

The EAC Common External Tariff (CET) and Rwanda

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Executive Summary

A major pillar of Rwanda's economic policy, beginning with its Vision 2020 has been to work toward deeper integration into regional and international markets. It took a major step forward on this front with its membership in the East African Community (EAC) in 2007, and then with its implementation of the Common External Tariff (CET) of the EAC on July 1, 2009. This step is consistent with its overall goals of economic development, in particular with the exporting plan of the National Export Strategy (2011).

The purpose of this report is to analyze and evaluate Rwanda's membership in the Common External Tariff (CET) of the EAC with a goal of making recommendations to improve this tariff for the benefit of the country of Rwanda. Since the CET was implemented on July 1, 2009, it has already been in effect for more than 2 years. The primary goal of this study is to explore the impact of those two years on outcomes of interest: exports, tariff revenues, the incomes of relatively poor households.

While there are a variety of valid reasons why Rwanda joined the CET related generally to the benefits of deeper regional integration, there are also **challenges for Rwanda** under the CET that were to be expected and had been predicted by previous studies (Carrère and de Melo (2008); de Melo et. al. (2011a); de Melo et. al. (2011b)). Whenever a regional trade area such as a customs union is formed, firms can locate anywhere within the trade area and avail themselves of the trade protection of the customs union. In comparison to Kenya and Tanzania, two of its partners in the EAC, Rwanda is smaller, less industrialized, and landlocked. Each of these factors make Rwanda less likely to be the location of choice for firms wishing to be able to serve the largest markets within the EAC, as well as have the potential for cheap overseas export/import. Rwanda's institutional changes implemented by the government to improve its attractiveness as a place for doing business will mitigate but not offset these factors. In particular, in general, when tariff rates are set to particularly high levels, as they were with the products on the Sensitive Items (SI) List in the CET, these tariff rates are more likely to benefit Kenyan and Tanzanian firms than those of Rwanda.

The primary accomplishment of the CET was to replace Rwanda's 0-5-15-30 normal tariff structure (0% tariff for raw materials, 5% for goods with economic importance, 15% for semi-finished goods, and 30% for finished products) with a **0-10-25 normal tariff structure** (0% for raw materials, 10% for semi-finished products, and 25% on finished products). For Tanzania, goods imported prior to the CET were subject to the 0-5-15-30 tariff structure, and were imported largely duty-free after the CET. Kenya, Uganda and Burundi were co-members with Rwanda in the COMESA preferential trade area (along with several other African countries), and so the tariffs on their imports into Rwanda's tariffs did not drop very dramatically with the CET.

The largest tariff decreases were in capital goods and intermediate goods, which is consistent with reinforcing the progressive tariff structure, with the highest tariff rates on consumption goods. Some major exceptions to this tariff structure are the items on the Sensitive Items (SI) List, with tariff rates as high as 100% (sugar).

Despite the exceptions of the SI List, on average the CET **lowered import tariffs** on goods from outside the EAC (as well as within the EAC) coming into Rwanda. This **can affect exports** in a couple of ways. First, it can potentially shift resources from import-competing sectors into both domestically-oriented and export-oriented sectors. Second, it reduces the cost of intermediate inputs for all producers, including exporters. To examine the degree of the second impact, we examine the impact of the tariff changes on inputs used by exporters (both new and continuing) on their exports. We find that the 5 percentage point tariff reduction on inputs used by exporters was associated with an increase of between 5% and 10% in exports by these exporters. This provides support for decreasing the tariff rate on intermediate inputs further.

The Government of Rwanda, like most governments, is also interested in **the employment of its citizens**. Tariffs on final products can either increase or decrease employment depending on the sector of that final product protected by the tariff and the employment intensity in that sector in comparison to the unprotected (domestically-oriented or export-competing or unprotected import-competing) sector. While we are able to match employment records of firms in the registered sector to records of those firms' imports, we do not know what the primary product output of those firms is. Therefore, we cannot measure directly the effect of tariff protection of final products on employment. We can measure the impact of tariff changes on imported inputs on employment in firms that are producing for the domestic market, or for export, or both. We cannot find any discernible *direct* effect of these tariff changes on employment. However, private registered employment is increasing at a healthy pace after the CET. While this employment effect may be the result of a wide variety of positive policy changes of the Rwandan government, it appears quite likely that the CET (and its accompanying reduction in tariff) has at least *indirectly* contributed to an increase in employment, or at a minimum, is a part of the package of policies that has helped to increase employment.

Poverty reduction is the goal of most governments, including the Government of Rwanda. To examine the impact of the CET on poverty, we disaggregate the consumption expenditure of a typical low-income household into its component categories, and the shares in each category, and then explore what happened to the tariffs on goods in each of these categories under the CET. What we find is a strong, surprising and unambiguous result: *Despite the fact that we can see that tariffs are dropping overall post-CET within Rwanda, the tariffs on goods consumed by the poor are mostly rising*. More precisely, the tariff changes induced by the CET were enough to lower the average poor person's income level by about 3.8%. In other words, the CET

reduced a poor worker's income by two weeks' worth of wages. The primary cause was the addition of the extremely high tariff rates of the Sensitive Items (SI) List, with these items disproportionately consumed by the poor. While a small number of poor farmers will partly also benefit from the increases in agricultural prices induced by SI tariffs, this will not undo the large, aggregate impact on the poor overall. Moreover, removing the high tariffs of the SI List should also equally benefit the poor in EAC partner countries. Therefore, if the governments of Kenya, Uganda, Tanzania, and Burundi are as concerned as the government of Rwanda about poverty, they should be as interested in lowering the SI List tariffs as the government of Rwanda.

Naturally, an important goal of a tariff is the **provision of government revenue**. Since the CET lowered considerably the tariff rate on imports from Tanzania, and also lowered the tariff rate on imports from the other EAC partner countries, as well as non-EAC partner countries, we should expect that the total tariff revenue under the CET should decrease. This is in fact what happened. Tariff revenue dropped by \$37.6 million U.S. from \$74.7 million in 2008-09 (prior to the CET) to \$37.1 million U.S. in 2009-2010 (the first year of implementation of the CET). The CET was directly responsible for a large portion of this drop in revenue. Specifically, \$33 million of the \$37.6 million U.S. drop in revenue was a result of the CET. Of this, \$17 million of the reduction in tariff revenue was for goods coming from the EAC (and the other \$16 million was from goods outside of the EAC). Fortunately, from a revenue perspective, a significant portion of this revenue reduction results from reduced petroleum tariffs, and the Government of Rwanda responded to the reduced tariff on petroleum products by increasing the excise tax on petroleum, charged at the border. This offset, although not completely, the revenue losses above.

A final question relates to whether or not the **top tariff rate of 25%** on finished products is in the best interests of Rwanda. In general, the typical justification for an import tariff is to protect a particular sector or industry from foreign competition. This protection is usually justifiable on a relatively short term basis, to protect an "infant industry" until this industry can either grow in size and/or efficiency to the point where it can compete successfully on the world market. In some cases, such as in East Asia, this has occurred successfully, but in many more instances, "infant industries" are typically protected for much longer than they should be. Therefore, this approach should be taken with some caution. This is even truer in the context of Rwanda where many of these industries are at least as likely to locate in Kenya or Tanzania given their size, coastal ports, and current level of industrialization, as well as the substantial inland transport costs required to reach Rwanda.

Suppose that an infant industry requires protection as it upgrades its quality in order to prepare for serving the overseas export market. This quality upgrading has been found to be a valid source of exports in general, and in particular, in the Rwandan context. Industries that fall into this category might include, for example, industries that under the CET are exporting to the

protected markets of EAC partner countries, but are not yet exporting substantially overseas. When we examine the data to see the fraction of products for which this characterization holds, and also examine only those products for which there is a sizeable (roughly \$17000 U.S. per year export level) it includes only 4% of the tariff lines. Therefore, a plausible case could potentially be made for protecting these limited tariff lines in the medium term. However, the 96% of the tariff lines that cannot be categorized in this way are likely to be protecting industries in Kenya and Tanzania, while raising prices for Rwandan consumers.

Combining the above conclusions on the impact of the CET after its first two years of implementation leads to the following policy recommendations, ranked in order of importance:

*1) Redefine the tariff rate for all items on the Sensitive Items (SI) list from the current tariff rates (up to 100%) to a rate of at most 25%. **This is absolutely the highest priority recommendation from this report.** While some temporary relief is currently in place for some items on the SI List (e.g. sugar), the change recommended here should be permanent. It will serve to raise the incomes of low-income households in Rwanda (and EAC partner countries), but is likely to also spur exports, since the items on this list (e.g. sugar) serve both as important consumption goods of the poor, and also as important inputs into manufacturing (food processing).*

2) Reduce the tariff rate on semi-finished goods, say from 10% to 5%. This is likely to boost exports by about 3% to 5%. The potential cost of this measure would be to reduce protection on intermediate inputs, which may be a set of industries that Rwanda is interested in fostering in the future. However, it is not likely to be in Rwanda's best interests to postpone this tariff reduction for the possible, uncertain benefit of intermediate input industries in the future.

*3) Rwanda should push for a redefinition of the "Sensitive Items" (SI) List, so that this category is restricted to only include a **limited** number of tariff lines. This could include product categories that are currently on the SI List or other products. One way to limit the number of items on the SI List would be to allow every country to nominate only a few products for the SI List. This would rectify the inequity inherent in the initial creation of the SI List (and in fact the CET) which were forced upon Rwanda and Burundi when they joined the CET. Alternatively, a procedure could be developed where objective, stringent rules are used to place a category on the SI List, if it was felt that this would result in fewer SI tariff line items.*

4) Work to lower the highest normal CET tariff rate from the current level of 25% to 20%. The timeframe for this should be thought of as medium-term. It is in Rwanda's interest that this tariff reduction happen more quickly than the current timeframe negotiated in the EPA agreement with Europe. At the same time, if the EAC partners can leverage (perhaps in partnership with other African countries) trade benefits from European countries in exchange for tariff reductions on

finished products, it would certainly be in both Rwanda's and the EAC's interest to reduce this tariff rate more rapidly.

There are other policy changes to improve trade that may well matter more than these tariff changes, and they are also discussed briefly in the paper.

A major pillar of Rwanda's economic policy, beginning with its Vision 2020 document of 2000, has been to work toward deeper integration into regional and international markets. It took a major step forward on this front with its membership in the East African Community (EAC) in 2007, and then with its implementation of the Common External Tariff (CET) of the EAC on July 1, 2009. This step is consistent with its overall goals of economic development, in particular with the exporting plan of the National Export Strategy (2011).

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1. Regional Trade Agreements, Trade Liberalization and the East African Community (EAC)

While a considerable amount of research has examined whether preferential trade agreements (PTAs), and in particular regional trade agreements (RTAs), are likely to help or hinder overall trade liberalization, there has been less research to explore the welfare impacts of these agreements on member countries, and in particular smaller countries within the RTAs. Venables (2003) is a helpful exception. In developing country contexts, Venables (2003) demonstrates that countries that have "extreme" comparative advantage are likely to experience welfare losses, while countries with intermediate comparative advantage are likely to experience welfare gains. To explain the concept of extreme versus intermediate comparative advantage, Venables uses the example of the *initial* East African Common Market. In that Common Market, Uganda had an extreme abundance of unskilled labour relative to Kenya, which had an intermediate abundance of unskilled labour in the global context (and therefore a relative abundance of skilled labour relative to Uganda). As a result, the comparative advantage of Kenya relative to Uganda resulted in Kenya exporting the skilled-labour intensive product (manufactures) to Uganda, while Uganda exported its unskilled-labour intensive product (agricultural products) to Kenya. The Ugandan imports from Kenya are labeled as *trade diversion*, since the lowest-cost (e.g. industrialized-country) manufactures are replaced by the higher-cost (but tariff-free) manufactured imports from Kenya. In contrast, Kenya's imports from Uganda are *trade creating*, as Kenya is

increasing imports of agricultural goods from the global lowest cost supplier, not just the lowest cost supplier within the Common Market. Venables demonstrates how this benefits Kenya, and hurts Uganda, and uses this to explain why the initial version of the East African Common Market broke down. While undoubtedly multiple causes led to the breakdown, the potential asymmetry of benefits within a regional trade agreement, especially in East Africa, is clearly instructive.

Venables' example is clearly relevant to the case of Rwanda. In the most recent incarnation of the East African Community (EAC), Rwanda's position is comparable to that of Uganda, relative to both Kenya and Tanzania. Rwanda's manufacturing base is currently less developed than either of these countries, and therefore the danger of trade diversion to the detriment of Rwanda is clear. This position is echoed by the previous IGC-sponsored study of Carrère and de Melo (2008), an IGC-sponsored study that predicts that joining the CET has a negative welfare effect, if the high tariffs of the sensitive items (SI) list are maintained, but has a positive welfare effect if these sensitive items (SI) list tariffs are removed. Also, Carrère and de Melo predict that the CET will result in significant tariff revenue loss for Rwanda.

The Venables result is also consistent with the results of Carrère (2006), which finds that regional trade agreements have the effect of generating a significant increase in trade between members, often at the expense of the rest of the world, including some evidence of the trade diversion highlighted above.

In short, while there are a number of valid reasons justifying the move by Rwanda to join the EAC, and the EAC Common External Tariff, including the benefits of regional integration, Rwanda needs to take steps to ensure that the future of the CET works for its benefit.

In addition to reducing the tariffs with its partner EAC countries, the CET served to lower tariffs with non-EAC (external) countries, at least on average. Lowering tariffs is one form of trade liberalization.

Therefore, a brief note on the overall impact of trade liberalization on economic growth and development is in order. While trade liberalization is widely agreed to increase trade, there is considerable debate about whether increased trade, usually measured as a country's openness ($(\text{exports} + \text{import}) / \text{GDP}$) also has a direct impact on economic growth.¹ On the other hand, there

¹Frankel and Romer (1999) and Frankel and Rose (2002) argue that trade can increase a country's income level, in the second case even after controlling for a country's geographic conditions. In contrast, Rodriguez and Rodrik (2001) find that trade does not impact economic growth, after controlling for geography. Rodrik, Subramanian, and Trebbi (2002) find that once the quality of a country's (legal and democratic) institutions are controlled for, that trade has at best no effect on growth. Cline (2004) outlines the degree to which industrialized-country protectionism increases poverty in developing countries. Dollar and Kraay (2004) document a strong correlation between a

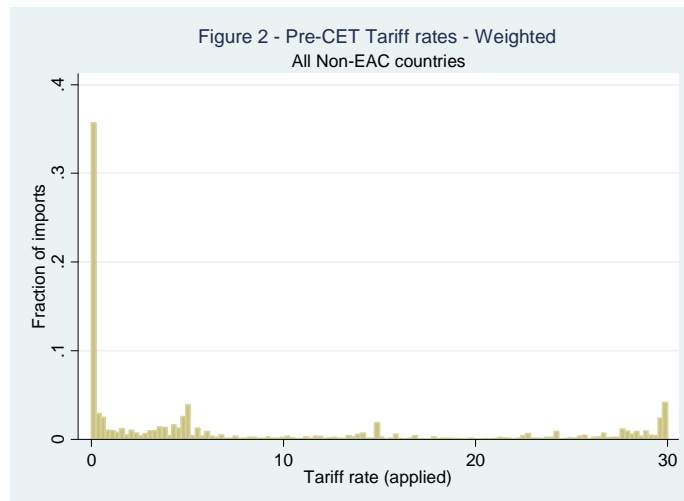
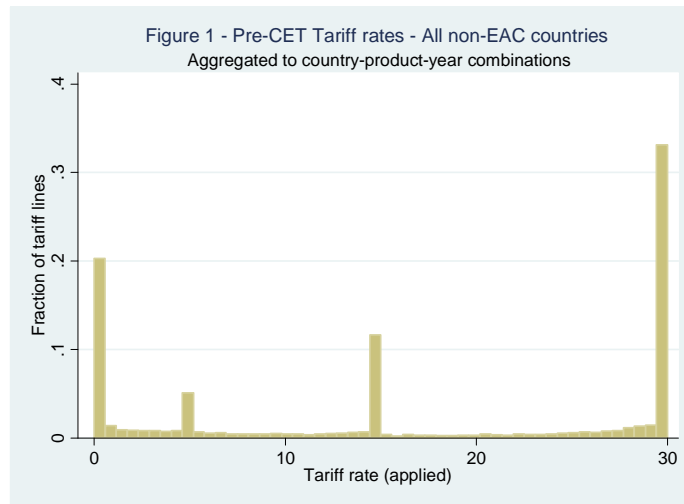
is absolutely no evidence that trade liberalization directly reduces growth. Fortunately, the primary research study that finds that trade liberalization has no direct impact on economic growth finds that the most important determinant of growth are a society's institutions (property rights and the rule of law, in particular). Therefore, the government of Rwanda's emphasis on improving the overall quality of institutions in Rwanda is widely agreed to be the most important policy task.

These potential negative consequences of the CET for Rwanda should be kept in mind in the process of evaluating the CET from the perspective of Rwanda for the purpose of renegotiating the details of its implementation, as this study will attempt to do.

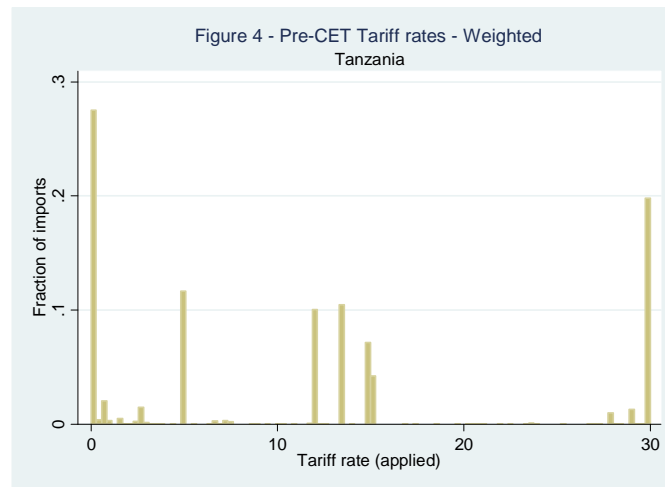
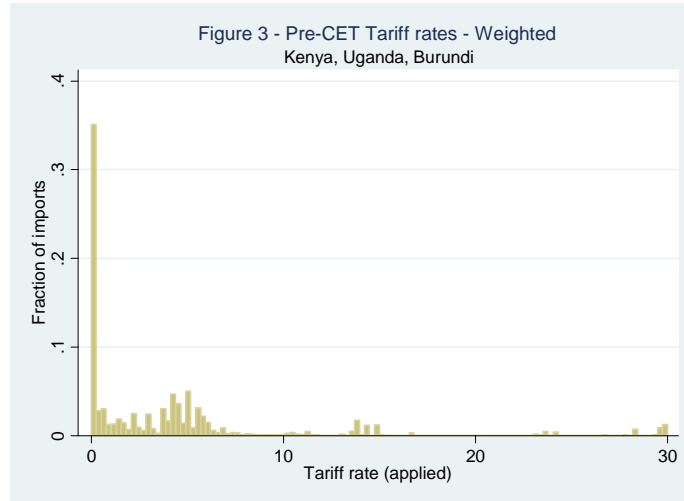
2. Tariff Structure

The Common External Tariff (CET) of the East African Community (EAC) was applied by Rwanda beginning on July 1, 2009. The change in tariff structure that was induced by the CET can be seen by Figures 1 through 7. Figure 1 demonstrates the structure of tariffs for imports into Rwanda from non-EAC countries prior to the CET. Here, we see that the 0-5-15-30 structure was applied, with 0% tariff for raw materials, 5% for goods with economic importance, 15% for semi-finished goods, and 30% for finished products. More than 30% of the tariff lines (for a given product from a given country for which we at some point see positive imports over the period 2005 through 2011) are in the 30% tariff category. However, when we instead examine the fraction of imports that are entering within each tariff category, we see that the tariffs prior to the CET were effective at reducing trade. Figure 2 demonstrates the fraction of imports, by value, entering Rwanda within each tariff category from non-EAC countries prior to the EAC. Here, we see that nearly half of all imports from non-EAC countries are entering Rwanda tariff-free. The imports are, not surprisingly, lower in the categories with positive tariff rates.

country's level of trade and its growth. Winters (2004), in a survey of the literature, argues that while the empirical evidence might not possess the "smoking gun" of a causal link between trade liberalization and growth, the suggestive evidence strongly points in that direction.



Prior to the implementation of the CET, Rwanda belonged to the Common Market for Eastern and Southern Africa (COMESA) preferential trade area, which included several African countries, but in particular, fellow-EAC members Kenya, Uganda, and Burundi. Prior to the CET, the fraction of imports entering under various tariff categories for these countries is given in Figure 3, with fewer imports entering under the 30% category, in particular. In contrast, the other EAC-member country, Tanzania, is not a member of COMESA. As a result, it faced higher tariffs on its exports into Rwanda prior to the CET, as demonstrated by Figure 4.



After the implementation of the CET on July 1, 2009, Rwanda's basic tariff structure changed. The four-tier 0-5-15-30 structure has been replaced with a 0-10-25 structure, with 0% for raw materials, 10% for semi-finished products, and 25% on finished products. For most categories, this is a reduction in tariffs--either from 15 to 10% or from 30% to 25%. However, a very significant change with the CET has been the inclusion of a "Sensitive Items" (SI) list. This list is included in Appendix A. Some of the products included on the SI list, along with their associated tariff rates, include the following:

Milk - 60%

Wheat Grain - 35%²

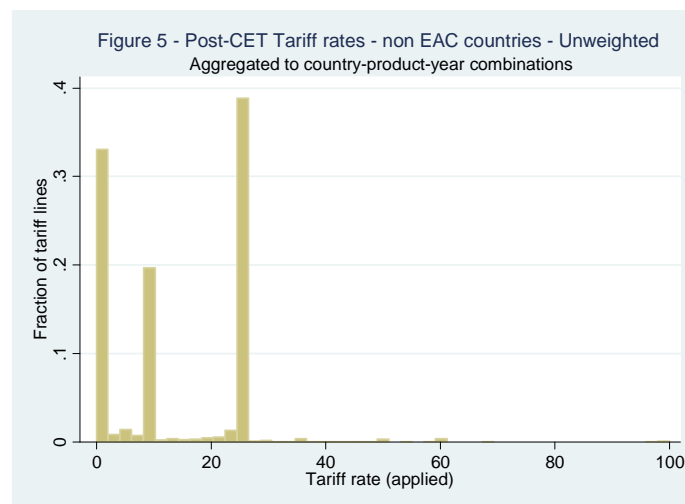
Wheat Flour - 60%³

² According to an agreement of EAC Ministers of Finance, reported in the Rwandan 2011-2012 budget, the tariff rate for wheat grain has been temporarily changed to 0% for a period of one year.

Maize - 50%
 Sugar - 100%⁴
 Worn Clothing - 50% or 0.75/kg, whichever is higher
 Kanga, Kikoi and Kitenge - 50%

For products on the SI list, tariffs have increased considerably.

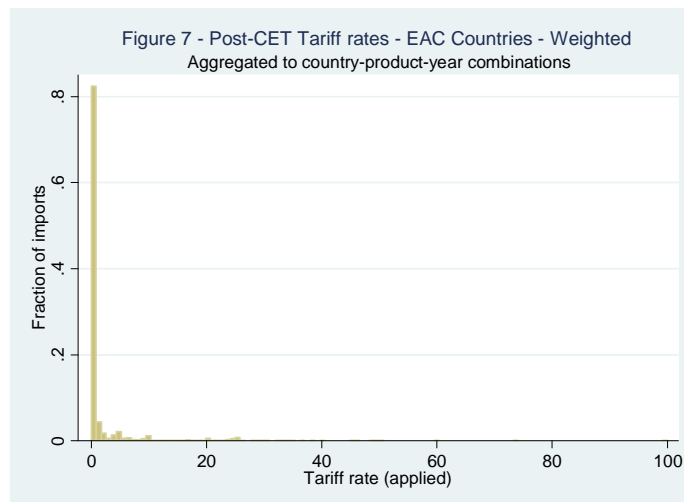
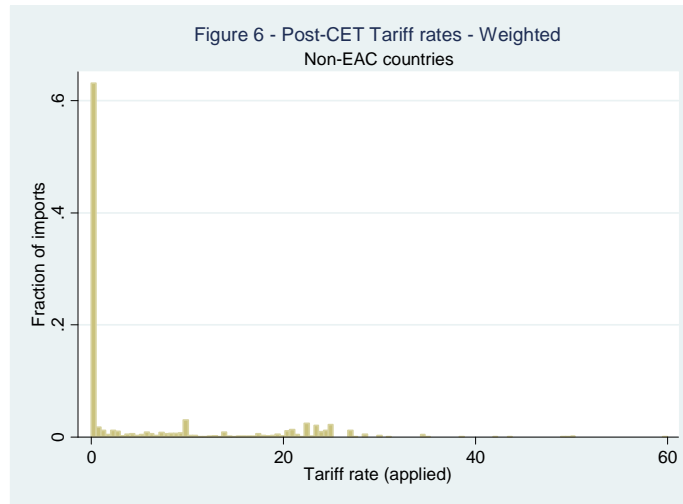
Figure 5 demonstrates this overall change in the basic tariff structure. Clearly, the bulk of product categories lie in the 0-10-25 structure, but we also see that in some categories (sugar), tariffs are as high as 100%. Like Figure 1, Figure 5 refers to the fraction of tariff lines that fall in each category. The impact of these tariffs is seen by examining Figure 6, where we see that the bulk of imports enter tariff-free, as importers avoid products in the higher-tariff categories. Figure 5 and Figure 6 do not include Rwanda's partner countries within the EAC. Under the basic principles of a customs union, these countries are not subject to tariffs. In practice, this is largely true. As demonstrated in Figure 7, more than 80% of imports entered Rwanda tariff-free from its EAC partners, and more than 70% of tariff lines are duty-free lines.⁵



³ By the agreement noted in the footnote above, the tariff rate for wheat flour has been temporarily changed to 35% for a period of one year.

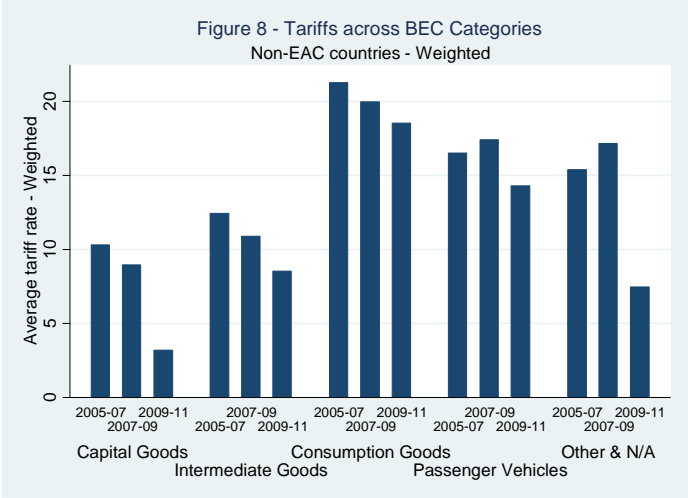
⁴ A temporary stay of this tariff rate was achieved by the Rwandan government for the purpose of importing 10000 MT at a 0% import tariff. However, like the amendments noted in the previous two footnotes, this stay is temporary.

⁵ The non duty-free lines may, for example, reflect rules-of-origin restrictions.

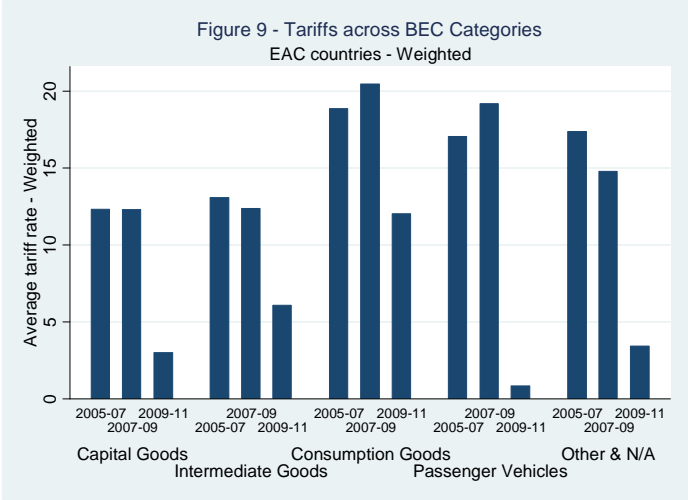


The purpose of the escalating tariff structure (0%-10%-25%) is to place higher tariffs on goods that require a higher degree of processing, with the highest tariff rate (25%) on finished products. A related categorization is that of the Broad Economic Categories (BEC), maintained by U.N. Statistics, that places goods into three primary categories: capital goods, intermediate goods, and consumption goods. Figure 8 describes the fraction of tariff lines that fall into each of these categories before and after the implementation of the CET for imports entering Rwanda from outside the East African Community (EAC). Passenger vehicles are used both as capital goods and as consumer goods, and so are listed separately. Many goods are not categorized by the BEC system, and these goods form the final category. We see that the drop in tariffs is most dramatic for capital goods, where the average tariff has dropped from more than 13% prior to the

CET to roughly 4% after the CET. This drop sensibly encourages industrial production by making the machinery essential in that production cheaper to manufacturers and other producers. Tariffs on intermediate goods also dropped from roughly 13.5% to roughly 10% after the CET. Overall the reduction in tariffs on consumer goods was less dramatic with a reduction from roughly 23% to roughly 21%. Tariffs on passenger vehicles and on other commodities were also reduced considerably.



For Rwanda's partners in the EAC, in principle the tariffs should have been largely removed following the implementation of the CET, and we do see in Figure 9 that the tariff rates dropped considerably in each of the categories, although the average tariff of 14% for consumption goods from EAC-partner countries is non-trivial.



3. Impact of the Common External Tariff on Exports:

Before discussing the impact of the Common External Tariff (CET) on exports from Rwanda, there have been a number of key research studies recently that have explored African export success that are worth highlighting. While these studies do not directly relate to the tariff changes, they do highlight a few key factors that have been related to export success that help to put these policy changes in context. First, there is a growing consensus among scholars that personal foreign experience has been critical to the development of new export entrepreneurs. This foreign experience has exposed individuals to the “export business model” which is frequently quite different from domestic orientation and modes of operation, for example, in timeliness and product quality (Easterly and Reshef, 2010; Artopoulos, Friel, and Hallak, 2010). Second, export successes in established industries, particularly in the Rwandan case, have involved moving up the quality ladder from current production (Easterly and Reshef, 2010). Third, a major constraint on African exports, particularly in landlocked countries like Rwanda, is the time required for inland travel to port (Freund and Rocha, 2011). This inland-transport time frequently reflects problems such as road quality and border delays. In the Rwandan case, it most certainly also reflects non-tariff measure (NTM) trade restrictions such as road checkpoints, and differential axle regulations in different jurisdictions, and frequent weigh stations. These restrictions matter more than tariff restrictions across countries, and have been highlighted by previous IGC papers (de Melo et. al., 2011a; de Melo et. al., 2011b).

However, as noted in the introductory section, tariffs still matter for exports. In general, the imposition of a common external tariff associated with a customs union has two implications for exporters within a member country of the customs union. First, it by definition lowers the import tariff for exporting to partner countries within the customs union. For the purpose of Rwanda, it lowers the import tariff for exporting to Kenya, Tanzania, Uganda, and Burundi, although these tariffs were already rather low for the countries of Kenya, Uganda and Burundi, given the common membership in COMESA. This may potentially result in trade (export) creation from Rwanda to its partner EAC countries, although by a symmetric effect it may result in trade diversion by stimulating imports into Rwanda from these countries, replacing imports that previously came from outside of the EAC. This latter effect may increase competition for Rwandan exporters if they also produce in the domestic markets, but will not increase competition for them in their export markets.

Second, a common external tariff changes the tariff structure for imports from outside the EAC coming into Rwanda. More specifically, as noted in the previous section, tariffs were on average lowered on goods entering Rwanda (with the notable exception of the goods on the sensitive items (SI) list). Since the import tariffs were lowered, it would be fair to regard the CET as an example of trade liberalization.

The form of trade liberalization that is usually examined with a view to increasing exports is the removal of export taxes. Rwanda removed all export taxes in 1999, and so has no further room for liberalization on that front. While the effect of the reduction of import tariffs in exports is more indirect, they may also have a modest effect. First, Argent (2011), in a previous IGC note, highlights the importance of the differential between the returns to exporting in comparison to the returns to domestic sale for domestic producers. If tariffs are high, producers will get a significantly higher price by selling their goods domestically than exporting, since tariffs on final consumption goods increase the prices of these goods domestically within Rwanda, while these tariffs do not raise the price that producers receive upon export. Satisficing producers may be comfortable with production for the domestic market, rather than export.

The second, more direct, mechanism of the impact of tariffs on exports occurs primarily through their impact on the prices of imported inputs, which can rise or fall with the tariff. Recall from Figure 8 that the tariff on intermediate inputs dropped from roughly 12.5% prior to the CET to roughly 8.5% after the CET. Since the real effective rate of protection offered by a tariff can substantially exceed its nominal percentage rate, depending on the level of value-added contributed within Rwanda towards the final value of the export good, such a tariff reduction of even four percent can potentially have a significant impact.

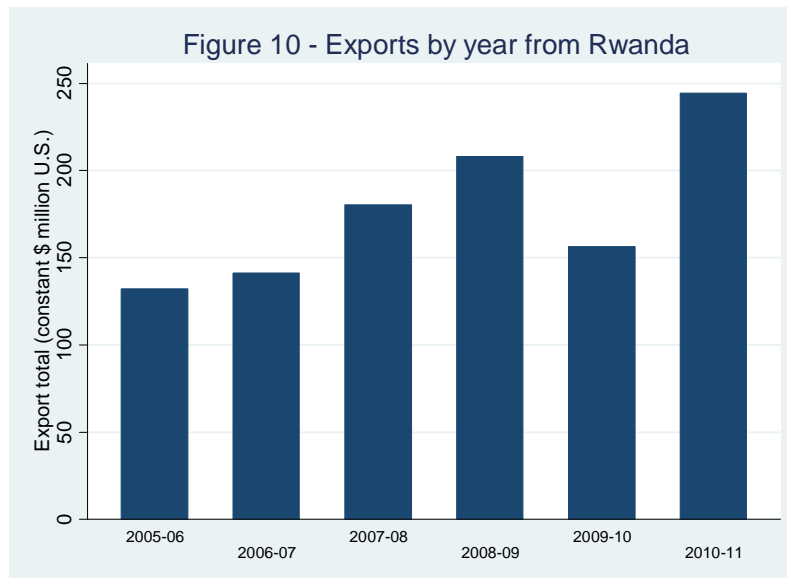
Figure 8 explores the tariff rate on all intermediate inputs imported into Rwanda, including those intermediate inputs used by exporters, as well as those used by firms for domestically-oriented production. The change in tariff rates on only those inputs that have been imported by exporting firms is provided in Table 1. Here we see a similar pattern. The tariff rate has a modest decrease from 13 to 12% in the 4 years prior to the CET. After the CET, the average tariff rate drops considerably to an average of roughly 7.3%. However, this average drop does mask some considerable heterogeneity. Within some tariff categories the import prices have increased, as we see that the maximum tariff rate prior to the CET was 30%, while the maximum tariff rate after the CET was 60%.

Table 1 - Average Tariffs on Inputs Imported by Exporters

Year	Mean Tariff Rate	Standard Deviation of Tariff Rate	Minimum Tariff Rate	Maximum Tariff Rate
2005-06	13.02	11.45	0	30
2006-07	12.51	11.28	0	30
2007-08	12.55	11.08	0	30
2008-09	11.85	10.93	0	30
2009-10	7.36	8.76	0	60
2010-11	7.33	8.81	0	60

Note: The mean tariff rate is weighted by the value of the imports.

Therefore, the tariff rates on inputs used by exporters dropped on average after the CET. To see what has been happening overall to exports from Rwanda over the time period 2005-2011, examine Figure 10. Here we see the large drop off in exports, caused by several factors for the year 2009-10, including the impact of the worldwide recession, and the concomitant drop in overall international trade during that time period. Unfortunately, this is exactly the same time period that Rwanda is implementing the Common External Tariff, beginning in July 1, 2009. Naturally, if one is not careful, one could misattribute the drop in exports to the CET. In addition, Rwanda has been expanding exports in some product lines over the past 6 years, and contracting exports in other product lines. These factors also have to be considered. For example, if the intermediate input tariffs are dropping post-CET in firms whose export lines were already expanding prior to the CET, we could misattribute the continued increase in exports post-CET to the tariff reductions of the CET, when in fact they were the result of these pre-existing trends.



Consider now in a bit more detail the impact of the CET on exporting firms. These exporting firms use inputs, some of which may be imported. However, even if a given firm does not import an input directly, the prices of its inputs may still be affected by tariff changes under the CET. For example, consider the following case. One firm, call it A-One, may import an intermediate input, say sugar, which it then sells to another firm, say Bibi's Biscuits. Bibi's Biscuits uses this sugar to create a new product (biscuits) for export. Even though the price of the sugar may have increased after the CET as a result of the tariff change, this will not be recorded in any records of Bibi's Biscuits' imports.

Similarly, consider the following case. Suppose that firm A-One imports sugar and then re-sells it to Christian's Bakery which uses it to produce for domestic consumption. At the same time, suppose that this time Bibi's Biscuits buys sugar, but from a domestic Rwandan sugar producer, say Good Sugar, and then uses it to export biscuits. The selling price of sugar will be the same for A-One (to Christian's Bakery) and for Good Sugar (to Bibi's Biscuits). Both of these prices will be affected by the tariff rate, even though the sale of sugar from Good Sugar to Bibi's Biscuits looks entirely like a domestic transaction.

In its sales, A-One has to include the price of the tariff in the final price of sugar in a competitive market. On the other hand, Bibi's Biscuits will also pay the tariff-inflated price for the input, since if Good Sugar did not sell sugar to Bibi's Biscuits, it could have sold it to Christian's Bakery. The main point of this illustration is that tariffs on imported intermediate inputs affect the input prices of all firms, regardless of whether or not these firms directly imported these

inputs or sourced them from other firms who either produced them domestically, or sourced them internationally.

At the same time, however, it is difficult to know exactly which input prices for a firm, say Firm B, have been affected by the CET tariff changes, mainly because we don't have administrative records on all inputs that all firms in Rwanda have purchased. However, we do have records on all of the intermediate inputs that Firm B has *imported*. Therefore, we are going to focus on the impact of the CET on price changes for inputs that a firm, say Firm B, has imported directly into Rwanda, and explore what the impact of these price changes has been on Firm B's exports. This may understate the impact of these input price changes on exporting, since the tariff-induced changes may also affect firms that do not import their inputs, as delineated above.

While we are doing this, we need to keep track of the fact that some firms export more than other firms, because they are larger, or they are more focused on exporting. To establish the causal impact of the CET on exports, we need to look at the input price *changes* within a firm over time on the *changes* in exports within a firm over time. We will also need to control for the changes in exports due to the worldwide recession, as well as other domestic factors affecting the Rwandan situation that vary over time, and finally account for different export trends (increasing, decreasing, stable) for different export product lines, to focus on the impact of the CET-induced changes in input prices on exports.

For the benefit of readers of this report with econometric backgrounds, the specification that was estimated was:

$$EXP_{ft} = \beta_1 CET_{ft} + \alpha_f + \lambda_i * t + \gamma_t + \varepsilon_{ijt} \quad (1)$$

The dependent variable is the total exports (EXP_{ft}) for firm f in year t .⁶ The control of interest is the average tariff level CET_{ft} faced by firm f on the goods that it imported in year t . Changes in the tariff level will be captured relative to the individual exporting ability/opportunity of the firm, captured in the full set of firm dummies: α_f . In addition, a full set of year dummies (γ_t) is included to capture all of the factors that change by year that affect all firms (e.g. worldwide recession). Finally, since the demand for some products is changing over time, differential trends for the major export product category by firm are allowed, with $\lambda_i * t$. This is an interaction between the major export product category for the firm (measured at the HS 2-digit level) and time. While the inclusion of these different product trends is quite conservative, since the CET may also affect these trends, its

⁶ Actually, the dependent variable in the base specification was the $\log(EXP_{ft} + 1)$. Other dependent variables were tested (square root, adding numbers other than 1), with little change in the marginal impact result. The coefficient on β_1 in this base specification was -0.014. Statistical significance in the robustness checks varied between significant at the 5% level and at the 10% level.

inclusion did not change the estimated coefficient β_1 , although it reduced its significance slightly.

Before stating what we find this impact to be, a further caveat is in order. We can uniquely identify each firm (say Firm B) in the dataset. Therefore, we can identify exactly the inputs (X) that Firm B imported over the time period, and the products (Y) that Firm B exported over the time period. However, we cannot guarantee that Firm B used the inputs (X) directly in the production of Y. Despite this, we are going to look at the association of changes in input price X with export quantities Y at an average Firm B. Since some of these firms are involved in production, and some are not, we may understate the impact of the price changes on production and export at those firms directly involved in production and exporting, since the impact is averaged across these firms, and includes other firms more oriented toward straight import and export, and not production. However, even these import-export firms may find their export productivity improved by reduced prices on imported inputs, and this will in fact be part of what is measured.

As noted previously, the CET reduced the average tariffs on goods imported by exporting firms from 12% to 7.3%, almost 5 percentage points. At the same time, firms are increasing and decreasing their exports for a variety of factors related to the worldwide economy, the domestic Rwandan economy, the exporting abilities of individual firms, as well as trends within export product lines. *When all of these factors are taken into consideration, a 1 percentage point decrease in the tariff rate on imported inputs is associated with an increase in exports of between 1% and 2% for an average firm.*⁷ Therefore, the average decrease of 5 tariff percentage points on imported inputs associated with the CET resulted in an average increase of exports of between 5% and 10% across all firms.

It should be remembered that we have already noted a couple of reasons why these numbers are relatively conservative. It considers the tariff change impact only for those goods that are imported directly by the exporters. It does not consider the indirect impact from the reduced prices of inputs that are imported but purchased through a third party, or the reduced prices of domestically-sourced, import-competing inputs.

We might also be interested in which input category tariff reductions provide the strongest impact on exports. When we allow for differential impacts by input category, we see that reductions in tariffs on the following categories of inputs provide the largest increase in exports:

Foodstuffs

Chemicals & Allied Industries

Plastics/Rubbers

⁷ The predicted change in exports in the baseline preferred specifications were 1.6% and 1.4%.

Raw Hides, Skins, Leather, & Furs
Instruments, Furniture, Signs and Miscellaneous Manufactured Articles

In each of these categories except Foodstuffs, the tariffs dropped after the implementation of the CET, and therefore the tariff reductions boosted exports. In the case of Foodstuffs, the tariffs increased after the implementation of the CET, and therefore, the increase in these tariffs resulted in a drop in exports. This primarily reflects the placing of sugar on the Sensitive Items List, and the fact that sugar is an important component in food manufacturing.

So, clearly the tariff reductions on inputs into exporting have had an impact. What is the next step for policy on this front? There still remains some scope for reductions of tariffs on these imported inputs, with a particular note of the following.

Removing sugar from the Sensitive Items list is a first-order priority for food manufacturing and export. Therefore, a very high priority in future negotiations will involve reductions of these tariffs to at least to the “normal” tariff level.

Second, one can expect that a further reduction of the tariffs on intermediate inputs should provide a further boost to exporting. On the one hand, it is possible that the magnitude of the boost may not be as large as it is above if there are diminishing returns to the tariff reductions. On the other hand, however, the previous discussion noted how the measured impact of the intermediate input tariff reduction is likely to be a conservative underestimate. The combination of the removal of items on the Sensitive Items list, along with the lowering of tariffs on semi-finished goods by 5% should result in an overall reduction in tariffs on inputs of another 2.5% or so, to reach roughly 5% overall. On balance, it is quite likely that this should boost exports a further 3 to 5%.

Recommendation #1) Reduce the tariff rate on semi-finished goods for the purpose of boosting exports, say from 10% to 5%.

4. Impact of the CET on Employment

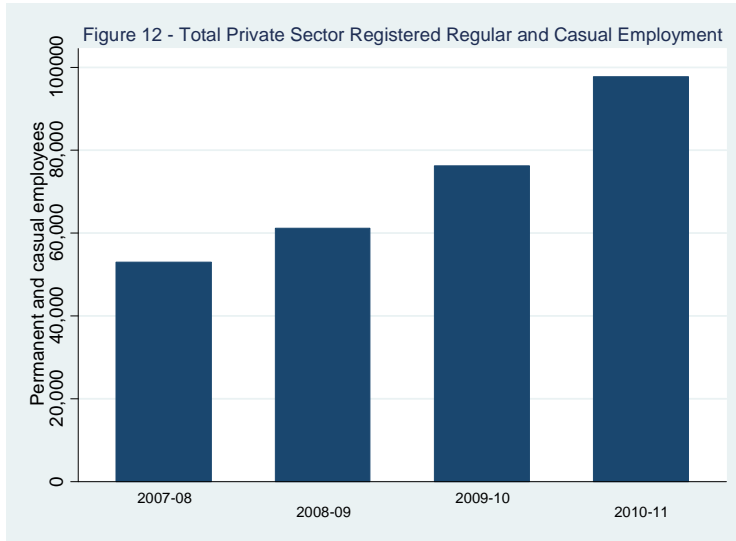
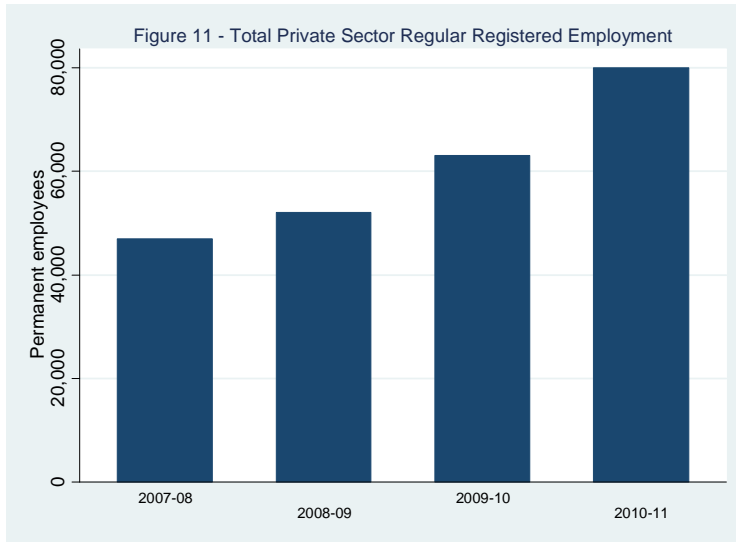
The Rwandan government, like most governments, is interested in the employment of its citizens. There are two primary mechanisms by which the CET can have an impact on employment. First, if a firm’s output is protected by high tariffs, this could increase the domestic price of a firm’s product. This could increase a firm’s domestic sales of the product, and therefore may also increase employment. By increasing the profitability of import-competing sectors, it can increase the incentive for investment in these sectors, and therefore increase

employment in these sectors over the longer term. However, as noted previously, it may also have the possibility of reducing the potential incentive for export, and therefore reducing employment in exporting sectors. The second mechanism by which the CET can impact employment is through a firm's purchase of inputs into production. Firms that are forced to pay higher (lower) prices for inputs as a result of the CET, may contract (expand) production, and therefore contract (expand) employment.

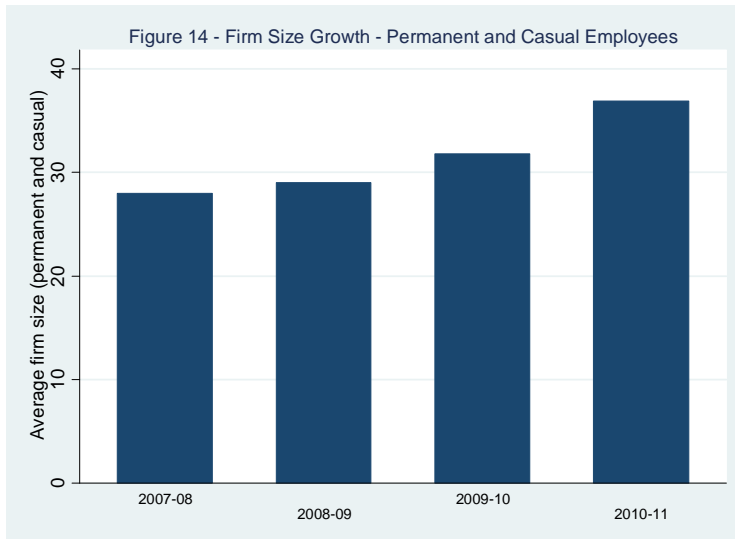
To explore this second mechanism by which the CET might impact employment, we examined the employment records as reported to the Rwandan Revenue Authority in their payroll files, and matched these records with the import records at the firm level. In short, firms on average faced lower tariffs for their imported inputs as a result of the CET. Specifically, the average tariff rate on the firms for which we have employment records that also imported inputs dropped from 13.6% before the CET to an average of 10.1% after the CET. However, for the firms that imported inputs, this drop in tariffs did not result in an increase in their regular employment levels.⁸ This is not overly surprising since we might expect the initial impact of this tariff-rate decrease to be on firm profits, and it might not necessarily translate directly into changes in employment.

Now, while the implementation of the CET did not stimulate employment directly through firms' reduced prices for inputs, many of the mechanisms by which the CET could influence employment are expected to be more indirect. That is, many firms purchase their inputs from retailers, or even wholesalers, rather than importing the inputs directly. These firms could see the reduced input prices stimulate production and employment through this more indirect channel. It is entirely possible that such a mechanism was operating. Figure 11 shows the total permanent employment figures in registered, private-sector firms in Rwanda before and after the CET. The increase seen over the years 2007 through 2011 can be a product of multiple factors, including the increased ability of the Rwandan Revenue Authority (RRA) to register firms. Therefore, the increase in employment delineated there should be seen as a combination of an expansion of employment within an average formal sector (registered) firm, combined with an increase in the number of formal sector (registered) firms. Both of these expansions are important to the health of the Rwandan economy. A similar expansion is seen in Figure 12 when casual employees are added to the permanent employees at the firm level.

⁸ There was no robust statistically-significant relationship found between changes in tariffs on imported inputs and changes in employment at the firm level, using specifications similar to (1) with a dependent variable of employment, and without the product-level trends.



A further sign of healthy private sector employment post-CET is given in Figure 13. This looks only at those firms for which we have data over the entire period from 2007 through 2011. While this is a select group of firms, as it does not include those firms that have gone out of business over this period, still, for this group of firms, their employment increased considerably post-CET, from an average of 25 employees to an average of 30 employees. It would be difficult to imagine a scenario where the CET had a negative overall registered employment effect, given this fact. The story is similar when the total firm size includes casual employees, as it does in Figure 14.



In short, while we do not find strong direct effects of the tariff changes under the CET on employment, private registered employment is certainly increasing during the period of the CET, suggesting that some of the more indirect mechanisms by which tariff reductions can improve employment may be at work.

5. Impact of the CET on Poverty and Inequality in Rwanda:

While the potential benefit of import tariffs is to increase the prices faced by Rwandan producers of import-competing products, as well as to raise government revenues, the negative impact is felt primarily by consumers. Since a major goal of the Rwandan government is poverty alleviation, it is important to examine the impact of these tariff changes on poor consumers. While overall the average tariff levels have been reduced for many product categories as a result of the common external tariff (CET), some tariff levels have also increased, in particular the items on the sensitive items (SI) list, which have tariff levels above 25% under the CET.

The impact of these tariff changes will come through the change in prices induced by the tariff changes. Whether a good such as sugar is imported or produced domestically, the price of domestic sugar will be strongly affected by the price of imported sugar with which it competes. Domestic firms will charge a price for sugar which is close to the tariff-inflated price charged by those who import sugar. The tariff has this impact even in the absence of any sugar imports from outside of the EAC. In this case, domestic sugar producers charge a price strongly influenced by their *potential* competitors, whose price of sugar would be inflated by the tariff were there imports of sugar.

While the Sensitive Items are a small fraction of the overall tariff changes that occurred under the CET, it is worth examining the overall impact of these tariff changes on poor households, in comparison to relatively well-off households. The impact of these price changes will be different for the poor, since the poor typically are more likely to consume basic staples, such as food, and fewer luxury products, such as electronics. As a result, the price changes on those staple products are likely to impact the poor more than the price changes on luxury products.

Provided the consumption categories are aggregated to a fairly high level of aggregation, the consumption basket of the poor is relatively similar across African countries. Building on this fact, and in the absence of access to a detailed household survey for Rwanda, we therefore use the consumption shares for households in the lowest 2 deciles and the top 2 deciles in South Africa, as delineated by Edwards and Lawrence (2008). Table 2 lists the 19 major consumption groups for households in the bottom 2 deciles of the income distribution. Together, these consumption groups account for 72% of the total consumption of low-income households. The table delineates the average tariff on goods imported into Rwanda within each of these categories from outside of the East African Community before and after the CET. These tariffs have been calculated by carefully mapping the consumption categories as established from the South African survey into tariff-line categories, line-by-line, at the Harmonized System 8-digit level, taking into account the importance of each product within each tariff category.

Table 2 - Common External Tariff Impact on Consumption Baskets of Typical Low-Income Households

Sector	Share of Exp.	Pre-CET			Post-CET			Change in Tariff Post-CET		% Impact on Overall Income
		Tariff	Std. Dev.	Max tariff	Tariff	Std. Dev.	Max tariff	Tariff Point Change	% Change	
Agricultural products	10	3.0	3.2	15	14.6	15.5	50	11.6	380%	-1.2
Meat products	9	21.4	9.3	30	23.8	4.7	25	2.3	11%	-0.2
Grain mill products	9	11.1	6.1	15	27.4	15.0	60	16.3	147%	-1.5
Soap products	8	25.0	8.1	30	22.8	6.2	25	-2.2	-9%	0.2
Bakery products	6	26.1	7.9	30	20.2	9.3	25	-6.0	-23%	0.4
Sugar products	5	14.6	13.8	30	42.1	39.9	100	27.4	188%	-1.4
Other food products	4	25.4	9.3	30	21.8	7.3	25	-3.6	-14%	0.1
Wearing apparel	3	27.8	6.7	30	24.5	5.1	50	-3.3	-12%	0.1
Petroleum products	3	17.7	11.7	30	6.3	10.0	25	-11.4	-65%	0.3
Dairy products	3	22.3	11.2	30	46.0	18.5	60	23.6	106%	-0.7
Beverages & tobacco	3	21.7	11.8	30	22.1	7.8	35	0.4	2%	0.0
Oils & fats products	2	21.0	11.6	30	17.0	10.7	25	-4.0	-19%	0.1
Footwear	2	25.9	8.2	30	22.7	6.4	25	-3.2	-12%	0.1
Other manufacturing	2	19.2	11.5	30	15.8	9.7	50	-3.4	-18%	0.1
Other paper products	1	15.4	12.1	30	17.7	9.6	25	2.3	15%	0.0
Fish products	1	20.9	8.3	30	24.8	2.0	25	4.0	19%	0.0
Fruit & vegetables	1	5.7	3.6	15	23.9	5.0	25	18.2	322%	-0.2
Knitting mill products	0	26.4	7.4	30	24.3	3.9	25	-2.1	-8%	0.0
Furniture	0	14.3	10.4	30	18.5	9.8	25	4.2	29%	0.0
Total										-3.8

As mentioned the differences in the tariffs will map directly into price differences. Practically speaking, the average tariff rate on the sugar which is imported into Rwanda might actually drop after the CET if sugar imports external to the EAC (and subject to tariffs) are replaced with sugar imports from Tanzania or Kenya, which would be duty-free given that they belong to the EAC Customs Union. However, the domestic price of sugar in a small market like the East African Community is still going to be set by the tariff-inflated alternative price of imports of sugar from outside of the EAC, if there are *any* imports of sugar from outside of the EAC at all, which there are. Therefore, the correct tariff change to examine from the perspective of price changes is the

tariff change on imports external to the EAC, as sugar from Brazil, for example, must pay the tariff before being imported into Rwanda.

What is striking from the table is that within some of the key consumption basket categories, the tariff rate has increased dramatically post-CET. *Despite the fact that we can see that tariffs are dropping overall post-CET within Rwanda* (from Figures 8 and 9 for example), *the tariffs on goods consumed by the poor are mostly rising*. For example, for the primary consumption category for the poor, agricultural products, the average tariff rate increased from 3.0% to 14.6% (a 380% or nearly five-fold *increase*). Similarly, the tariff on grain mill products increased from an average of 11.1% to an average of 27.4%, and the tariff on sugar products increased from an average of 14.6% to an average of 42.1%. While there were some reductions in the top 6 categories of consumption, these were relatively minor in comparison: a drop from 25.0% to 22.8% tariff in soap products, and a drop from 26.1% to 20.2% in bakery products.

As mentioned previously, in the world economy, East Africa is a small market in any of these products. As a result, these tariff increases typically result in close to equivalent price increases for these commodities in the domestic market. Therefore, using these expenditure shares, we can calculate what the overall impact of these price changes is on poor consumers, assuming that their aggregate consumption basket does not change. Naturally, there will be some product substitution induced by these tariff changes, and so these price changes do not map 1:1 to income reductions at the household level. However, even some of these potential product substitutions should be concerning from a welfare perspective. For example, the second-largest consumption category for poor households is meat products. The tariff increase in this category is not dramatic (from 21.4% to 23.8%), but it is likely to induce some poor households to substitute away from meat consumption. That is, while low-income consumers may not be 2.3 percentage points (times 9% for the budget share for meat) poorer as a result of the tariff increase on meat, they are a bit poorer, and the tariff has induced them to consume less meat. Overall, combining these figures together, the implementation of the CET resulted in a roughly 3.8% increase in real prices for poor households, and therefore a 3.8% decrease in real income. If the price increases were not fully passed on to consumers in poor households (and the study did not formally evaluate the degree of pass-through for lack of data) the increase in prices might have been slightly less than 3.8%.

To put this number in context, a country with per capita income growth of roughly 0% per year is seen to be stagnant, and a laggard by international standards. In contrast a country growing at 3.8% per year on a per capita basis is achieving strong growth. For the poor for the year after implementation of the CET, the tariff increase has forced them to be living in the first country, rather than the latter. Alternatively, the CET may have resulted in poor households losing as much as two weeks' worth of wages annually.

The consumption bundle categories with the major increases in tariffs are categories that include products on the sensitive items (SI) list.⁹ Specifically, the products with high-tariffs that are consumed by the poor within their largest consumption categories include the following.

1) "Agricultural Products" category:

maize (50%), rice in the husk (30%), husked rice (30%) as well as two items with high tariffs, but not on the SI list: sorghum (25%) millet (25%).

2) "Grain mill products" category:

Wheat or meslin flour (60%), Corn (maize) flour (The rate within the tariff book for maize flour is 25%, but the rate actually charged for maize flour is frequently 50%.) Within this category, there are also other items with high tariffs, but not on the SI list, most notably buckwheat flour (25%).

3) "Sugar products" category:

All sugar, except jaggery (100%)

4) "Dairy products" category:

Milk and cream (60%)

For a complete picture of the impact of these tariff changes, we should also consider the degree to which the poor are producers of the above commodities. While this will mitigate to some degree the magnitude of the price increase on poor households, it is hard to imagine it overturning the key result, particularly since the most significant price increase, sugar, is produced in a highly concentrated industry in Rwanda.

In contrast, Table 3 demonstrates that top-decile households typically should not see the same tariff increase on the types of goods that they are likely to purchase. The top two spending categories, motor vehicles and petroleum products, both saw a decline in tariffs after the CET (although in the case of petroleum products, this was balanced by a commensurate increase in excise taxes in this category). Meat products, the second-largest category for the poor, is the third largest category for the rich, and also saw a moderate increase in tariffs. However, the four "high tariff" categories listed above (agricultural products, grain mill products, sugar, and dairy products) that were the 1st, 3rd, 6th, and 10th largest categories for poor households were only the 7th, 8th, and 13th largest categories for wealthy households, with sugar products not even landing in the top 19 categories. In short, the tariff changes under the CET definitely advantaged

⁹ De Melo et al. (2011a) and Carrère and de Melo (2008) also discuss extensively problems of the SI List for Rwanda.

wealthy consumers at the expense of poor consumers.

Table 3 - Common External Tariff Impact on Consumption Basket of Typical High-Income households

Sector	Share of Exp.	Pre-CET			Post-CET			Change in Tariff Post-CET		% Impact on Overall Income
		Tariff	Std. Dev.	Max tariff	Tariff	Std. Dev.	Max tariff	Tariff Point Change	% Change	
Motor vehicles	4	19.2	12.2	30	17.7	10.6	25	-1.6	-8%	-0.1
Petroleum products	3	17.7	11.7	30	6.3	10.0	25	-11.4	-65%	-0.3
Meat products	3	21.4	9.3	30	23.8	4.7	25	2.3	11%	0.1
Beverages & tobacco	2	21.7	11.8	30	22.1	7.8	35	0.4	2%	0.0
Soap products	2	25.0	8.1	30	22.8	6.2	25	-2.2	-9%	0.0
Wearing apparel	2	27.8	6.7	30	24.5	5.1	50	-3.3	-12%	-0.1
Agricultural products	2	3.0	3.2	15	14.6	15.5	50	11.6	380%	0.2
Dairy products	1	22.3	11.2	30	46.0	18.5	60	23.6	106%	0.2
Other food products	1	25.4	9.3	30	21.8	7.3	25	-3.6	-14%	0.0
Bakery products	1	26.1	7.9	30	20.2	9.3	25	-6.0	-23%	-0.1
Furniture	1	14.3	10.4	30	18.5	9.8	25	4.2	29%	0.0
Footwear	1	25.9	8.2	30	22.7	6.4	25	-3.2	-12%	0.0
Publish & print prods	1	1.3	5.8	30	0.0	0.0	1	-1.3	-100%	0.0
Grain mill products	1	11.1	6.1	15	27.4	15.0	60	16.3	147%	0.2
Radio & television	1	16.9	12.4	30	10.0	10.5	35	-6.9	-41%	-0.1
Fruit & vegetables	1	5.7	3.6	15	23.9	5.0	25	18.2	322%	0.2
Household appliances	1	19.2	11.0	30	14.8	9.6	25	-4.4	-23%	0.0
Other paper products	1	15.4	12.1	30	17.7	9.6	25	2.3	15%	0.0
Fish products	1	20.9	8.3	30	24.8	2.0	25	4.0	19%	0.0

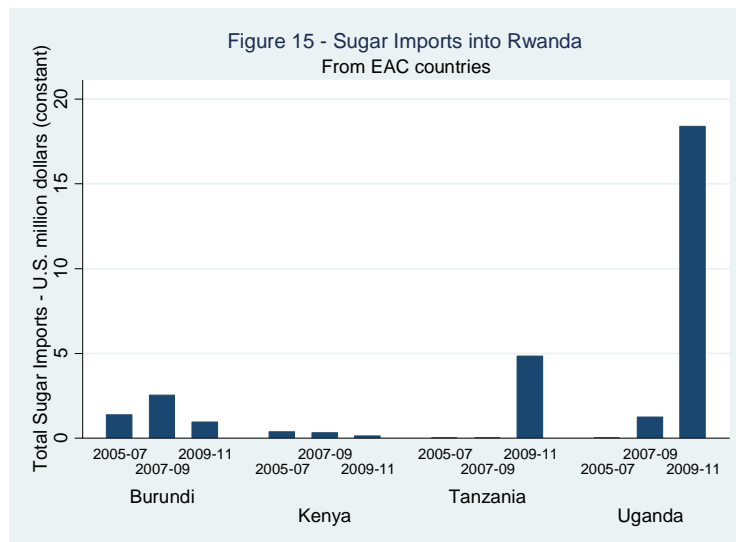
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Therefore, we recommend that future changes to the CET for the benefit of Rwanda, and in particular to reduce inequality in Rwanda, should definitely seek to reduce the tariff levels within the four categories above, and in particular those "sensitive items" with tariff rates above 25%. Specifically the priority list for tariff reductions would be the following.

Priority #1) Reduce the tariff levels on sugar, which is currently 100% immediately to the

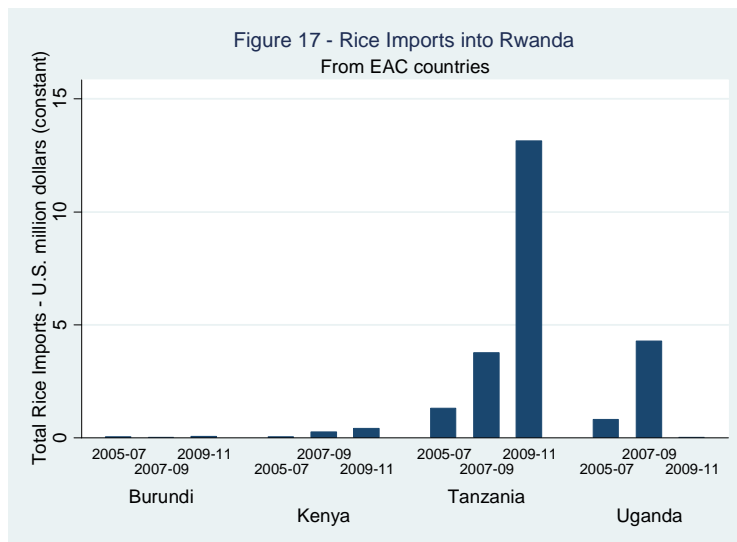
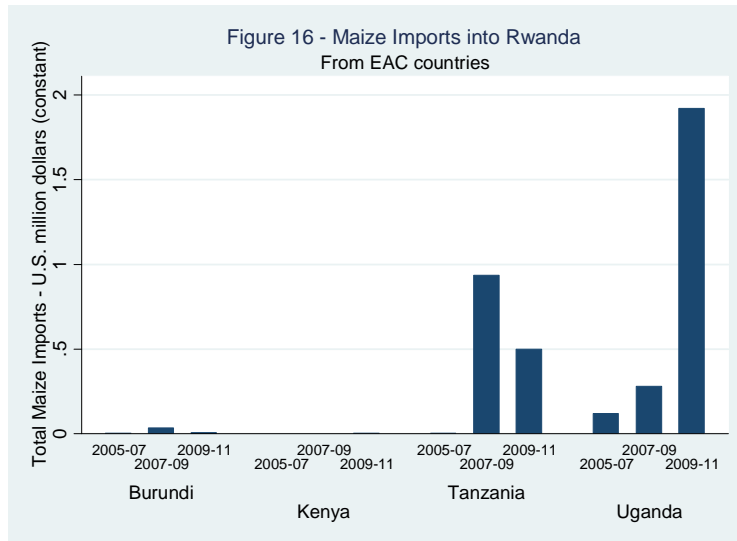
standard rate of 25%, and reduce the tariff levels on jaggery from 35% to 25%.

To anticipate potential resistance to such a tariff reduction within the EAC, we have compiled Figure 15, which delineates the imports of sugar into Rwanda prior to and after the CET. While neither Tanzania nor Uganda were competitive enough in terms of sugar production to justify imports prior to the CET, after the CET, imports from these two countries have soared. One can expect that both of these countries may well be under pressure to maintain the higher tariff levels



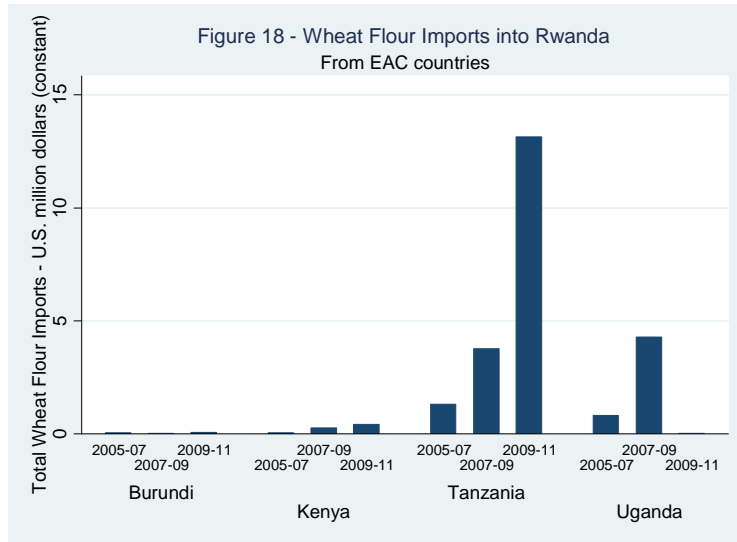
Priority #2) Reduce the tariff levels on maize (50%) and rice (30%), both of which are on the sensitive items list, and both of which feature prominently in the primary consumption category of low-income people, immediately to the top (normal) tariff category of 25%.

Like Figure 15, Figures 16 and 17 document the shift in imports of maize and rice within the EAC with the implementation of the CET. For maize, the implementation of the CET appears to have primarily benefitted Uganda, as imports from Uganda exploded after the CET. For rice, the primary beneficiary, at least in terms of imports into Rwanda, was Tanzania. Therefore, Uganda and Tanzania may resist tariff reductions on maize and rice, respectively.



Priority #3) Reduce the tariff levels on wheat flour, which is currently at 60%, at least to the standard rate of 25%.

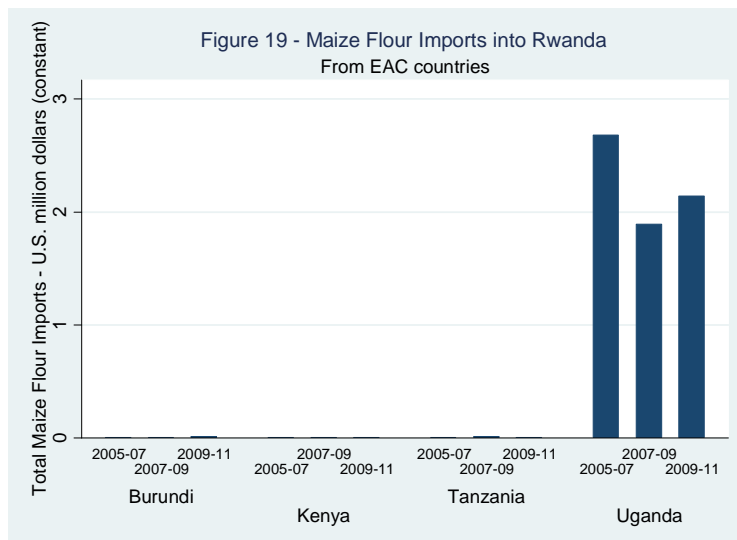
For wheat flour, the primary producer within the EAC is Tanzania, at least if Rwandan imports serve as an appropriate proxy, as demonstrated in Figure 18. Wheat flour imports clearly skyrocketed from Tanzania with the CET.



Priority #4) Enforce the posted tariff rate of 25% on maize flour.

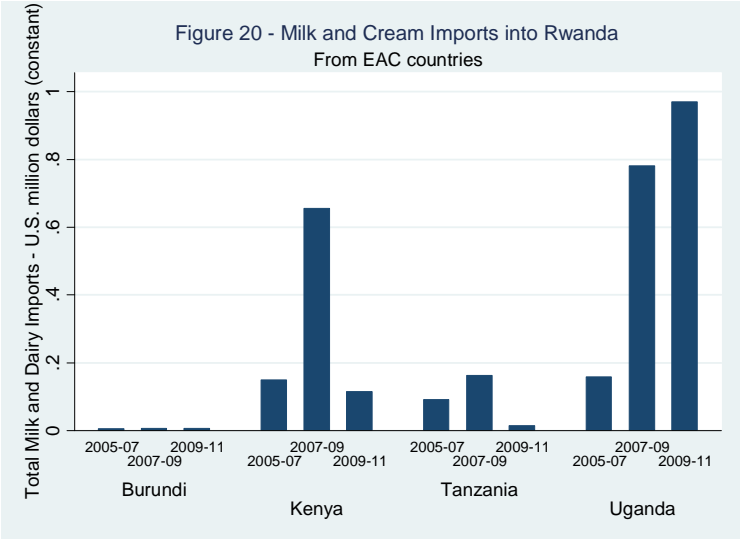
For the category 1102.20.00 of maize (corn) flour, the rate listed in the CET Tariff handbook is 25%. However, the effective tariff rate actually charged in this category under the CET is 50%. (This 50% rate was charged for imports of maize flour from China, Congo, Finland, New Zealand, Sweden, Egypt, United Arab Emirates and Argentina under the CET.)

Implementing the true posted tariff rate of 25% should not be difficult. As Figure 19 illustrates, within the CET, Rwanda essentially only imports maize flour from Uganda, and these imports have not shifted with the implementation of the CET.



Priority #5) Reduce the tariff on milk and cream products from 60% to the standard rate of 25%. Although a large amount of milk is produced and consumed domestically, both within the household, as well as within Rwanda, there still is a large fraction of dairy products imported with 144 billion Rwandan francs worth of dairy products imported between July 1, 2010 and June 30, 2011. For this reason, welfare gains could still be had by reducing the tariff on these staple commodities.

Figure 20 demonstrates that each of Kenya, Tanzania and Uganda have had non-trivial exports of milk and cream into Rwanda, and therefore each of them has sufficient domestic production to potentially be hesitant to reduce the tariffs. However, imports from these countries has not been stimulated with the onset of the CET.



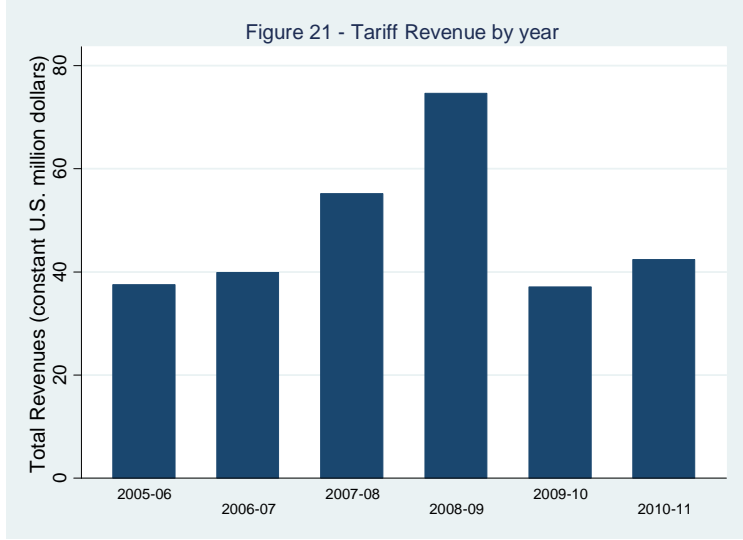
While Figures 15 through 20 do highlight the potential impact of tariff changes on domestic production in partner EAC countries, at least as can be inferred from imports into Rwanda, we should not get fixated on these figures or overstate potential resistance in CET partner countries. *If the governments of Kenya, Uganda, Tanzania, and Burundi are as concerned as the government of Rwanda about poverty and inequality, they should be as interested in lowering the tariffs on these sensitive items as the government of Rwanda.* It is worth re-stating the fact that, for example, dropping the sugar tariff will benefit the poor in Kenya as much as it will benefit the poor in Rwanda.

6. Impact of the Common External Tariff on Tariff Revenue

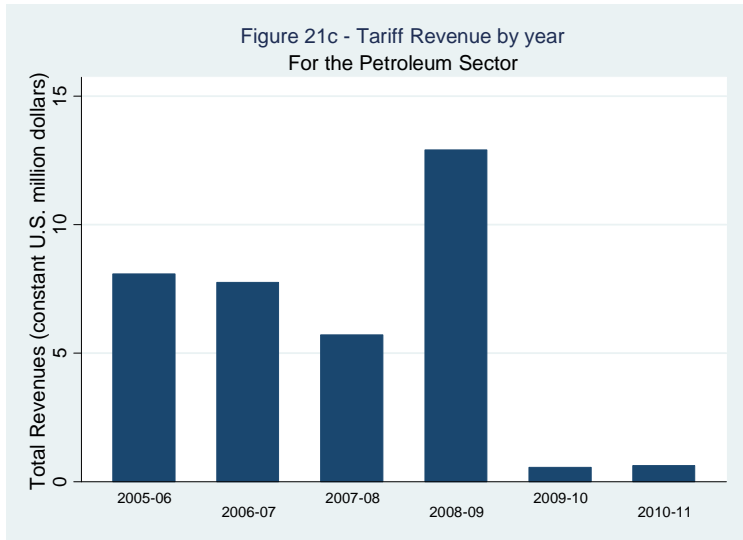
This report has outlined a number of the benefits (improved exports, improved price incentives), as well as the costs (increased prices on staple products for the poor) of the CET. An additional cost for the Rwandan government is the loss of tariff revenue that has occurred under the CET. While tariff rates have increased for some items (and dramatically so for those items on the Sensitive Items list), on the whole these items are not the largest import lines for Rwanda. As a result, the reduction in tariffs on other goods has dominated, and resulted in an overall reduction in tariff revenue as a result of the CET. In addition, the base for that tariff revenue shifted with the CET. Since tariffs are calculated on the c.i.f. values of products, which includes freight charges up to the border, the fact that the c.i.f. valuations changed with the CET changed the base upon which the tariffs (and other trade taxes: VAT, excise and WHT) are calculated. Specifically, prior to the CET, the c.i.f. values were calculated including freight up to the Rwandan border. After the CET, the c.i.f. values were calculated including freight up to the CET border—usually meaning up to the port of Mombasa or Dar es Salaam.¹⁰

The annual tariff revenue collected over the period 2005 through 2011 is highlighted in Figure 21. Here we see that tariff revenue dropped by \$37.6 million U.S. from \$74.7 million in 2008-09 (prior to the CET) to \$37.1 million U.S. in 2009-2010 (the first year of implementation of the CET). However, this was also a time of considerable economic upheaval worldwide. Some of this drop in tariff revenue was a result of reduced imports occurring despite the average drop in tariff rates. Also, part of this drop was a result of the change in the c.i.f. valuation described above. Once we factor in these other factors that might have been affecting imports (and therefore tariff revenue), in order to separate the causal impact of the CET, we find that the CET is responsible for a drop in tariff revenue for Rwanda of \$33 million. Therefore, not all of the \$37.6 million drop in tariff revenue was a result of the CET, but a major portion of it was. This loss of tariff revenue was predicted by Carrère and de Melo (2008).

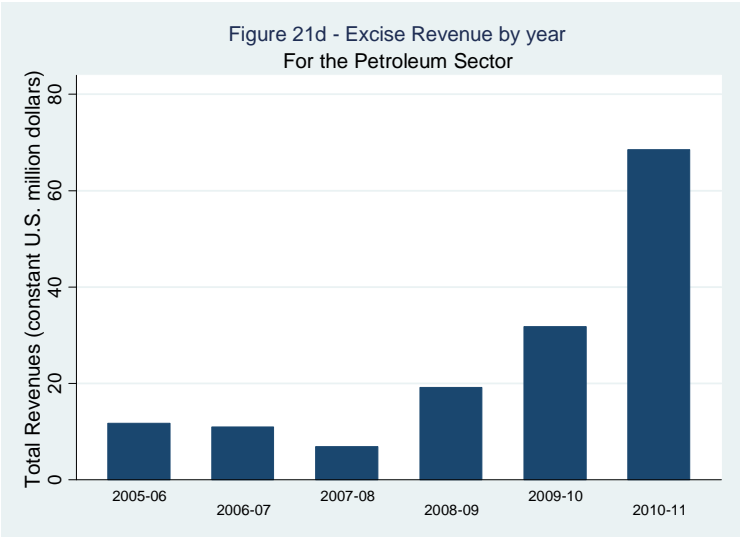
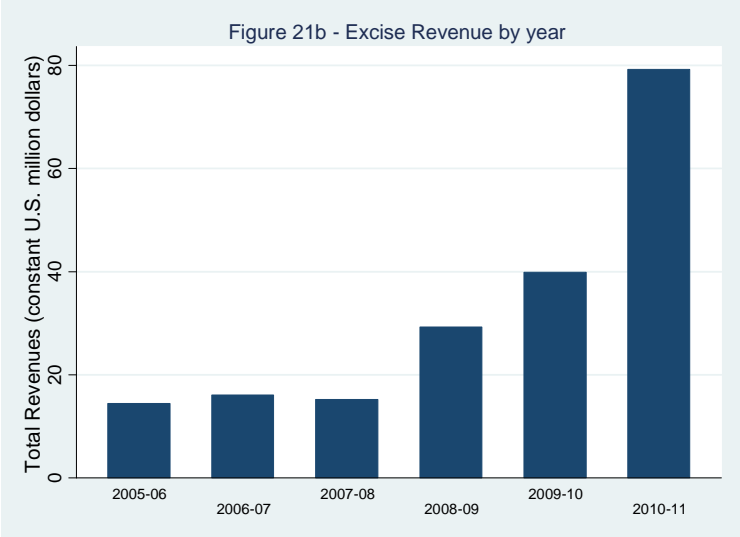
¹⁰ This reduction in freight was anticipated, and Rwanda received a compensatory payment for this from a COMESA fund, sponsored by the European Union.



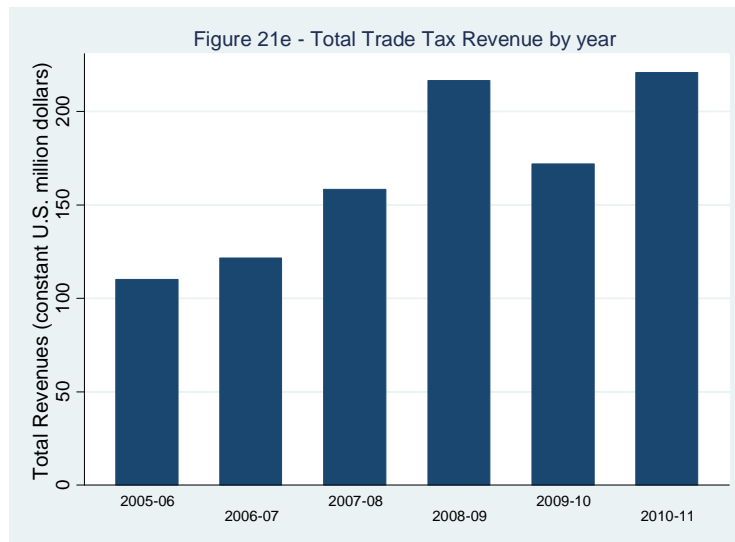
From the perspective of evaluating the impact of the CET for Rwanda, it is worthwhile to break this \$33 million reduction in revenue down into the portion that resulted from reduced tariffs on goods coming from the EAC (most of which are now imported duty-free), and the reduced tariff revenue on goods coming from outside the EAC. Of the \$33 million, \$17 million of the reduction in tariff revenue was for goods coming from the EAC (and the other \$16 million was from goods outside of the EAC). A significant portion of this revenue loss (but not all) was in the petroleum sector, as evident in Figure 21c.



Still, this revenue has not been entirely lost by the Government of Rwanda. The tariff on petroleum was replaced by an excise tax on petroleum, and this excise tax has recovered a sizeable portion, but not all, of the tariff revenue lost through the CET. The excise tax revenue collected at the border is given in Figure 21b, and the excise revenue collected for petroleum and related categories (HS 4-digit categories 27.09, 27.10 and 27.11) is given in Figure 21d.



The overall change in trade taxes (including duties, excise taxes, VAT and WHT) is provided in Figure 21e.



In short, Rwanda has certainly lost tariff revenue as a result of the implementation of the CET, although it has compensated for that tariff revenue loss, which occurred in petroleum and in other sectors, through an increase in excise revenue on petroleum that has partially compensated this loss.

7. The Tariff Rate of 25% on Finished Products

The Common External Tariff of the EAC reduced the highest normal tariff rate, the tariff rate on finished products, from 30% to 25%. It is worth examining whether this tariff rate is optimal. The first step in this evaluation is to examine the potential goals of this tariff rate.

Certainly, a significant goal of this tariff, as of all taxes, is to raise revenue. As we noticed in Figure 21, this tariff revenue is not inconsequential, on the order of 24 billion Rwandan francs. While the tariff, like most taxes, is distortionary, the question is whether it is more distortionary than other taxes that might be required to raise the funds required by government. For example, payroll taxes are likely to reduce employment in the formal sector of the economy. Corporate income taxes may reduce funds available for firms in the formal sector to reinvest in their business. Personal income taxes reduce incentives for working in the formal sector. Therefore, the benefit of a tariff must be weighed against its costs, as well as against the costs of alternative forms of taxation available.

The typical justification for an import tariff is to protect a particular sector or industry from foreign competition. This occurs as the tariff increases the domestic price of the product. This

induces domestic producers to increase their production to replace imports of the product. Of course, this occurs at the expense of domestic consumers, who must pay a higher price. Typically, this distortion is justified on a relatively short term basis, to protect an "infant industry" until this industry can either grow in size and/or efficiency to the point where it can compete successfully on the world market. The danger is that historically, "infant industries" have been typically protected for much longer than they should be. Therefore, this approach should be taken with some caution.

Tariff protection becomes a bit more complicated in the context of a customs union, like the CET. The CET jointly protects production in all members countries of the EAC, not just Rwanda. So, for Rwandan firms, it allows them to export duty-free into Kenya, Burundi, and Uganda (which was also largely possible under COMESA, but we see that tariff rates did drop below COMESA rates under the CET), and definitely lowers the duties paid on exports to Tanzania. On the other hand, it also allows EAC partner country firms to export duty-free into Rwanda, and it is not, a priori, clear whether the benefit to Rwandan firms is greater than the benefit to Tanzanian and Kenyan firms.

In short, the CET would be of considerable benefit for Rwanda if Rwanda were to become the primary hub of production for the EAC, and firms located in Rwanda to take advantage of the tariff protection offered under the CET for exporting to Kenya, Tanzania, Uganda, and Burundi. On the other hand, the CET also has the potential to have all of the costs associated with a tariff for Rwanda (particularly higher prices for consumers), with limited benefits (just tariff revenue, no producer benefit) if all of the production occurs elsewhere within the customs union (e.g. Kenya or Tanzania). Theoretically, this is a considerable concern for Rwanda given its landlocked location, smaller size, and smaller historical manufacturing base. Since both Kenya and Tanzania are larger countries, with ports, firms choosing to locate in either of these countries can serve Kenya and Tanzania with smaller transportation costs than if they are located in Rwanda. At the same time, these firms can also serve the Rwandan market tariff-free. Finally, given the ports of Mombasa and Dar es Salaam, these firms can import from and export to other international markets more efficiently than if they were located in Rwanda, where the transport costs to reach a port are sizeable, as noted in Argent (2011) and de Melo, Argent and Collinson (2011b).

As mentioned, Rwandan firms already had some protection for export to Kenya, Uganda and Burundi under COMESA, although this protection was expanded under the CET, and protection for export to Tanzania was granted under the CET. Ideally, with a full industrial census, we would be able to examine the production of different commodities by different firms within Rwanda in order to see the level of production under this protection. In the absence of this data, we can get some indirect evidence of Rwandan production, as well as some direct evidence of

Rwandan exports, by examining Rwandan exports of the goods that are protected by the highest regular tariff of 25%. Similarly, it would be helpful to know which of these categories being protected is important for EAC partners. To do this most completely, industrial censuses for Kenya, Tanzania, Uganda and Burundi would be ideal. Again, in the absence of this data, we can also get a sense of which products are most important for Rwanda's EAC partners, as well as which product lines are being used by its EAC partners for protected exports into Rwanda by examining Rwanda's record of imports from its EAC partners.

This is done in Table 4. Each product category listed in the first column contains many narrowly-defined (tariff-line or HS 8-digit) products.¹¹ Each narrowly-defined product can be classified by one of the four column headings of the table. The first column reflects those products that are both exported by Rwanda (to anywhere in the world) and those products that are imported from EAC partners into Rwanda. This category therefore reflects goods with at least some level of economic importance for both Rwanda and its EAC partner countries. The second column categorizes those products that are exported from Kenya, Tanzania, Uganda, or Burundi into Rwanda, but for which Rwanda has no exports. The third column reflects those goods that Rwanda exports to somewhere, but does not import from any of the EAC partner countries. The final column reflects goods that show no evidence of being exported either from Rwanda to anywhere in the world, or from EAC partners into Rwanda.

¹¹ Note that here we are only considering those product lines that are imported or exported into/from Rwanda at least once over the 2005-2011 period.

Table 4 - Importance of Product Categories to Rwanda and its EAC Partners - Considering All Rwandan Exports

Product Category	Fraction of Tariff Lines in the Category with Exports From			
	Both Rwanda and EAC Partners	Just EAC partners	Just Rwanda	Neither
Animal and Animal Products	0.2	0.66	0.02	0.13
Vegetable Products	0.55	0.41	0	0.04
Foodstuffs	0.46	0.47	0.01	0.05
Mineral Products	0.74	0.26	0	0
Chemicals & Allied Industries	0.51	0.48	0	0.01
Plastics/Rubbers	0.5	0.45	0.01	0.04
Raw Hides, Skins, Leather, & Fur	0.41	0.59	0	0
Wood & Wood Products	0.46	0.49	0.01	0.04
Textiles	0.15	0.75	0.01	0.1
Footwear/Headgear	0.6	0.38	0	0.02
Stone/Glass	0.25	0.6	0.03	0.11
Metals	0.44	0.55	0	0.02
Machinery/Electrical	0.51	0.43	0.01	0.05
Transportation	0.64	0.13	0.13	0.09
Miscellaneous	0.32	0.51	0.02	0.15
Overall	0.36	0.56	0.01	0.08

For each product category, the fraction of narrowly-defined (8-digit) products that fall into each of the columns is calculated and displayed in the table. Note that in this table, we have not taken into account in any way the value of exports in each product line. In many of these product lines, the trade both into and out of Rwanda is truly marginal. On the one hand, the actual values reported reflect exports rather than production, and it is not impossible that some products are produced substantially domestically, and only marginally exported. However, this is unlikely, and a more sensible approach would be to not conclude that Rwanda has a strong sector in a product line just because it has marginal exports of that product.

Therefore, an effort is made to correct for this in Table 5. Here, a product is only counted for export from Rwanda if the total value of exports over the 6 years under investigation (2005-2011) is at least 50 million Rwandan francs (roughly 9 million Rwandan francs per year). Now,

we see that roughly 30% of the narrow product lines that had seemed relevant to both EAC partner countries and Rwanda are now only relevant to the EAC partner countries (reflected in the 30% shift from the first column to the second).

Table 5 - Importance of Product Categories to Rwanda and its EAC Partners - Considering Significant Rwandan Exports

Product Category	Fraction of Tariff Lines in the Category with Exports From			
	Both Rwanda and EAC Partners	Just EAC partners	Just Rwanda	Neither
Animal and Animal Products	0.03	0.82	0	0.14
Vegetable Products	0.13	0.84	0	0.04
Foodstuffs	0.07	0.87	0	0.06
Mineral Products	0.17	0.83	0	0
Chemicals & Allied Industries	0.06	0.93	0	0.01
Plastics/Rubbers	0.09	0.87	0	0.05
Raw Hides, Skins, Leather, & Fur	0	1	0	0
Wood & Wood Products	0.03	0.93	0	0.05
Textiles	0.01	0.88	0	0.11
Footwear/Headgear	0.11	0.87	0	0.02
Stone/Glass	0.06	0.8	0.01	0.13
Metals	0.08	0.9	0	0.02
Machinery/Electrical	0.05	0.89	0	0.06
Transportation	0.3	0.47	0	0.23
Miscellaneous	0.04	0.79	0	0.16
Total	0.06	0.86	0	0.09

From a policy perspective, however, if Rwanda is already achieving exports in a product line to countries that are external to the EAC, then it is likely to already be overcoming transportation and possibly tariff barriers to achieve these exports. These product lines are less likely to be in need of protection, even if that protection is advantageous. Consider, instead, products that are being exported to partner EAC countries, for example Tanzania. These products are experiencing genuine protection in the Tanzanian market, since they are duty-free exports, but global imports into Tanzania still face the CET. A plausible case could also be made that Rwandan firms are first expanding exports into its EAC partners before expanding their exports

globally, perhaps with quality upgrading. Therefore, a more interesting taxonomy is that given in Table 6, which provides the same classification as the previous tables. However, now only those products that are exported in the amount of at least 50 million Rwandan francs total over 6 years (globally), but are also exported from Rwanda into the EAC are considered. Here, we see that the fraction of narrow product categories that are jointly of interest to both Rwanda and EAC partners drops further from 0.06 to 0.04.

Table 6 - Importance of Product Categories to Rwanda and its EAC Partners - Considering Significant Rwandan Exports to EAC partners

Product Category	Fraction of Tariff Lines in the Category with Exports From			
	Both Rwanda- EAC and EAC- Rwanda	Just EAC- Rwanda	Just Rwanda- EAC	Neither
Animal and Animal Products	0.02	0.84	0	0.14
Vegetable Products	0.12	0.85	0	0.04
Foodstuffs	0.05	0.88	0	0.06
Mineral Products	0.13	0.87	0	0
Chemicals & Allied Industries	0.06	0.93	0	0.01
Plastics/Rubbers	0.09	0.87	0	0.05
Raw Hides, Skins, Leather, & Fur	0	1	0	0
Wood & Wood Products	0.01	0.95	0	0.05
Textiles	0.01	0.88	0	0.11
Footwear/Headgear	0.09	0.89	0	0.02
Stone/Glass	0.02	0.84	0	0.14
Metals	0.07	0.91	0	0.02
Machinery/Electrical	0.03	0.91	0	0.06
Transportation	0.28	0.49	0	0.23
Miscellaneous	0.03	0.8	0	0.16
Total	0.04	0.87	0	0.09

Nevertheless, these product categories could potentially be reflecting some key industries that are worth protecting. Therefore, it is worth disaggregating this table a bit further. This is done in Table 7, which is identical to Table 6 in terms of categorization, but aggregates product categories to a more disaggregated (2-digit) level.

Table 7 - Importance of Product Categories to Rwanda and its EAC Partners - Considering Significant Rwandan Exports to EAC partners

Product Category	Fraction of Tariff Lines in the Category with Exports From			
	Both Rwanda-EAC and EAC-Rwanda	Just EAC-Rwanda	Just Rwanda-EAC	Neither
Live animals	0.14	0.71	0	0.14
Meat and edible meat offal	0	0.78	0	0.22
Fish and sea creatures	0.02	0.87	0	0.12
Dairy produce; birds eggs; natur	0	1	0	0
Products of animal origin, n.e.s	0	0.71	0	0.29
Live trees and plants; bulbs, ro	0	0.86	0	0.14
Edible vegetables and certain ro	0.2	0.77	0	0.03
Edible fruit and nuts; peel of c	0.02	0.94	0	0.04
Coffee, tea, maté and spices	0.24	0.68	0	0.08
Cereals	0.08	0.92	0	0
Products of the milling industry	0.05	0.95	0	0
Animal or vegetable fats and oil	0	1	0	0
Preparations of meat, of fish or	0	0.75	0	0.25
Sugars and sugar confectionery	0	0.92	0	0.08
Cocoa and cocoa preparations	0	1	0	0
Preparations of cereals, flour,	0	1	0	0
Preparations of vegetables, fruit	0.03	0.95	0	0.02
Miscellaneous edible preparation	0.1	0.9	0	0
Beverages, spirits and vinegar	0.17	0.77	0	0.07
Tobacco and manufactured tobacco	0.13	0.75	0	0.13
Salt; sulfur; earths and stone;	0.11	0.89	0	0
Mineral fuels, mineral oils; bit	0.14	0.86	0	0
Inorganic chemicals; org. or ino	0	1	0	0
Pharmaceutical products	0	1	0	0
Tanning or dyeing extracts; dyes	0	1	0	0
Essential oils and resinoids; pe	0.13	0.87	0	0
Soaps, lubricants; waxes; candle	0.07	0.93	0	0
Albuminoidal substances; modifie	0	1	0	0
Explosives; pyro. products; matc	0	1	0	0
Miscellaneous chemical products	0	0.88	0	0.13
Plastics and articles thereof	0.09	0.87	0	0.04
Rubber and articles thereof	0.08	0.85	0	0.08
Leather articles; saddlery and h	0	1	0	0
Furskins and artificial fur; man	0	1	0	0
Wood and articles of wood; wood	0.02	0.93	0	0.04
Manufactures of straw or similar	0	0.9	0	0.1
Paper and paperboard; articles o	0	0.96	0	0.04

Books, newspapers, pictures and	0	1	0	0
Silk	0	1	0	0
Wool, fine or coarse animal hair	0	0.78	0	0.22
Cotton	0	0.87	0	0.13
Other vegetable textile fibers;	0	1	0	0
Man-made filaments	0	0.9	0	0.1
Man-made staple fibers	0.01	0.68	0.01	0.3
Wadding, felt and nonwovens; spe	0	0.92	0	0.08
Carpets and other textile floor	0	0.79	0	0.21
Special woven fabrics; tufted te	0	0.9	0	0.1
Impregnated, coated, covered or	0	0.89	0	0.11
Knitted or crocheted fabrics	0	0.73	0	0.27
Articles of apparel and clothing	0	0.98	0	0.02
Articles of apparel and clothing	0	0.99	0	0.01
Other made up textile articles;	0.09	0.91	0	0
Footwear, gaiters and the like;	0.18	0.82	0	0
Headgear and parts thereof	0	1	0	0
Umbrellas, sun umbrellas, walkin	0	1	0	0
Prepared feathers and down and a	0	0.9	0	0.1
Articles of stone, plaster, ceme	0.03	0.87	0	0.1
Ceramic products	0	0.95	0	0.05
Glass and glassware	0.04	0.92	0	0.04
Pearls, precious stones, metals	0.02	0.7	0	0.28
Iron and steel	0.17	0.83	0	0
Articles of iron or steel	0.08	0.9	0	0.03
Copper and articles thereof	0	0.93	0	0.07
Nickel and articles thereof	0	1	0	0
Aluminum and articles thereof	0.09	0.91	0	0
Tools, implements, cutlery, spoo	0	1	0	0
Miscellaneous articles of base m	0	1	0	0
Nuclear reactors, boilers, machi	0	1	0	0
Electrical machinery and equip.;	0.04	0.88	0	0.08
Vehicles other than railway or t	0.31	0.49	0	0.2
Ships, boats and floating struct	0	0.5	0	0.5
Optical, photo., cinem., measuri	0	0.78	0.11	0.11
Clocks and watches and parts the	0	0.79	0	0.21
Arms and ammunition; parts and a	0	0.13	0	0.88
Furniture; bedding; lamps and li	0.09	0.83	0	0.08
Toys, games and sports requisite	0	0.93	0	0.07
Miscellaneous manufactured artic	0.02	0.98	0	0
Works of art, collectors' pieces	0.2	0.7	0	0.1
Total	0.04	0.87	0	0.09

Finally, Table 8 examines first the products in the above table for which there are exports totalling \$1 million or more over the 6 years from 2005-11 (roughly \$170 000 U.S. per year).

Table 8 - Product Categories with Tariff Rate of 25% with Sizeable Exports and Exports to EAC

HS-2 digit code	Product Category	Total Exports 2005-11 (\$U.S. million)
1	Live Animals	12.1
7	Edible vegetables	11.3
9	Coffee, tea, mate and spices	370.0
11	Products of the milling industry	1.0
22	Beverages spirits and vinegar	12.7
25	Salt; sulfur; earths and stone; plastering materials, lime and cement	5.0
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	1.1
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	4.7
39	Plastics and articles thereof	3.9
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags	1.9
64	Footwear, gaiters and the like; parts of such articles	8.5
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewelry; coin	2.8
72	Iron and steel	2.7
73	Articles of iron or steel	2.2
76	Aluminum and articles thereof	2.4
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	2.0
87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	24.0
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated sign illuminated nameplates and the like; prefabricated buildings	1.6
95	Toys, games and sports requisites; parts and accessories thereof	1.2
97	Works of art, collectors' pieces and antiques	2.9

As outlined in the appendix, a few of these industries (e.g. plastics, cement, iron bars) involve Rwandan niche industries that are serving the regional market. These industries would be less protected with a further reduction in the CET. In a few other industries (e.g. apparel, footwear), we highlight potential independent arguments for protecting the industries in the short-term that may be in the interests of all EAC member countries. However, in many of the other industries (e.g. the entire agricultural sector), it is much more difficult to justify the protection. Moreover, the products listed in Table 8, and their more narrow sub-categories of products listed in Appendix Table A1, are a very small fraction of the overall list of products in Table 8 and 9 that are protected by the CET. Therefore, overall, Rwanda's partner countries are experiencing greater protection of their industries, partly at the expense of Rwandan consumers.

Therefore, in principle, lowering the CET for finished products from the current tariff rate of 25% would seem to harm relatively little Rwandan production, while it would benefit Rwandan consumers.

One way in which this could happen in a balanced way that could potentially benefit select Rwandan industries in the short term would be the following.

Recommendation:

1) Work to lower the highest normal CET tariff rate from the current level of 25% to 20%.

2) At the same time, Rwanda should push for a redefinition of the "Sensitive Items" (SI) List, so that the tariff rate for Sensitive Items is 25%. Moreover, given the recommendation above, the tariff category of 25% should be restricted to only include a very limited number of categories. This could include product categories that are currently on the SI List or other products.¹²

In short, if the Sensitive Items list is kept, stronger limits on the inclusion of items on the SI List should be created. Currently, there is a very long list of items receiving 25% or greater protection. Most of these product categories benefit the larger countries, particularly Kenya and Tanzanian industries, at the expense of consumers in all five countries. In future, the SI List should be more balanced in its reflection of the priorities of EAC-member nations. This will

¹² There are a couple of ways that a limited list could be created. One way would be to allow each country to place a limited number of products on the SI List (say 4 product categories at the 4-digit level). In addition, countries would be able to unanimously agree to add additional items to the list. For example, maintaining used-clothing imports on the SI List might be in the interest of all countries, and so it could be added outside of the 4-product quota. Another way to keep the number of items on the list limited would be through a series of criteria that a product must meet before it qualifies for the SI List, but that may be bureaucratically more difficult. Given the current information on Rwandan exports in the appendix, Rwanda might choose to include footwear categories, perhaps cement, and perhaps some plastics categories on its products allowed on the SI List.

serve to benefit Rwandan consumers, while still maintaining protection of Rwandan industries, of a limited degree (25% rather than up to 100%), and for a limited time, in a few key sectors.

One caveat should be noted. While Rwanda is likely to benefit from the reduction of the CET from 25% to 20%, clearly this type of tariff reduction is part of the EPA negotiations underway with Europe. Currently, the EAC has negotiated an extremely long timeframe for tariff elimination. It would be helpful from Rwanda's perspective to speed up that timeline. However, it would benefit all EAC partners (and similarly for other African countries involved in separate EPA negotiations) if trade concessions with Europe could be negotiated as part of the tariff elimination negotiations. One such concession would be the facilitation of labour exchanges between African countries and Europe. Not only has personal foreign experience been found to be crucial to entrepreneurial export creation, but it should be expected to create knowledge spillovers within domestic industry as well. Naturally, a key challenge would need to be to guarantee the return of workers to the African countries at the end of the exchanges, but this could be enforced either by retained wages payable after return, or other mechanisms. Regardless, what is clear from the current studies is creative approaches to trade negotiations with Europe and other developed countries may be what is needed at present.

8. Some Other Comments

The primary goal of this report is to evaluate the implementation of the CET, based on the evidence available from the first two years of implementation of the CET. Nevertheless, I am going to take this opportunity to offer a few additional comments in this section from my experience as a student of trade and development in the African context.

It is worth (re-)stating a couple of facts that are well known by the Rwandan government and all analysts of Rwanda's trade. While the trade costs imposed on importers, exporters, and domestic consumers by the tariffs of the CET remain significant, these costs are small relative to the transport and non-tariff barrier costs experienced by Rwanda (Argent, IGC, 2011; de Melo et. al., 2011b). These costs primarily reflect the infrastructure challenges that Rwanda faces as a landlocked nation without a major railway to the coast. Naturally, the Rwandan government's efforts toward constructing a railway link to the coast would reduce trade costs much more substantially than reduced tariffs. The design of finance and management for such a railway is discussed in Collier (2011). A railway would also technologically remove (at least for rail exports) a number of the non-tariff measures such as weigh stations, check points, and axle regulations that affect Rwanda's exports, and work to addressing a major restriction to Rwanda's exports highlighted by Freund and Rocha (2011), namely the direct and indirect costs of inland transport. That being said, a railway is undoubtedly a massive, long-term project. In the short to

medium-term, the priority has to be improvement of the road transport to the ports, and removal of the non-tariff measures that restrict that transport.

Finally, while efforts should certainly continue to reduce both transport and tariff costs of trade, Rwanda should also continue its strategy of expanding service exports. Rwanda's inland geography is likely to give it a comparative advantage in service exports over commodity exports for quite some time. In addition, Rwanda recent shift to the promotion of English provides it with an almost unique position in Africa to provide certain bilingual service exports. As a result, Rwanda should seek to build its bilingual (French/English) capacity to strengthen this comparative advantage. This is fully consistent with the Rwandan government's efforts to market the nation as an honest nation, open for business, and free from corruption. This image partners well with a bilingual capacity to enable Rwanda to market itself as an honest broker and gateway for the world in terms of doing business with both anglophone and francophone Africa, which should both be among the dynamic growth poles of the world in the decades to come.

9. Overall Summary:

Rwanda has made significant progress thus far in terms of its trade policy. The average reductions in tariffs that have come with the implementation of the Common External Tariff have certainly contributed to the recent growth in Rwanda. To this point, we note that the reductions of tariffs on imported inputs have improved the price incentives for exporters, and induced at least a moderate increase in exports. There is no reason to suspect that a further average decrease in tariffs on imported inputs could not further stimulate exports.

However, an even higher priority for the Rwandan government has to be the removal of the items on the Sensitive Items List. The increased prices caused by tariffs on the Sensitive Items list fall disproportionately on the poor. As a result, at the same time that tariffs were dropping overall in Rwanda, tariffs on the items purchased by low-income households were rising, putting a strain on these households' budgets. In addition, the extremely high (100%) tariff on sugar not only impacts the welfare of poor households. Sugar is also a significant component of food manufacturing, and so this tariff also places a burden on food manufacturers.

The advantage of both of the points listed above is that there is no reason to believe that the situation is unique to Rwanda in the context of the East African Community. Poor households in each of Kenya, Tanzania, Uganda and Burundi should all be disproportionately affected by the high tariffs on the SI list. Therefore, if the Kenyan, Tanzanian, Ugandan and Burundi governments are concerned about inequality, and hopefully they are, then they should also be concerned about the high tariffs on the SI list.

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Appendix A - Sensitive Items (SI) List

10.05 Maize (corn).

1005.90.00 - Other kg 50%

24.02 Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes.

2402.20.10 ---Of length not exceeding 72 mm in length including the filter tip mil. 35%

2402.20.90 --- Other mil. 35%

2403.10.00 - Smoking tobacco, whether or not containing tobacco substitutes in any proportionkg 35%

25.23 Portland cement, aluminous cement, slag cement, supersulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers.

2523.10.00 - Cement clinkers kg 10%

- Portland cement :

2523.21.00 -- White cement, whether or not artificially coloured kg 25%

2523.29.00 -- Other kg 55%²

² Rates to be reduced from 55% to 35% over a period of four years at an annual rate of 5%.

36.05 3605.00.00 Matches, other than pyrotechnic articles of heading 36.04. kg 35%

85.06 Primary cells and primary batteries.

8506.10.00 - Manganese dioxide u 35%

8506.30.00 - Mercuric oxide u 35%

8506.40.00 - Silver oxide u 35%

8506.50.00 - Lithium u 35%

8506.60.00 - Air-zinc u 35%

8506.80.00 - Other primary cells and primary batteries u 35%

83.09 Stoppers, caps and lids (including crown corks, screw caps and pouring stoppers), capsules for bottles, threaded bungs, bung covers, seals and other packing accessories, of base metal.

8309.10.00 - Crown corks kg 40%

52.08 Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing not more than 200 g/m².

-- Plain weave, weighing not more than 100g/m² :

5208.51.10 --- Khanga, Kikoi and Kitenge kg 50%³

-- Plain weave, weighing more than 100 g/m² :

5208.52.10 --- Khanga, Kikoi and Kitenge kg 50%

52.09 Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing more than 200 g/m².

-- Plain weave:

5209.51.10 --- Khanga, Kikoi and Kitenge kg 50%

52.10 Woven fabrics of cotton, containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing not more than 200 g/m².

-- Plain weave:

5210.51.10 --- Khanga, Kikoi and Kitenge kg 50%

52.11 Woven fabrics of cotton, containing less than 85% by weight of cotton, mixed mainly or solely with man-made fibres, weighing more than 200 g/m².

-- Plain weave:
5211.51.10 --- Khanga, Kikoi and Kitenge kg 50%

52.12 Other woven fabrics of cotton.

- Weighing not more than 200 g/m² :
-- Printed:
5212.15.10 --- Khanga, Kikoi and Kitenge kg 50%
- Weighing more than 200 g/m² :
-- Printed:
5212.25.10 --- Khanga, Kikoi and Kitenge kg 50%

55.13 Woven fabrics of synthetic staple fibres, containing less than 85 % by weight of such fibres, mixed mainly or solely with cotton, of a weight not exceeding 170 g/m².

- Printed :
-- Of polyester staple fibres, plain weave:
5513.41.10 --- Khanga, Kikoi and Kitenge kg 50%

55.14 Woven fabrics of synthetic staple fibres, containing less than 85% by weight of such fibres, mixed mainly or solely with cotton, of a weight exceeding 170 g/m².

- Printed :
-- Of polyester staple fibres, plain weave:
5514.41.10 --- Khanga, Kikoi and Kitenge kg 50%

62.11 Track suits, ski suits and swimwear; other garments.

-- Of cotton:
6211.42.10 --- Khanga, Kikoi and Kitenge u 50%
-- Of man-made fibres:
6211.43.10 --- Khanga, Kikoi and Kitenge u 50%
-- Of other textile materials:
6211.49.10 --- Khanga, Kikoi and Kitenge u 50%

63.02 Bed linen, table linen, toilet linen and kitchen linen.

- Other bed linen, printed :
6302.21.00 -- Of cotton kg 50%
- Other bed linen :
6302.31.00 -- Of cotton kg 50%
- Other table linen :
6302.51.00 -- Of cotton kg 50%
- Other :
6302.91.00 -- Of cotton kg 50%

63.09 6309.00.00 Worn clothing and other worn articles. kg US\$0.75
per kg
or 50%
whichever is
higher

04.01 Milk and cream, not concentrated nor containing added sugar or other sweetening matter.

0401.10.00 - Of a fat content, by weight, not exceeding 1% kg 60%
0401.20.00 - Of a fat content, by weight, exceeding 1% but not exceeding 6%
kg 60%
0401.30.00 - Of a fat content, by weight, exceeding 6% kg 60%

04.02 Milk and cream, concentrated or containing added sugar or other sweetening matter.

0402.10.00 - In powder, granules or other solid forms, of a fat content, by weight, not exceeding 1.5%

kg 60%
- In powder, granules or other solid forms, of a fat content,
by weight, exceeding 1.5% :
-- Not containing added sugar or other sweetening matter:
0402.21.10 --- Specially prepared for infants kg 60%
0402.21.90 --- Other kg 60%
-- Other:
0402.29.10 --- Specially prepared for infants kg 60%
0402.29.90 --- Other kg 60%
- Other :
-- Not containing added sugar or other sweetening matter
0402.91.10 --- Specially prepared for infants kg 60%
0402.91.90 --- Other kg 60%
-- Other:
0402.99.10 --- Specially prepared for infants kg 60%
0402.99.90 --- Other kg 60%

11.01 1101.00.00 Wheat or meslin flour. kg 60%

17.01 Cane or beet sugar and chemically pure sucrose, in solid form.

- Raw sugar not containing added flavouring or colouring matter :
-- Cane sugar:
1701.11.10 --- Jaggery kg 35%
1701.11.90 --- Other kg 100%
-- Beet sugar:
1701.12.10 --- Jaggery kg 35%
1701.12.90 --- Other kg 100%
- Other :
1701.91.00 -- Containing added flavouring or colouring matter kg 100%
-- Other:
1701.99.10 --- Sugar for industrial use kg 100%
1701.99.90 --- Other kg 100%

Appendix Table 1 - EAC Exports protected by the 25% Tariff Rate

<i>HS 2-digit Category</i>	<i>Description of the primary exports that Rwanda exports (to anywhere) within that category</i>
1	A variety of types of live animals
9	Coffee and black tea
22	Sparkling wine in 2008-09; Beer and non-alcoholic beverages both before and after the CET
25	Almost entirely cement
27	Gasoline; jet fuel; motor spirit; kerosene;
33	Beauty, make-up, skin-care (including suntan lotion); Other preparations for use on hair; Powders whether or not compressed
39	Boxes, cases, crates and similar articles; office or school supplies; Plastic reservoirs, tanks, vats and similar containers; Other tubes, pipes and hoses
63	Almost entirely used/worn clothing
64	A variety of types of footwear
71	Other waste of precious metal (excluding waste of gold and platinum); Other unwrought gold
72	Waste and scrap of cast iron; Waste and scrap of alloy steel; Flat-rolled iron/steel width 600mm, otherwise plated; Variety of types of steel, some plated, some not
73	Iron or steel reservoirs, tanks, vats and similar containers; Towers and lattice masts; Other products are fairly random--tubes, rivets, structures
76	Plates of aluminum alloys (1.9 million in 2009-10), Plates of aluminum alloys (100000 in 2010-11); Bars, rods, and profiles of aluminum alloys, table kitchen articles, etc. all less than \$100000
85	Generating sets with compression-ignition engines; Parts of fax machines and teleprinters; Other apparatus for transmission of voice
87	Aside from a tank shipment in 2008-09 and another one in 2010-11, mostly cars, but some trucks and vehicles for carrying passengers
94	Various types of furniture
95	No category over 100000 since 2007.
97	Collages and similar decorative plaques, executed entirely by hand; Original sculptures and statuary, in any material--although this category is dropping

The first four categories in Table 8 involve agricultural products. These are difficult to justify protecting, as agricultural products have clearly dominated Rwanda's exports historically. Code 22 products include primarily beer, as well as non-alcoholic beverages both before and after the introduction of the CET. These exports are unlikely to require protection. Category 25 consists overwhelmingly of cement. A case might (?) be made for protecting Rwanda's cement industry for a medium-term period, while it establishes itself more substantially in the regional market,

but then this tariff rate should be reduced.

Category 27 consists of gasoline, jet fuel, kerosene, and motor spirits. In the absence of a refinery in Rwanda, these are all re-exports, and protection does not benefit Rwanda.

Category 33 consists of some cosmetic, hair, and skin-care products.

Category 39 consists of a variety of plastics manufactures from Rwanda. A case could be made for continuing to protect this industry for a short period of time until it has a larger foothold in the regional market, particularly if this industry can be pushed to upgrade its product quality for more significant export.

Category 63 consists of used clothing. In other research (Frazer, 2008), I have demonstrated the impact of these imports on local apparel production, and so I am supportive of a decision to maintain a high tariff rate in this sector.

Category 64 consists of a variety of types of footwear. It might well be in the interests of all of East Africa to protect this sector *for a period* of time, while trying to promote exports in this sector. As demonstrated in Frazer (2008), all of the countries of the world that are currently developed have had a significant fraction of their workforce in apparel and footwear production, with that employment level peaking at a per capita income level of about \$12 500 (roughly 10 times that of Rwanda). For example, apparel and footwear were stepping stones for all East Asian countries as they worked their way up the manufacturing sophistication ladder. It would not be unthinkable to shield the apparel and footwear sectors, but this must be time-limited.

In Category 72, while waste and scrap iron or steel is not a type of value-added worth protecting, steel and iron bars manufactured in Rwanda could be protected while they get a foothold in the East African market. This is also true of the iron and steel containers of Category 73, and the aluminum plates of Category 76.

In Category 85, I do not believe that most of the manufacturing is genuinely domestic. Electrical generators were dominant in this category.

Category 87 consists largely of cars and trucks. As noted in the previous section, maintaining high tariffs in this area reduces inequality in Rwanda, but given the importance of these vehicles to industry, that is unlikely to be a strong case for maintaining high tariffs in this industry over the long term, particularly in the absence of true domestic production.

Category 94 consists of furniture. There is substantial manufacturing in this area. If this area is

liberalized, it should be performed in stages, as this is an area of significant employment.