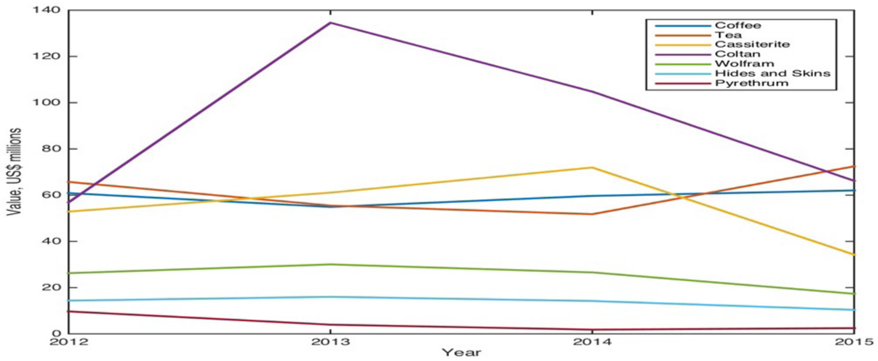
Table 1: Exports by Broad Category, 2015

	US$ million	Share (%)
Tourism	318	29
Tea and coffee	135	12
Minerals	118	11
Other goods (formal)	129	12
Cross-border (informal)	125	11
Re-exports	178	16
Transport services	75	7
Other services	20	2
Total	**1097**	**100**

Source: IMF (2016), BNR website, MINICOM (2016).

The recent trend in exports has brought to an end the impressive growth of the past decade. This is primarily due to a fall in world mineral prices which then led to cuts in production in Rwanda as some deposits were no longer profitable (Figure 5). This trend continued in 2016, with mineral export revenues expected to fall to US$70 million, one-third of the 2013 peak.

Figure 5: Evolution of Principal Merchandise Exports, 2012-2015 (US$ million)



Source: BNR website

3. It is not clear whether the level of such trade has actually doubled, or whether this increase reflects improved data collection. Note, however, that a comparison based on the level of net exports, after accounting for imported inputs, would be quite different. This is particularly relevant in the case of re-exports. While no data are available, one might assume that the value-added is no more than 15% of the export value, resulting in net exports of only US$27 million.

In addition, the growth in tourism receipts has slowed down to 2% per annum between 2012 and 2015. This was partly due to the Ebola scare in 2014, and possibly instability in neighboring countries, but may also be the portent of the limits of gorilla tourism. Tea was one of the few bright spots in 2015, but prices have fallen in 2016 while a drought has hurt production.

Changing export portfolio: Diversification, if with remaining vulnerabilities

Rwanda (and East Africa) trade less than the region …

Land-locked countries will generally have a more difficult time exporting due to the high cost of transport to and from the coast. Rwanda tends to have a lower export-to-GDP ratio than other low and lower middle income developing countries which are also land-locked (Figure 6).[4] Its performance is far below the average for sub-Saharan Africa, yet somewhat better than that of Ethiopia and Nepal and, unlike these two countries, moving in the right direction. On the other hand, it is far behind mineral-exporting Zambia and Bolivia. Uganda is perhaps the best comparator, given its similar economic structure, and it does significantly better. The government is right therefore to focus on increase exports as a driver of growth.

Figure 6: Exports to GDP: Rwanda and comparator landlocked countries, 2003-2015

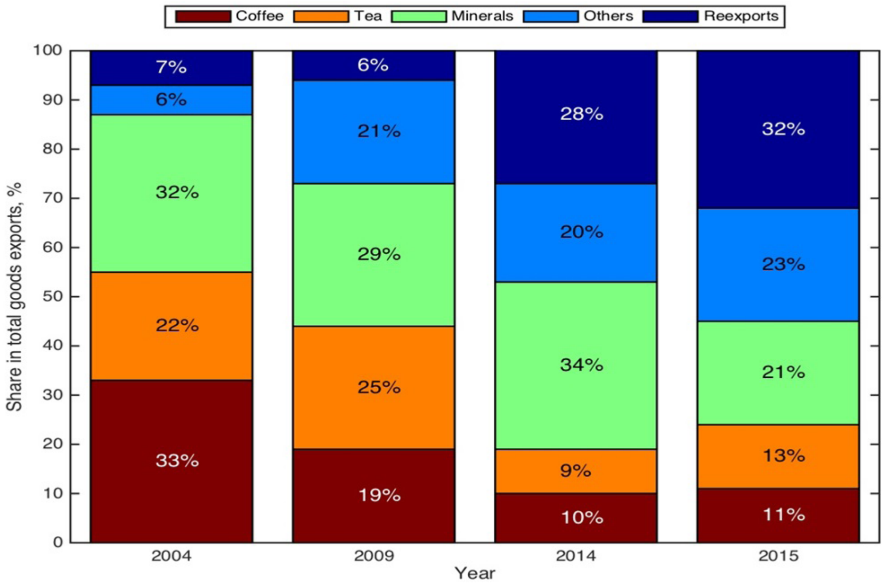
Source: WITS, WDI and UNCTAD data. *Two-year averages 2013-2014.

… But exports are becoming more diversified

The good news is that today Rwanda exports more products than it did a decade ago, and this is important for mitigating large swings in commodity prices that would otherwise leave the country vulnerable to terms of trade shocks. The share of traditional exports (coffee, tea, and minerals) in formal exports has fallen from 87% in 2004 to 46% in 2015, while other exports and re-exports have grown. However, improved reporting of re-exports over time may also bias this comparison.

4. Includes re-exports.

Figure 7: Changing structure of formal exports: 2004-2015



Source: National Bank of Rwanda, Annual Report, various years.

In 2003-5, the top five exports, coffee, tea, tin, coltan and tungsten, accounted for 79% of the total for formal exports (Table 2). By 2013-15, their share had dropped to 71% (excluding re-exports and cross-border trade). However, if one takes the top 10 exports, the situation has not changed much – 80% in 2003/05, 79% in 2013/15. Nonetheless, several exports have become important, such as hides and skins, live cattle, beer and maize flour.[5] This table also underlines the impressive rates of growth in all major exports.

5. Unfortunately, beer exports were on the decline in 2015 as DRC slapped on new taxes.

Table 2: Top 20 merchandise exports and re-exports and their growth, 2003-2015

		Exports		% of total		
HS-6 Code	Product	2003-2005	2013-2015	2003-2005	2013-2015	Rate of growth
261590	Coltan (tantalum)	8008	103338	8	18.7	29
271019 271012	Petroleum products*	55	58267	0.1	10.5	101
090111	Coffee	29416	57218	29.4	10.3	7
260900	Tin (cassiterite)	23878	56680	23.8	10.2	9
090230 090240	Tea	16798	55786	16.8	10.1	13
261100	Tungsten (wolframite)	644	23753	0.6	4.3	43
100630 100640	Rice	13	12060	0	2.2	98
110100	Wheat flour	7	11211	0	2.0	109
410120 410390	Hides and skins	473	10910	0.5	2.0	37
010290	Live bovine animals	0	7140	0	1.3	Infinite
220300	Beer	3	6838	0	1.2	117
170199	Sugar	0	6243	0	1.1	Infinite
151620	Vegetable fats and oils	4	5542	0	1.0	106
110220	Maize flour	67	4682	0.1	0.8	53
843049	Boring or sinking machinery for minerals*	0	4628	0	0.8	Infinite
721049	Flat-rolled products of iron or non-alloy steel	0	4249	0	0.8	Infinite
710812	Gold	0	3805	0	0.7	Infinite
220290	Non-alcoholic beverages	2	3736	0	0.7	112
870333	Motor cars*	740	3701	0.7	0.7	18
282590	Bases, inorganic and metal oxides	0	3215	0	0.6	infinite

Source: ITC Trade Map (www.trademap.org). *re-exports

Informal cross-border exports are another important source of diversification, as reflected in Table 1 (but not included in Table 2). In 2015, their value was roughly the same as that of formal non-traditional exports. Table 3 summarises the main products and destinations for informal trade, some of which are re-exports (telephonic apparatus, dried fry and second-hand clothing).

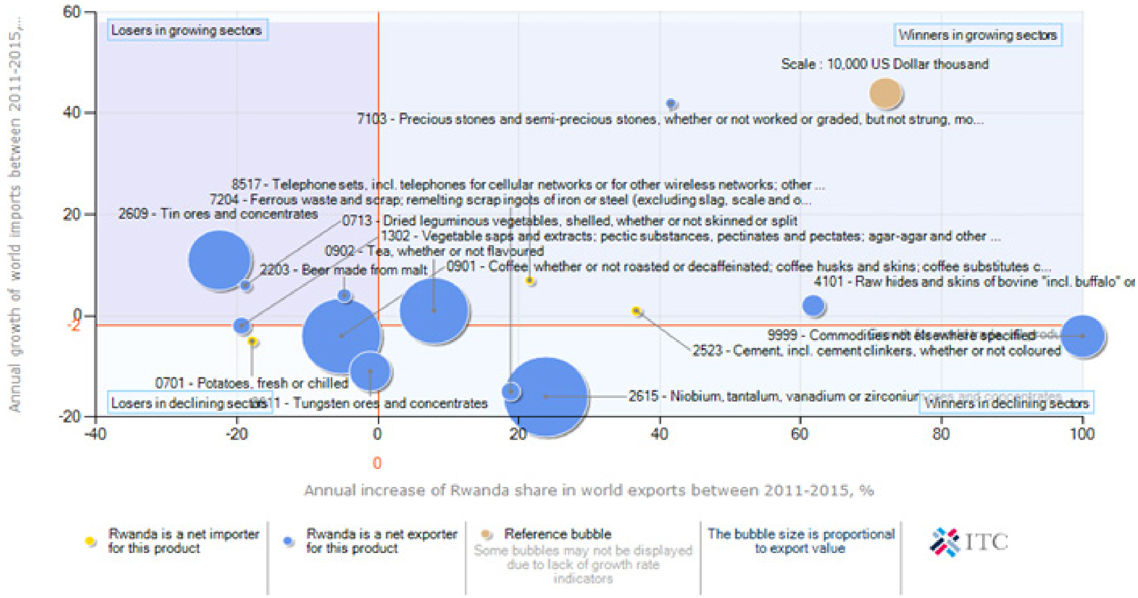
Top 10 informal exports	Burundi	Tanzania	Uganda	EAC Total	DRC	EAC+DRC
Telephonic apparatus	21.4	5.5	6,955.4	6,982	386	7,369
Bovine cattle live	341.9	0.7	789.6	1,132	4,520	5,652
Beef meat	5	-	3.2	8.3	5,346	5,354
Dried Beans	146.7	0.3	2,209.5	2,356	516	2,872
Maize flour	291.5	0	2	294	4,134	4,428
Poultry live	9	0.1	969	978	2,087	3,065
Other fishery products	2.1	0	0.3	2.5	3,508	3,511
Raw milk	60.3	0.7	2.2	63	3,131	3,194
Dried fry of Tanzania	134.3	-	0.2	135	2,597	2,732
Second-hand clothing	444.8	0.3	63.4	509	1,701	2,209

Source: MINEAC, Regional Integration Performance Report in the East African Community, 2016, p. 26

One vulnerability: Not enough products in fast growing markets

The world market has had an important influence on Rwanda's export performance in terms of volume as well as price – and the location of Rwandan products in the growth segments of the global market underscore the headwinds it faces. The four quadrant graph (Figure 8) compares Rwanda's export performance with the trend in world trade for the period 2011-15. It compares the change in Rwanda's share of world exports to the annual growth rate of world trade for each product. The ideal situation is for a product to be gaining market share in an expanding global market, the upper right quadrant. This is true of tea and raw hides and skins. However, for tantalum (coltan), the situation is less promising – Rwanda's market share is improving but world trade is falling (the top left quadrant). It is still worse for coffee and tungsten (wolfram), where the country is losing market share in a global market that itself is shrinking (the lower left quadrant). Finally, for tin, world trade is expanding but Rwanda's share is falling. Overall, this analysis might suggest that more attention should be focused on tin, tea and raw hides and skins where world trade is expanding and would support Rwanda's competitiveness.

Figure 8: Growth of national supply and international demand for products exported by Rwanda in 2015



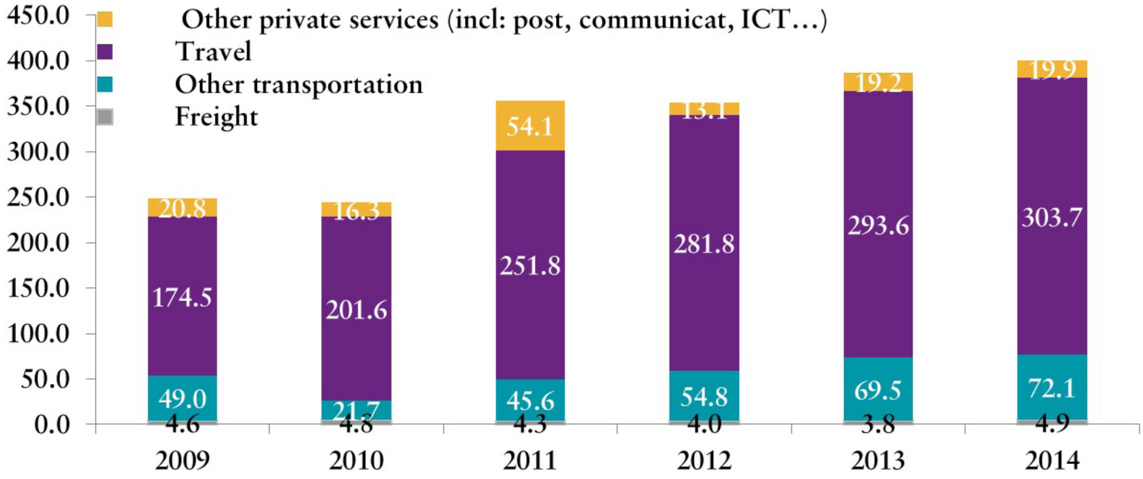
Source: ITC, Trade Map.

Services are a major source of diversification and fast growth

A notable exception to the quadrant location is omission of services trade. In fact, Rwanda's exports are actually more diversified than suggested by this table because it excludes services, and notably tourism, and this is a fast-growing segment of the world market. Annual tourism receipts were already estimated at US$41 million in 2003-05, the equivalent of 41% of formal merchandise exports. These revenues grew by an annual average of 22% to reach some US$300 million by 2013-15, equal to 79% of formal exports. Thus, tourism is easily the largest single source of foreign exchange, exceeding the total of the five main commodity exports in 2015, especially after the recent decline in mineral prices. However, this implies that the economy has become increasingly dependent on tourism. Other service exports consist primarily of transport services, such as air or road transport, in the amount of US$72 million (Figure 9).[6]

6. Service exports in the balance of payments are considerably larger but they include foreign exchange transferred to Rwanda to cover the operating expenses of embassies, donors and the UN system, notably peacekeeping.

Figure 9: Services exports, 2009-14 (US$ million)



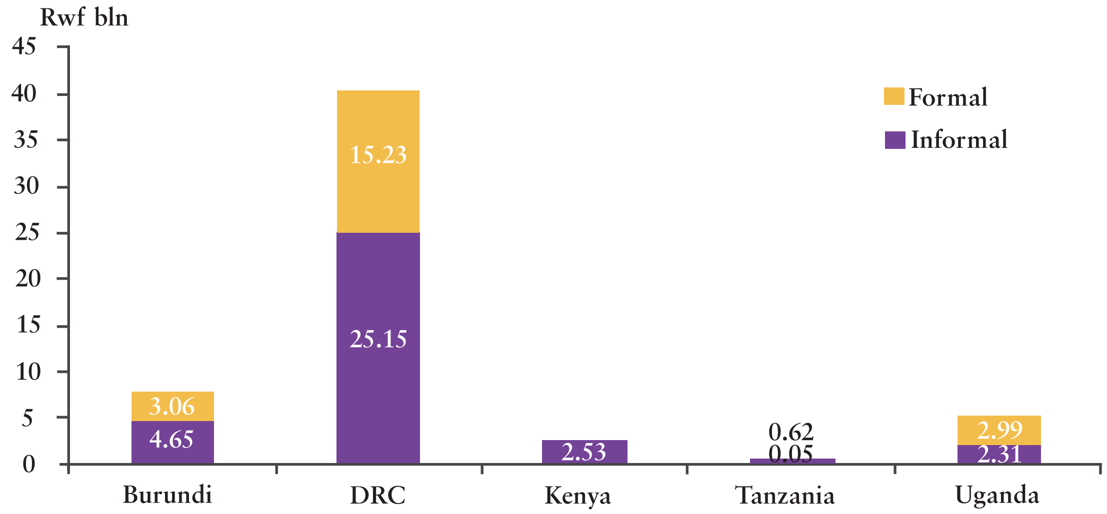
Source: MINICOM: Revised National Export Strategy, 2016.

Diversification into new markets complements product diversification

A second form of diversification that complements an increasing number of products and services is exporting to new geographic markets. While traditional exports are sold overseas, most of the rest stays in the sub-region. In particular, it is striking how important the Democratic Republic of Congo has become. It accounts for over 70% of all exports to its immediate neighbors, including Kenya (Figure 10). Almost half of the remainder goes to Burundi. Rwanda enjoys a strategic advantage with respect to these two markets. Its proximity and favorable investment climate have encouraged some East African companies to establish subsidiaries in Rwanda from which to service these two markets, with their weak industrial sectors and sizeable populations. In many cases, Rwandan firms do not actually export, but simply wait for foreign buyers to come to their factory gate.[7] DRC is particularly interesting because there are two large markets just across the border, in Goma and Bukavu, which attract buyers from as far away as Kisangani.

7. MINICOM, National Cross-Border Trade Strategy, 2012.

Figure 10: Formal and informal exports to the sub-region, 2011 (RwF billion)



Source: MINICOM, National Cross-Border Trade Strategy, 2012, p. 16.

Rwanda has had limited success in penetrating the large markets of Kenya, Tanzania and Uganda. These countries have larger private sectors and cheaper access to the imported raw materials on which many manufactures depend.[8] More recent data for 2015 shows considerable export growth in both the EAC and DRC markets, with continued dominance by the latter. Total exports to the EAC are now estimated at US$55 million compared to only US$20 million in 2011.[9] Exports to the DRC have risen to US$148 million compared to US$50 million in 2011, although the recent figure probably includes re-exports.

New products or new markets drive diversification?

Decomposing the growth of exports can highlight the role of new products and markets relative to traditional products in the diversification process. Is export growth the result of traditional products being sold to traditional markets (the intensive margin) or is it new product introduced recently to new markets (the extensive margin)? Brenton and Newfarmer found that 43% of all export growth in sub-Saharan Africa was on the intensive margin for the period 1995-2005.[10] A similar analysis for Rwanda for a more recent, if shorter, period (2008-13) found that the share of growth accounted for by products that existed in 2008 and continued to be sold to the same markets was only 20% (Table 4). On the other hand, selling existing products to new markets accounted for 61% of the growth. This suggests that Rwanda is engaged in a more robust process of discovery and diversification than for the average sub-Saharan African country. However, much of this is due to a shift in mineral markets from Europe and the US to Asia. Only about 20% of export growth is due to new products, and virtually all of these went to existing markets.

8. Some analysis gives a misleading impression of larger and growing trade with the East African Community because trade data shows tea exports going to Kenya. In fact, tea is sent to an auction in Mombasa from where it is exported abroad.
9. Ministry of East African Community, Regional Integration Performance Report in the East African Community, Issue Two, 2016. We have deducted re-exports in order to get the level of formal trade with the EAC.
10. P. Brenton and R. Newfarmer, "Watching more than the Discovery Channel", 2009.

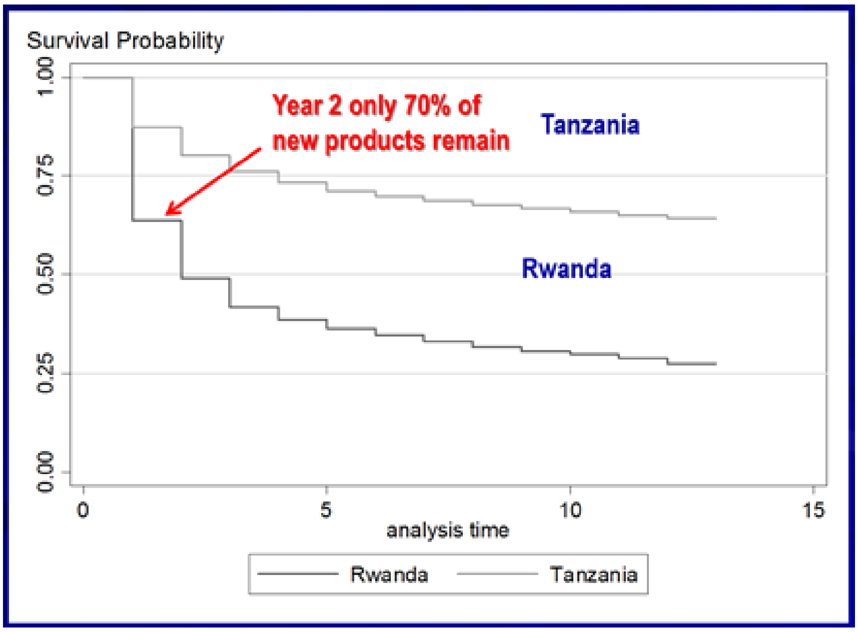
Table 4: Decomposition of merchandise export growth, 2008-13

		Products	
		Existing	New
Markets	Existing	20%	19%
	New	61%	< 1%

Source: MINICOM, Revised National Export Strategy, 2016, p. 13.

One explanation for the relatively low contribution of new products to overall growth is the low survival rate of new exports in foreign markets. In other words, Rwandan exports may have many new products in a given year but these disappear from the statistics in the years that follow. In the period 2000-2008, only 70% of new products introduced in that period had positive exports in the second year after their introduction (Figure 11). On newly exported products, 30% disappeared in the second year and even more by the third year. Product "deaths" occur at a much more rapid rate than in Tanzania (shown in Figure 11) and other countries in East Africa. It would be worthwhile exploring these numbers in greater depth to identify where public policy might support exporters in maintaining a presence in foreign markets.

Figure 11: Survival rate of new products in year after introduction



Source: R. Newfarmer, "Using Trade to Grow" Presentation, Kigali November 2010 based on WITS Comtrade database.

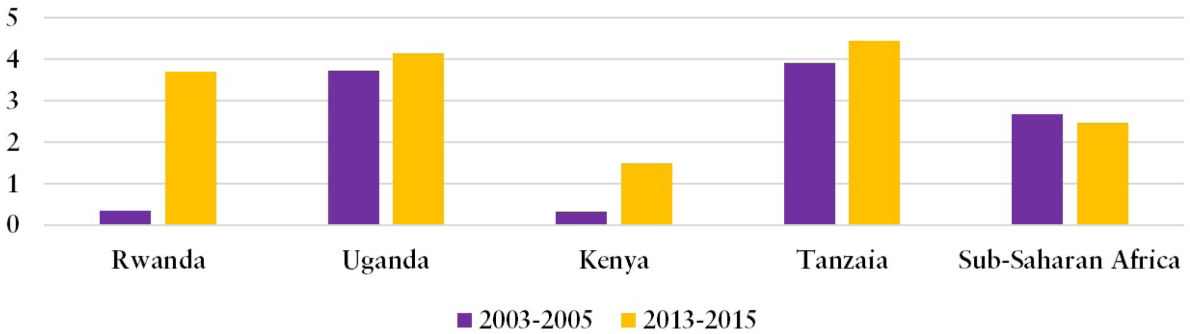
Large exporters drive export growth

If we look at the characteristics of exporting firms, it becomes clear that large exporters are very important. The revised National Export Strategy makes this point well.[11] It distinguishes between million dollar exporters, of which there were 64 in 2014, and the remaining 1,961 smaller exporters. The former group accounted for 84% of all exports in 2014 and 88% of export growth since 2008. This is partly due to their dominance in commodity exports, but even in agro-processing and manufacturing they accounted for 63% of all exports. The Strategy also calculates that 40% of these large exporters emerged from smaller operations which grew over time, while 60% were the result of large-scale initial investments, both foreign and domestic. It then looks at the survival of exporters and finds a much better performance among large exporters: 63% were still exporting after five years, as compared to an average of only 33% for all exporters. The Strategy concludes that '"large exporters" not "many exporters" drive export growth.'[12] While promoting small and medium enterprise is important, it cannot be the sole focus of an export strategy.

Foreign direct investment

Foreign direct investment, the key to participation in emerging regional and global value chains, has increased substantially in the last decade. In 2005, FDI was less than 5% of gross fixed capital formation; in 2015, inflows amounted to 24%. This was some 8-10 percentage points higher than other countries in the EAC. FDI reached US$320 million in 2015, equivalent to 4% of GDP. This is well above the average for sub-Saharan Africa, comparable to Uganda and Tanzania and well ahead of Kenya (Figure 12), though similar to the average for low income countries globally (3.9%).[13] The official projection for 2016 is the maintenance of the previous year's level, although the value of projects registered with the Rwanda Development Board (RDB) fell significantly in 2014 (to US$360 million from US$645 million the previous year).[14]

Figure 12: Average annual net FDI inflows (% of GDP)

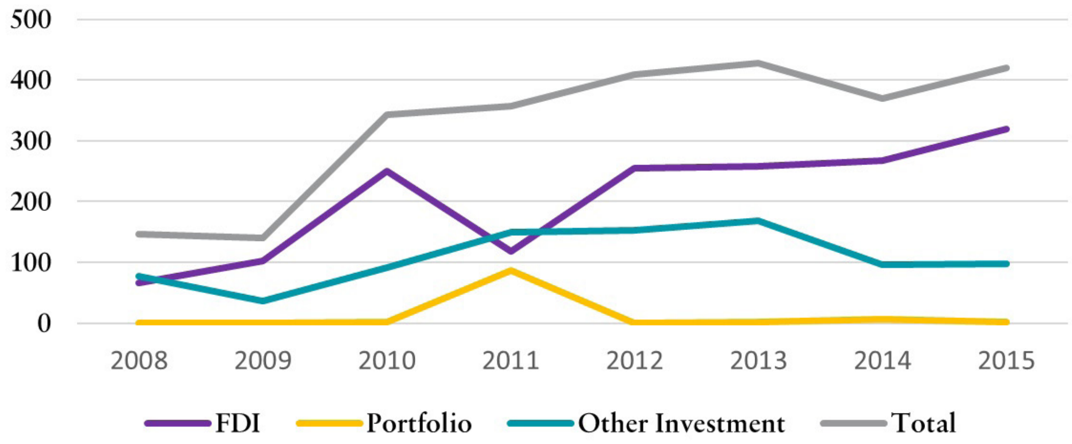


Source: World Bank, World Development Indicators website.

Other private investment, such as long-term loans to the private sector, has also grown over the last 7 years, though falling back recently. Portfolio investment remains negligible (Figure 13).

11. MINICOM, Revised National Export Strategy, 2016, pp. 19-21.
12. Ibid., p. 21.
13. World Bank, World Development Indicators for 2014.
14. National Bank of Rwanda, Foreign Private Capital in Rwanda, 2015, p. 17.

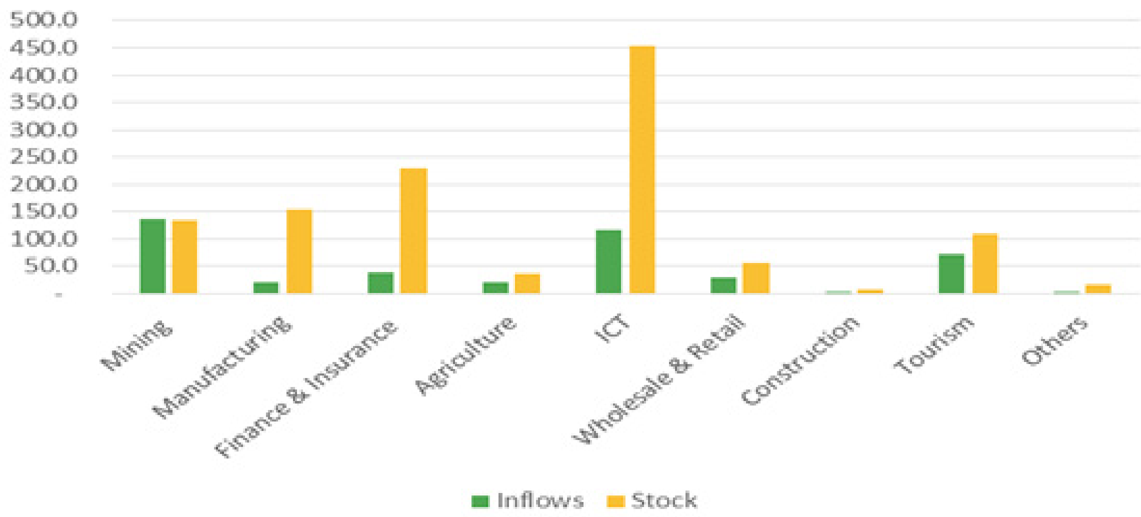
Figure 13: Foreign private capital flows, 2008-2014 (US$ million)



Source: National Bank of Rwanda, Foreign Private Capital in Rwanda, 2015; IMF, Staff Reports for the Fourth and Fifth Reviews under the Policy Support Instrument, January and June 2016.

Much of the investment has gone into the domestic service sector – finance and telecommunications – which have the largest stock of FDI (Figure 14). More recently manufacturing, tourism and mining have also attracted significant inflows, much of which has been geared towards exports. In 2014, the mining sector received the largest inflows, followed by ICT and tourism. Mauritius accounts for the largest share of FDI stocks (25.7%), followed by South Africa (14.2%), Luxembourg (10.9%), Kenya (8.8%) and the USA (7.5%).

Figure 14: Foreign Direct Investment Stocks and Flows by Sector, 2014 (US$ million)



Source: BNR, Foreign Private Capital in Rwanda, 2015.

A 2012 study by UNCTAD found that many foreign investors are small or medium-sized companies or entrepreneurs; 58% had 250 employees or less in their parent operation, and 24% had no more than 10 employees.[15] Investors were generally very happy with the registration process but were disappointed with the support for implementing their projects. They cited weaknesses in the decision-making process and problems with tax administration as the two most serious problems.

Ideas for action

Economy-wide actions to promote exports

Rwanda has made exceptional progress in improving its investment climate. Its ranking on the World Bank's Doing Business scale has risen from 139 in 2009 to 56 in 2017. This puts Rwanda behind only Mauritius among sub-Saharan African countries, and the top-ranked low-income country on the continent. On "getting credit" it is number two in the world. This performance has drawn international attention and attracted foreign investors. However, there is still room for improvement in areas such as tariffs and non-tariff barriers, tax policy and administration, and the services sector.

Deepening the supply chain: Increasing domestic value added

All export sectors face constraints which are likely to prevent rapid growth in the near future. Therefore, it would be wise to also look at the import side of the balance of payments to see what opportunities exist for efficient import substitution. Imports of goods are three times as large as exports, and yet domestic producers enjoy natural protection due to the high transport cost of reaching this land-locked market. However, it would be preferable to focus on building local capacity to compete with imports rather than resorting to higher protection which penalises consumers.

Governments can help to foster an enabling environment for the development of supplier linkages between global lead firms and domestic enterprises. In the capacity of a facilitator, a government can leverage local knowledge of industrial capabilities, constraints and upgrading possibilities, and match these to the requirements of investors. Market friendly measures such as relationship building and matchmaking through investment promotion agencies (for general manufacturing), and local content units (in the case of resource-rich countries) have proven to be effective across the globe. Two cases from John Sutton's (LSE) work have spawned new initiatives in Ethiopia and Tanzania (Box 1). In both case, it began with the preparation of an Enterprise Map describing all the clusters of mid-sized companies which could potentially serve as suppliers.

There is a growing appreciation for the potential to increase local content in the mining sector in other African countries, such as Ghana, where modern mines dominate. This may be less relevant in the case of Rwanda where artisanal mining prevails, but the possibility should not be excluded. The tourism sector has requirements for the quality and reliability of food supplies which local farmers may be unable to satisfy without support to attain certain standards and volumes. An NGO has successfully launched the Gambia is Good programme along these lines in The Gambia. Further work could be done in agro-processing. Two other ways to increase local content are briefly described in Box 1.

15. UNCTAD, A Study of Foreign Investors' Perceptions of Rwanda, 2012.

Box 1: Increasing local firm participation in global value chains

Strengthening Investment Promotion: The Case of Ethiopia

The Ethiopian Investment Commission (EIC), that is responsible for trade and investment promotion, has established a Relationship Building Programme consistent with international best-practice. The EIC serves in a coordination role, helping to bring together potential business partners. By providing forums for dialogue, the EIC helps prospective international lead firms and local suppliers to understand each other's constraints and requirements. The EIC then holds regular follow-up meetings with the foreign investor to ensure that any problems are quickly addressed. This is a low resource-intensive option that can easily be emulated by other countries.

Strengthening local content units: The case of Tanzania

Following the discovery of off-shore gas reserves in Tanzania, the government set up a Local Content Unit whose responsibilities include shaping dialogue with foreign companies regarding local firm integration and encouraging the development of potential domestic suppliers' capabilities. As the supply chain is built up, opportunities will emerge for partnership between foreign and local firms in construction, followed by business and general services, and subsequently in engineering. The Unit is currently working with foreign companies to agree on training arrangements for local SMEs who can then qualify as 'approved vendors' for entry into the supply chain. Training schemes normally run for 1-2 years, and therefore it is important that the LCU be established well ahead of the foreign companies' need for goods and services. The institution of training programmes (e.g. through an Enterprise Development Centre, secondment of experts to local firms, shadowing schemes) will however be costly, and is an area for potential co-financing from donors.

IGC has supported both of these cases and stands ready to assist the Government of Rwanda.

Implementation and targets

Given the wealth of high-quality analysis and the many detailed strategies, the challenge now is to prioritise and implement. The Government of Rwanda is unusually focused on the implementation agenda, with many impressive initiatives under way. Prioritisation is always difficult but one does get a sense that the authorities are stretched too thin given their human and financial resources. While our assessment is very preliminary and needs to be informed by the ODI analysis of global value chains, it would seem that there should be a greater focus on the traditional export sectors of tourism, tea, coffee and minerals. The case of tourism is perhaps the most striking. Given that it accounts for almost one-third of all exports of goods and services, stronger institutional support and possibly a dedicated agency would seem in order.[16]

Coordination is pursued through the Economic Cluster Committee at the Ministerial level and chaired by the President of the Republic, the Industrial Development and Export Council (IDEC), chaired by the Minister of Industry of Trade, and the Export Forum where government and the

16. In 2016, the Ministry of Industry and Trade had only one professional responsible for tourism and all other services as well. The Rwanda Development Board was much better staffed but still tourism is only one of many priorities.

private sector meet twice a year. There are also sector working groups, jointly chaired by the public and private sectors. However, the IDEC has only one staff member, the Export Forum may be too broad to address sector-specific issues, and not all sectors have functional working groups.

More impressive is the practice of establishing quantitative medium-term goals, detailed annual matrices with quarterly actions, and performance contracts. There are nonetheless several ways in which this process could be strengthened. First, the medium-term targets are overly ambitious and tend to be set in a top-down fashion instead of building up from a realistic knowledge of each sector. The Second Economic Development and Poverty Reduction Strategy for 2013-2018 assumed that the value of exports would grow by 28% per annum, including 35% for services. Unfortunately, the authors overlooked the fact that the 2012 base figure was inflated by exceptional mineral prices and significant foreign exchange earnings attributed to services but actually entering to support foreign embassies and institutions. The growth projection for services was particularly ambitious given the approaching saturation of gorilla tourism and the virtual absence of any other significant service exports. The resulting export target for 2018 was US$4.5 billion.

The revised National Export Strategy makes a valiant effort to moderate these ambitions, but it too failed to foresee the correction in mineral prices and it continues to adopt high growth rates for services, albeit from a more realistic base. It proposes a 2018 target of US$2.2 billion. Given that actual exports of goods and services in 2015 amounted to barely US$1.1 billion, even this lower target needs to be revised downward. It is good to be ambitious but it is also important to be realistic. Otherwise targets can become meaningless and allow actors to avoid accountability.

This suggests a need to adjust annual aspirations rather than rigidly adhering to unrealistic targets that otherwise would risk undermining one of the newest initiatives of the authorities, joint performance contracts with private companies. The government has proposed to make deals with key exporters whereby they offer certain types of support in exchange for export targets to be achieved by the private firms. The latter are not surprisingly reluctant to agree in the face of many variables beyond their control, from the weather, to world prices, to consumer preferences. That said, the sectoral consultations recently launched by the Ministry of Industry and Trade are exactly the sort of frank discussion needed to identify key constraints and agree on practical objectives. In September 2016, separate meetings were held with representatives of the coffee, tea, mining, tourism, ICT, manufacturing, textiles and clothing, and horticulture sectors. The government presented its understanding of the sector and then the private sector was invited to respond. If the authorities approach can evolve from one of leading to one of listening and learning, such meetings could be extremely effective. These could usefully be repeated regularly and the authorities held to account as much as the private sector.[17]

Border barriers and incentives could be improved

Incentives facing domestic firms to export could be improved through reducing the costs of trading and removing non-tariff barriers (NTBs) in the EAC, and revisiting the tariff structure to provide greater incentives to export.

Good progress has been made in removing NTBs in the EAC. Between 2008 and 2016, 98 were eliminated, representing 79% of all reported NTBs.[18] Trademark East Africa (TMEA) has provided useful support in this area, but more needs to be done. In fact, in 2015 Rwanda's worst score in

17. These consultations were led by the Permanent Secretary of MINICOM who soon after was moved to a new position in the President's office. It will be important for his successor to continue this initiative.
18. MINEAC, Regional Integration Performance Report, p. 27.

Doing Business was on 'trading across borders' where its rank was 131st. Whereas this indicator used to penalise land-locked countries because it included the time required to import from or export to the coast, this is no longer the case. This indicator is now restricted to the time and cost of documentary and border compliance, matters entirely under the control of the government in question.

The introduction of an electronic single window system at the border in 2013 was a positive step. However, in 2015, Rwanda increased the time and cost for documentary and border compliance for importing by making pre-shipment inspection mandatory for all imported products. The authorities appear to have recognised that this was unwise and in 2016 this policy was reversed. Rwanda's ranking has consequently improved significantly to 87th.

As Table 5 indicates, Rwanda now does better than the sub-Saharan African average, as well as its East African neighbors, especially in terms of cost.[19] Kenya does somewhat better on the time required for exports, but worse on the cost. Rwanda's performance is particularly good on the time it takes to comply with import procedures. This is very important for the labour-intensive manufactures upon which the government is putting so much hope, since these typically depend on imported inputs and face strict deadlines for product delivery.[20] In general, given the serious constraint imposed on Rwanda by its geography, separated from the nearest port by 1500km, it would be wise for the country to make every effort to minimise the extra burdens over which it has control.

Table 5: Trading across borders: Rwanda, other East African countries, and Sub-Saharan Africa

	Rwanda	Kenya	Uganda	Tanzania	Sub-Saharan Africa
Exporting					
- Border compliance (hrs)	97	21	71	96	101
- Documentary compliance (hrs)	42	19	64	96	91
- Border compliance (USD)	183	143	287	1160	571
- Documentary compliance (USD)	110	191	102	275	225
Importing					
- Border compliance (hrs)	86	180	154	402	141
- Documentary compliance (hrs)	72	84	138	240	105
- Border compliance (USD)	282	833	489	1350	662
- Documentary compliance (USD)	121	115	296	375	313
Overall ranking	87th	105th	136th	180th	

19. The export regulations may be underestimated due to the fact that the market chosen for analysis is Kenya, a fellow member of the East African Community.
20. C&H Garments would like to have customs clearance for their input conducted at their factory.

The tariff regime shapes relative price incentives facing private producers, and high tariffs tend to make it more profitable to produce for the domestic market rather than for export, biasing production towards import substitution, usually with a cost penalty in growth.[21] The current common external tariff structure is substantially higher than in other regions, such as East Asia. Using firm-level data, Frazer (2012) calculated that when Rwanda lowered its tariffs on intermediate inputs from an average of about 12% to 7%, exporting firms increased their sales abroad by 5-10%. Many tariff lines are misclassified now as final products (at tariff rates of 25%) when they are in fact intermediate inputs (and should have a 10% tariff). More analysis of the common external tariff, the sensitive list (with its very high tariff rates), and derogations and exemptions could inform policy makers about the potential cost in exports, income growth and income inequality.

Tax policy and administration

Rwanda scores relatively well on the Doing Business assessment of tax administration but there is still room for improvement, especially where exporters are concerned. The revised National Export Strategy makes several references to this issue, particularly as it relates to the VAT. Since exporters do not collect VAT on their final sales, they are unable to recoup the VAT they pay on inputs through a direct deduction. Instead, they are eligible for a refund from the government. As in most developing countries, VAT reimbursement is slow and constitutes a serious drain on cash flow, or require financing at high domestic interest rates. Firms report that it takes an average of 172 days to receive their refund.[22]

VAT was being levied on service exports produced in-country even though the consumer was outside, contrary to the normal practice, including in other EAC countries. This policy appears to have been rectified, but it would be important to confirm that it is being implemented.

The 2012 UNCTAD survey of foreign investors found that tax administration was their second biggest concern and they had the following recommendations:[23]

companies wish to see the RRA become less zealous and more client-facing in its approach to tax collection. Suggestions included the adoption of a yearly or two-yearly tax audit, to cut down on excessive management time devoted to repeated audits and tax issues, and a preferential tax status for start-up investors.

In subsequent years, the Rwanda Revenue Authority (RRA) has made good progress, like simplifying profit taxes for small businesses and allowing mobile tax declaration and payment, but firms still find the system of paying VAT extremely cumbersome, fines for late tax payment very high, tax obligations unclear (e.g. a lot of information on the RRA website is either cryptic, hard to find, or incorrect), processes for de-registering extremely cumbersome and difficult, and then often the payment and declaration systems break down. Firms also complain about the unfair competition from the informal sector which typically eludes VAT and other taxes.

Some elements of tax policy could also be revisited. Mining taxes may be overly rigid (see below) while the tax holiday offered to exporters in the special economic zone would appear be too generous. International experience suggests that companies are usually prepared to pay profit taxes when they are profitable. Their preoccupation is with other taxes and costs which render them unprofitable.

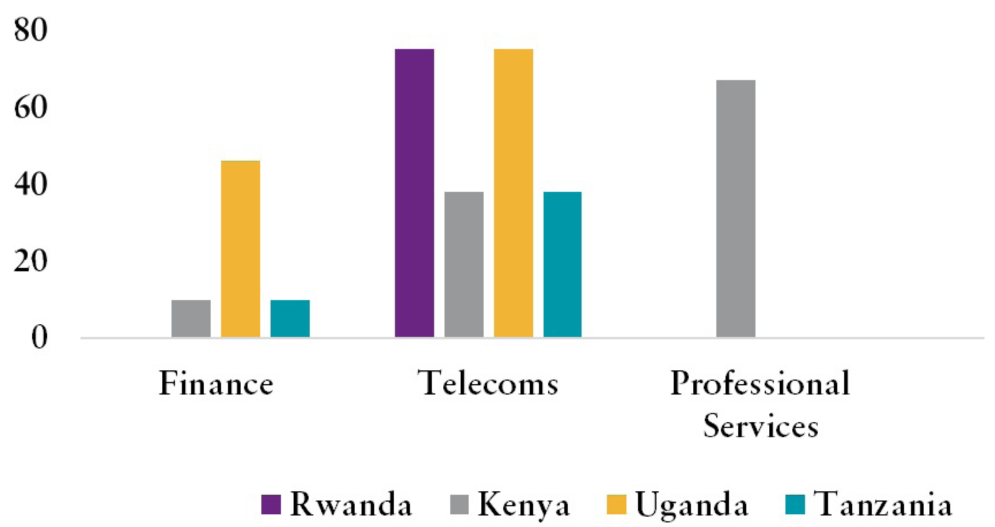
21. See Newfarmer and Sztajerowsky (2012) for a literature review of some 15 recent econometric studies dealing with tariff liberalisation and economic growth.
22. MINICOM, Revised National Export Strategy, p. 24.
23. UNCTAD, A Study of Foreign Investors' Perceptions of Rwanda, 2012, p. 14.

Improving competitiveness of services

Efficient services as inputs are key to increasing productivity in manufacturing and export industries. A large scale programme of regulatory analysis should be undertaken for backbone services sectors like transport, finance, business services, logistics, and professional services - with the purpose of discerning policy and institutional barriers to new competition as well as identifying targets for investment promotion. It is likely that streamlining the regulatory burden, consistent with important public policy objectives, while at the same time developing private sector capacity, could help downstream firms become more productive and develop linkages to foreign markets, both intra- and extra-regionally.

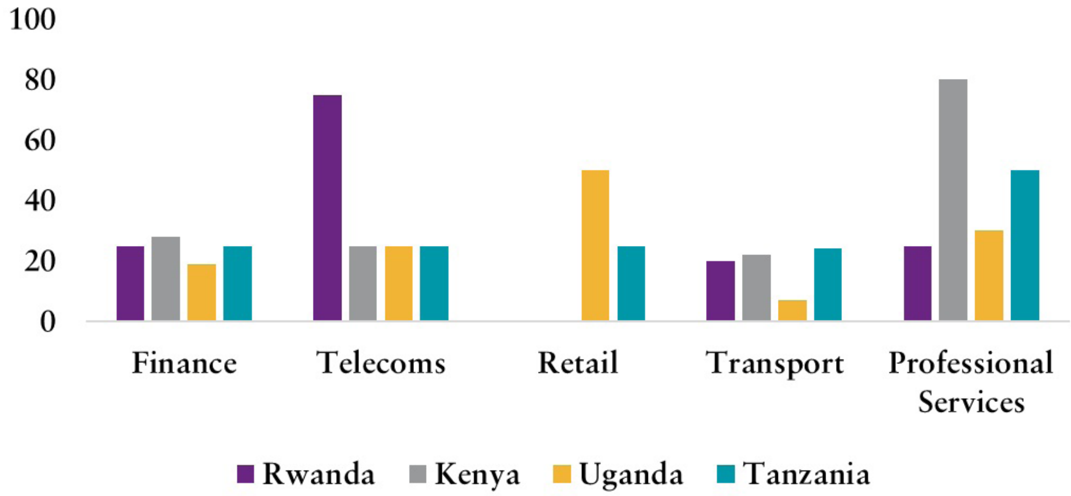
Performance in the services sector can often be improved through trade, by encouraging competition through cross-border provision by foreign companies (mode 1 in the WTO framework) or the establishment of a commercial presence in a country, typically through foreign direct investment (mode 3). The World Bank's Services Trade Restrictiveness Index attempts to measure the different restrictions which existed, where relevant, in 2009. As summarised in Figures 15 and 16, Rwanda had fairly high restrictions on trade in telecommunication services, and notably higher than other East African countries for mode 3. This appears to have been due to restrictions on the number of licenses in Rwanda. Given the government's desire to promote the information and communication technology (ICT) sector, it may be useful to re-examine the level of restrictions in telecoms trade, if in fact it has not already been done. In other sectors, the situation looked relatively good.

Figure 15: Mode 1 restrictions on services trade, 2009



Source: World Bank, Services Trade Restrictiveness Index website.

Figure 16: Mode 3 Restrictions on services trade, 2009



Source: World Bank, Services Trade Restrictiveness Index website.

Services can also be a dynamic source of exports and the government has high expectations for the various possibilities, in addition to tourism. The fact that services are not constrained by the high cost of transportation in the same way as goods is well recognised. This is particularly true for ICT services, which have received special attention. Progress has been made across a range of activities from call centers to software development. While most of this has been focused on the domestic market, companies are now exploring export opportunities. Rwanda's potential to offer services in both English and French is an advantage. However, it appears the country still has a long way to go in terms of ICT readiness. According to the ICT Development Index, which combines measures of access, use and skills, Rwanda is ranked 154th.[24] It does even worse on the price of fixed broadband services where it is ranked 179th. Whereas the 2014 average cost for this service in developing countries was $74.5 in purchasing power parity terms, in Rwanda it was $1083, among the highest in the world.

One recent study identified the following constraints faced by the ICT sector:[25]

a) Absence of appropriate and enforced data protection laws;

b) Standards not aligned with international norms;

c) High prices due to changes in termination charges and the EAC common external tariff;

d) Imposition of VAT on services exports;

e) Lack of skilled IT sector specialists; and

f) Availability and price of bandwidth due to business practices of Tanzania Telecommunications Company.

24. ITU, Measuring the Information Society Report 2015.
25. D. Primack and J.B. Kanyangoga, 2014.

Education and health are also being promoted as foreign exchange earners with some initial success. Several private universities have set up in Rwanda with a view to serving the regional market, including Carnegie Mellon, which is focusing on ICT, and the Africa Leadership University, which has chosen Rwanda for its East African campus. Rwanda already provides health services to DRC residents and private hospitals are being established. Nonetheless, such operations will probably be limited in scale for the foreseeable future due to the scarcity of highly-skilled labor.

There are many other possibilities, including finance and professional services such as consulting. Mining services would also seem to be logical, given its own industry and proximity to the DRC, but free of its dysfunctional policy environment. Air transport has potential, given the recent success of RwandAir and the weakness of other EAC airlines (though competition with Ethiopian Airlines is another matter). In fact, one of the largest service exports is embedded in the booming re-export business, which requires transport, logistics, and insurance services among others. This does not appear to be fully appreciated, with at least one report suggesting that there is no value-added in re-exports.[26]

For the purposes of thisbrief, the focus will be on tourism, which is the only service sector likely to have large-scale impact in the short to medium term. Doing a systematic analysis of other service export opportunities and constraints, including re-exports, would help guide the Rwanda Development Board in its export and investment promotion efforts.

Sector analysis

Beyond these economy-wide considerations, it is necessary to drill down into the key export sectors to understand their prospects and constraints.

Tourism has enormous potential...

Tourism has been the most reliable export sector over the last ten years. It has grown steadily to become the largest source of foreign exchange. Tourism is not vulnerable to price fluctuations, unlike the other major exports of coffee, tea and minerals. This sector is relatively labour intensive and requires a wide range of skills. Many of the jobs are low skill, but typically better paid than agriculture, thereby contributing directly to poverty reduction. And they are often located outside the main cities. One 200-room hotel typically creates 200 jobs, with another 200 in associated tourism activities, and a further 200 indirectly through backward and forward linkages.[27]

When discussing the tourism sector, one needs to be careful to disaggregate it into its very different component parts. It includes people visiting friends and relatives (VFR), official delegations, business travelers, cross-border day traders, conference attendees, and transit passengers, as well as holiday visitors. In fact, 89% of visitors to Rwanda are Africans and 43% are from DRC. Thus holiday tourism is only one small part of the total, accounting for less than 10% of total visitors in Rwanda, or just over 100 000 persons (Table 6). Furthermore, this small component is the one most susceptible to direct promotion. The other one, with somewhat less potential, is conference travel or MICE (meetings, incentive, conference, events). The other components are dependent on variables outside the tourism industry, such as the dynamism of the economy, or the presence of family and friends.

Measuring the revenues from tourism is especially difficult given the wide range, and dispersed nature, of the expenditures involved. Fortunately, the government conducts an annual survey at

26. MINEAC, Regional Integration Performance Report, p. 27.
27. E. Philip English, The Great Escape? An Examination of North-South Tourism, 1986, p. 38.

the airport. While air passengers only account for 12% of all visitors, they are responsible for the majority of spending. Indeed, leisure tourists contribute roughly half of total revenues thanks in part to the high cost of gorilla trekking licenses. Overall tourism receipts have grown by 22% per annum over the last ten years. However, they appear to be leveling off since 2012. The Ebola scare in West Africa impacted Rwanda in 2014. The main driver of tourism, gorilla trekking, is reaching full capacity and the country needs to develop additional attractions to keep the sector growing.

	Visitor Arrivals			Total Revenue ($m)			Revenue per Visitor ($)		
Tourism	**2012**	**2013**	**2014**	**2012**	**2013**	**2014**	**2012**	**2013**	**2014**
Leisure	95 270	103 786	105 213	129,7	143	144,6	1 361	1 378	1 374
VFR	305 544	327 996	398 111	26	28,6	35,8	85	87	90
Business	414 628	419 182	395 344	105,2	98,2	94	254	234	238
Transit	39 552	46 410	48 930	0	0	0	0	0	0
Other	206 314	224 761	271 931	20,9	23,8	30,5	101	106	112
Total				**281,8**	**293,6**	**304,9**	**266**	**262**	**250**

Source: RDB & Directorate General of Immigration and Emigration as reported in IFC, Tourism Market Assessment and Recommendations for Three DMAs in Western Rwanda, draft 6, 2016.

Conference tourism (MICE) is doing well, increasing by 24% in 2014 and helping offset the decline in other business travel. RDB estimates that revenues from MICE accounted for 10% of the tourism total. With the recent completion of a new conference center, and the addition of more high-end hotels in Kigali, this component is promising and should be further pursued. However, there is a risk of over-supply in hotel capacity which will hurt mid-tier hotels that were already operating at or below 50% capacity utilisation, which is probably below the break-even point for many.[28]

But the biggest rewards will be obtained if the country can expand leisure tourism beyond gorillas, and convince tourists – both leisure and MICE - to spend a week in Rwanda instead of the current average of only 3.2 days. This could generate another US$60 million without an increase in the number of tourists.[29] Gorilla tourism has put Rwanda on the international map and established a good reputation for the industry. Now the country needs to build on this sound base.

Rwanda has two other national parks which offer complementary attractions – Akagera, for classic safaris, and Nyungwe, for other primates, birdwatching and hiking. Indeed, Akagera now receives more visitors than Volcano National Park and its gorillas, due to greater interest from nationals. Then there is Lake Kivu, which offers interesting possibilities to develop beach and other water-related activities in a freshwater setting. This is rare in Africa since most lakes are not suitable for swimming due to bilharzia, or the presence of hippos and crocodiles. Lake Kivu is not affected by these limitations. A strategy has been prepared for the development of Lake Kivu but funding is needed for infrastructure before investors can be attracted to build hotels.[30]

Promotion of Rwanda as a tourist destination beyond gorillas will be a challenge.[31] Most tour operators market it as part of a regional package, allowing only a few days in Rwanda for gorilla trekking. While this has enabled Rwanda to piggy-back on the established East African safari market,

28. This risk also exists for hotels in the gorilla trekking region as new hotels are being built while the number of trekking licenses is fixed. IFC, Tourism Market Assessment and Recommendations for Three DMAs in Western Rwanda, draft 6, 2016, pp. 17, 19.
29.100,000 tourists * 3 additional nights * US$200 per night = $60 million. This is considerably less per night than currently received because most leisure tourists are spending US$750 for a gorilla trekking license which they are unlikely to repeat in a longer stay.
30. IFC, Tourism Market Assessment and Recommendations for Three DMAs in Western Rwanda, draft 6, 2016.
31. Tourism is also more susceptible to the overall image of Rwanda and recent media stories about human rights abuses and the repression of dissidents could be damaging.

it is time to distinguish itself as an alternative, offering more variety in a more secure environment with less travel. The government might consider giving priority to tourists on longer visits when issuing gorilla permits, at least during the peak season. Expanding tourism in this way will require investments in road infrastructure to permit smoother circulation around the country, infrastructure which will have benefits far beyond tourism. More frequent and cheaper air transport will help both leisure and MICE tourism, with positive externalities for horticulture exports. The visa system could be simplified to permit obtaining them on arrival. And a boost in training for tourism employees will be necessary, with strong leadership from the private sector. The Revised National Export Strategy recognises the potential and the constraints. Now the challenge is to follow up.

It is not clear if the institutional setup in Rwanda is appropriate to take this sector to the next level. There is no single institution (ministry, board, etc.) which is devoted entirely to tourism and which could serve as a champion for the sector. MINICOM has very little capacity on tourism while RDB tends to be stronger on implementation than on policy formulation, while both have a mandate which stretches far beyond tourism. As the sector accounting for almost one-third of all export earnings, and one with some of the best potential for future growth, it may merit greater institutional support. It might be useful to finance a project which builds the human and institutional capacity to manage the tourism sector, fills infrastructure and skill gaps, and attracts private investors. There may also be room for development partners to facilitate visas for Rwandan tour operators attending trade fairs, or even to set up an office.[32]

Finally, it may be useful to examine the pros and cons of different market segments. To date, marketing has been focused on high-end tourists, as is appropriate given the high cost of gorilla trekking permits. However, it may be worth expanding promotion to include younger and/or budget tourists who may be more likely to explore the other destinations in Rwanda, and thereby help establish their reputation. Such tourists will also stay in more modest accommodation which national entrepreneurs are more likely to own and operate.

Coffee and tea can continue to provide impetus

These are the two export sectors which involve the most people in Rwanda, and probably the greatest number of poor people. Tea exports have grown significantly in the last ten years, enjoying annual growth of almost 13% (Table 2). However, most of this growth was achieved in the first five years as the benefits of privatisation took effect. Since then, volumes have only grown by 6% per annum, and value by 4%, at least until 2015 when a temporary bump in prices occurred. Growth in coffee exports has been much slower – 7% per annum since 2003 (Table 2).

Both crops have low average yields which could be doubled. Tea yields are only half of those achieved in Kenya. Tea factories operate at only 70% of capacity and would like to expand but have trouble finding additional land sufficiently close. Smallholders with only 0.5 ha of land (or less) are understandably reluctant to devote all their land to a cash crop with fluctuating prices. Thus increased yields becomes critical. Increasing yields of coffee and tea by 50% would generate another US$60 million in exports and raise many farmers out of poverty. Curiously, the Revised National Export Strategy dismisses the potential for yield improvements and focuses on expanding the area under tea. It would seem important to revisit this issue.

In both tea and coffee, part of the problem is old trees or bushes which need to be replaced. This represents a challenge because it would mean depriving smallholders of their income for several

32. D. Primack and J.B. Kanyangoga, 2014.

years. Some form of compensation may be needed to motivate farmers to make this short term sacrifice.[33] Fertiliser use and other good practices is another key to higher yields. Action is being taken to improve fertiliser access but there remains the need for better extension services on how to use fertiliser properly.

In the tea sector, recent consultations with the private sector mooted the idea of creating more value-added by establishing a single origin 'made in Rwanda' tea. The Revised National Export Strategy makes a convincing case that this would not be appropriate due to the limited market, higher transport costs, marketing complications, and pushback from current clients. Instead, it promotes closer cooperation with these clients to improve reliability and quality. It would be useful to examine these options and reach a consensus on the best way forward.

Coffee export values could be improved by producing more fully washed coffee which receives a higher price because it substantially reduces the risk of defects. However, existing coffee washing stations need improved management. They also require certification, which is costly, but funding is generally not available. Incentives must be developed to promote fully-washed coffee. Possibly introducing new electronic technologies might allow for greater enforcement of now-informal contracts between washing stations supplying inputs and farmers who subsequently must deliver the coffee (a problem the IGC has studied in depth that leads to a relatively low share of exported coffee being washed).[34] The marketing of Rwandan coffee could also be improved.

Mining earnings have room to grow

The mining sector is characterised by artisanal mining which creates a large number of jobs but results in a lower value of exports due to the inefficiency of the production techniques. The end of the commodity boom has exposed a number of structural weaknesses in the sector. The sector is highly fragmented (close to 500 licenses have been issued), has the highest share of extremely poor people, and makes limited use of technology. Financial institutions have abstained from investing in the sector and pre-finance by exporters and international traders is contracting.

DfID is launching an interesting project to improve the investment climate and the productivity of artisanal mines. It may be useful to also look at the long-term benefits of transitioning to a more modern mining sector which can exploit deposits more completely and sustain employment for a longer period. In addition, it may be possible to better control the social and environmental implications of such mines. The current system of dividing up mining concessions into small units may need to be revisited if larger mining companies are to be attracted.

Second, taxation merits review. A few years ago, when mineral prices were booming, the focus was on increasing taxes to capture a share of the rents. Unfortunately, these were introduced just as prices collapsed, and in a way that does not take into account price fluctuations or profits. It may be necessary to revisit the current mining tax framework.

Third, the country could use funds to support a new and more detailed geological survey. While the country undertook a survey several years ago, several promising areas warrant further exploration. Once deposits are located the complicated issues of land use and existing ownership need to be addressed, and encouragement given to bringing in selected foreign mining at scale.

Fourth, the financing challenge needs to be addressed. Better geological information would be helpful, but small-scale miners also need to be trained to keep better records. The DfID project proposes

33. DfID is providing such support for farmers participating in the new Unilever tea project.
34. R. Macchiavello and A. Morjaria, 2015.

to work with financial institutions, but it may also be necessary to restore lending by large traders. To do this, governance problems must be resolved. Miners and trading companies will need to respect contracts, supported by an enforcement mechanism.

Finally, Dodd-Frank legislation in the US, in an effort to control the labour problems associated with conflict minerals from the DRC, has pushed Rwandan mineral exports out of the main world markets, as the legislation subjects all countries bordering the DRC to the same scrutiny. Rwanda has put in place an ambitious tagging and certification scheme, but as yet has not escaped the effective sanctions applied to it and other neighbors of the DRC. Apple and other companies might be interested in promoting improvements in value chain management. If the DfID project cannot address this issue, it would be important for another donor to step in.

Livestock products

Livestock products (including hides and skins, dairy products, meat and live animals) are among the top emerging non-traditional exports in Rwanda (Table 2). The export of animal products generated US$63.62 million in export revenues in 2014-15, an increase of 150% from US$25.3 million in 2010.[35] Hides and skins are the largest export to the EAC, while beef meat and live cattle are the top two informal exports to DRC. Development of this sub-sector has large potential to improve household incomes since 65% of households in Rwanda are engaged in rearing some type of livestock.[36]

The potential of the animal products sub-sector in Rwanda is highlighted by Spray and Wolf,[37] who find that it is the only agriculture industry that is among the top 30 industries in the country in terms of labor productivity. Hausmann and Chauvin also identify animal products (including preserved milk and cheese products, live poultry and eggs, and preserved meats) as among the commodities with greatest potential to develop and diversify Rwanda's export basket.[38] Their criterion for identifying potential export commodities included those best positioned to harness the country's relative comparative advantage while correcting for constraints of land, infrastructure and production capabilities. This conclusion is a little surprising given the shortage of land in Rwanda. There is probably a distinction to be made between extensive forms of livestock-raising such as beef cattle, and more intensive activities dairy or poultry.

The dairy value chain is constrained by critical capability constraints of an organisational and relational nature compared to international competitors. These constraints include poor supply chain coordination; underdeveloped distribution networks and the pervasiveness of informal markets; low capacity utilisation of processing plants due to inconsistent and insufficient supply of raw materials; and low milk productivity. In order to upgrade Rwanda's industrial competitiveness in the region, it will be imperative to focus on improved processing capacities, harmonisation of trading relationships along the value chain to ensure consistent supply of quality raw materials, and adherence to regional (EAC) trading standards.[39]

Other manufactured exports

Other manufactures can be divided into two categories according to the markets they target: regional or international. The vast majority fall in the former group and, as already described, focus primarily on DRC, followed by Burundi. There are only 17 companies which export at least 2% of

35. Figures sourced from NAEB Annual Reports.
36. Rwanda Integrated Household Living Conditions Survey 2013/14.
37. J. Spray and S. Wolf, Industries without smokestacks in Uganda and Rwanda, 2016.
38. R. Hausmann and J. Chauvin, "Moving to the Adjacent Possible: Discovering Paths for Export Diversification in Rwanda, 2015.
39. J. Daly, A. Abdulsamad, and G. Gereffi, "Regional Value Chains in East Africa", 2016.

their output.[40] Of the 14 for which market information is available, only one of them had its primary market outside of the region. For 11, the primary market was DRC or Burundi, and these two markets plus Uganda were the secondary market for 11 as well. Most companies have one principal export product, and these products are generally relatively low value and based on local or regional inputs. Maize flour, beer and other beverages, plastic shoes, cement, rebar and other construction materials are among the main exports. As explained above, Rwanda is well-positioned to access the DRC and Burundi markets. This has attracted investment from companies based in Kenya, Tanzania and Uganda.

Past growth in this trade has been impressive and there remains much untapped potential. That said, it is a very complex, indeed difficult, environment to work in and recent events are not encouraging. Corruption is endemic, many rebel groups remain active across the border in DRC, and Burundi is in a state of political turmoil. Business leaders in Rwanda often refuse to travel out of concern for personal safety, preferring to let buyers come to their factories if they wish.[41] Recently, authorities in Burundi have closed the border, blaming Rwanda for the political problems they face at home. DRC has raised taxes on beer and other beverages, and imposed new licensing requirements for cement, wheat flour and alcoholic beverages. It is difficult to know what to expect from these two markets and how much effort to place on expanding this trade.

In contrast, very few manufactured products are exported beyond the region, yet the government has high hopes for the future. In particular, it plans to expand labour-intensive manufactures through participation in global value chains. Chinese wages have been rising fast and China is now seeking to relocate low-value production overseas. Rwanda has attracted interest due to the high productivity relative to the low cost of its labor force, although the size of its non-farm labor force is small. The establishment of one Chinese clothing exporter in the Special Economic Zone is indeed promising. However, Rwanda's land-locked status poses a major challenge, since competitive clothing exports are likely to depend on imported textiles from China. The transport time required to import raw materials and then export the finished product leaves insufficient time to complete actual production and meet the deadlines for seasonal apparel. Thus, the current operator's exports are focused exclusively on uniforms for the time being, along with production for the domestic market.[42] One other company is exporting home design products which also are not seasonal. In general, this type of trade is highly competitive and Rwanda does not seem to be an obvious candidate. However, other related analysis by ODI should shed additional light on the potential for expanding labor-intensive manufactured exports through global value chains.

Horticulture

The export of fruits, vegetables and flowers is being actively promoted by the authorities. This would seem appropriate given the success of this sector in other East African countries, notably Kenya and Ethiopia. Rwanda enjoys a similarly mild climate, and it also has an interest in moving to such higher-value crops given the limited available land. There is already considerable experience with pyrethrum, a flower used for natural pesticides, which does not require a cold chain to maintain freshness.

Very small-scale exports have begun. Estimates of their value vary between US$6.5 million[43] and

40. Garth Frazer, A Few Facts about Manufacturing and Exports in Rwanda, 2016.
41. MINICOM, National Cross-Border Trade Strategy, p. 23.
42. C&H Garments currently employs 300 workers for export production while training another 550 to respond to increased domestic demand given recent decisions to reduce used clothing imports.
43. MINICOM, Revised National Export Strategy, 2016.

US$13 million[44] (excluding pyrethrum) but there is agreement that most of this product is for the regional market, including cross-border trade. Exports beyond the region may not amount to more than US$3 million, consisting primarily of tubers, chili peppers, green beans and snow peas. Flower exports really only began in late 2016.

It has been a struggle to get to this point. Volumes actually declined between 2008 and 2013, although the value rose modestly.[45] The largest flower operation, Bella Flowers, was set back when the Kenyan investor pulled out for personal reasons. Investors have been discouraged by the shortage of land, the lack of a cold chain, and the high cost of air transport, among other things. The government is addressing the first two: by identifying and securing available land and providing this information through the Agricultural Land Information System (ALIS) data base, and by investing in cold storage and transport facilities. However, there are many competing demands for land and large investors have so far been discouraged by this shortage. The contrast is especially great with regard to Ethiopia which has plans for 50,000 ha. for commercial development and another 150,000ha. for out growers. Consequently, it has already attracted some 120 exporters.

High air freight charges also pose a major obstacle. The cost per kg can be as high as US$2.5, compared to US$1.5 in Kenya. It is partly due to a lack of competition between airlines (there are only two flying to Europe) and partly competition with Uganda since these flights also pick up cargo and passengers there. It is also a chicken-and-egg problem: larger and more reliable volumes would enable exporters to negotiate lower rates, but the current high rates discourage entry. Also, capacity may not be a current constraint but it could become one soon, as there are currently no cargo flights to Europe. Even Ethiopia, with many more airline connections and its own strong national company, subsidises air freight charges for the horticulture sector. Rwanda may be obliged to adopt this approach on a temporary basis.

The horticulture sector has been well studied, is receiving donor support, and enjoys a good dialogue between the various actors, public and private. The government is putting in considerable resources of its own, including temporary support for Bella Flowers and for the cold chain. However, it will be essential to bring in more foreign investors with the necessary expertise and market knowledge. Finding a new investor to take over Bella Flowers will be an important first step. Next, decisions will need to be made on the allocation of scarce land between horticulture, coffee, tea and food crops.

Donor support: Possible support activities

The donor community at large, and DfID in particular, are already very engaged in supporting the export agenda in Rwanda. The programme of Trademark East Africa is impressive and one hopes it will attract renewed funding for its second phase. The Export Growth Fund being established at the Development Bank of Rwanda with support from KfW and DfID is an important addition. DfID's proposed project to support artisanal mining should provide badly needed assistance to improve productivity, and its support to the new Unilever tea factory and plantation will give a boost to that sector. The work by the Africa Governance Initiative will be a big help on implementation. ODI's analysis of global value chains will help clarify the potential for labor-intensive manufactured exports.

Without knowing the full range of support currently provided by the donor community, our brief overview suggests the following possibilities:

44. MINAGRI, National Horticulture Policy and Strategic Implementation Plan.
45. MINICOM, Revised National Export Strategy, 2016.

Projects:

1. Investment project to support the diversification of leisure tourism
2. Investment projects to improve productivity in tea and coffee
3. Support on implementing the Dodd-Frank requirements in the mining sector
4. Creation of a local content unit to deepen the supply chain

Studies:

5. Analysis of the trade-offs between modern and artisanal mining
6. Analysis of the role of services in improving export competitiveness
7. Analysis of the opportunities and priorities for services trade, including re-exports
8. Analysis of tax policy and administration and its impact on export performance