

Regional Integration, Sustainable Development and Global Value Chains in Southern Africa¹

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Table of contents

1. INTRODUCTION	1
2. THE THEORY AND PRACTICE OF REGIONAL INTEGRATION	1
2.1 Convergence and Divergence	2
2.2 Lessons from Other Regions	3
3. SOUTHERN AFRICA: TYPES OF VALUE CHAIN DEVELOPMENT	4
3.1 Upgrading Opportunities in Value Chains	4
3.2 Identifying Types of Intra-Regional Value Chains	5
3.3 Exploring Developmental Aspects of Intra-regional Value Chains	5
3.4 Micro Foundations and Types of Value Chain	6
3.5 Achievement of Structural Economic Transformation	7
4. CONCLUDING REMARKS	14
REFERENCES	15

List of figures

Figure 1. Intra-regional exports as a percent of total	4
Figure 2. Intra-regional exports by regional economic community (%)	4
Figure 3. Relative productivity and changes in employment in South Africa	9
Figure 4. Sectoral productivity gaps in South Africa, 2013	9
Figure 5. Relative productivity and changes in employment in Botswana	10
Figure 6. Sectoral productivity gaps in Botswana, 2013	10
Figure 7. Relative productivity and changes in employment in Namibia	11
Figure 8. Sectoral productivity gaps in Namibia, 2013	11
Figure 9. Relative productivity and changes in employment in Lesotho, 2013	12
Figure 10. Sectoral productivity gaps in Lesotho, 2013	12
Figure 11. Relative productivity and changes in employment in Swaziland	13
Figure 12. Sectoral productivity gaps in Swaziland, 2013	13

Abbreviations

AfT	Aid for Trade
GVC	Global Value Chain
ISIC	International Standard Industrial Classification
NTB	Non-Tariff Barrier
NTM	Non-Tariff Measure
RTA	Regional Trade Agreement
SACU	Southern African Customs Union
SADC	Southern African Development Community
UNECA	United Nations Economic Commission for Africa

1. INTRODUCTION

Any trade policy change creates winners and losers, which motivates governments to intervene. Tensions between economic and social objectives assume a particular importance in view of sustainable development objectives. Hence increasingly more dynamic capability approaches towards managing regional integration processes are emphasized by the United Nations Economic Commission for Africa (UNECA, 2014). Unfortunately, the data to underpin decision making and development of governance capabilities at this level are often lacking. These important knowledge gaps are increasingly being recognized, not least in view of the broader post-2015 agenda.

In this think-piece we first discuss the theory and practice of regional integration. We then describe how approaches have developed in view of the ascendancy of global value chains (GVCs). Finally, we focus on Southern Africa and the emerging literature on regional value chains and integration efforts. We argue that the choice should not be between fostering global or regional value chains, but rather that both approaches should be considered strategically in the pursuance of sustainable development objectives. Leveraging regional integration should provide a platform for both, which are likely to differ in terms of resultant growth and poverty effects. In order to do this effectively, policy makers need to be equipped with adequate data and donors need to be mindful of potential tensions between actors, over and above those that can exist in view of broader sustainable development initiatives.

2. THE THEORY AND PRACTICE OF REGIONAL INTEGRATION

The literature on regional integration dates back at least to Viner (1950), who suggested that the effects of regional integration on trade can be either trade creating or trade diverting. Like any form of liberalization, one intended effect of a regional trade agreement (RTA) is to allow the more efficient producers in the region to expand production (and reap economies of scale) to the advantage of consumers and the detriment of less competitive producers. This is called trade creation.

Trade diversion occurs when the removal of tariffs within the region leads to goods that were previously imported from outside (from the cheapest global source) being replaced by more expensive goods produced inside the region which can be sold for less because they no longer have to pay any import duty. Consumers still gain, although by less, but governments lose more in tariff revenue and the country as a whole is able to obtain fewer imports for a given value of exports.

Beyond these direct trade effects, there are other important roles that closer regional integration and cooperation can play. Regions can better support the provision of, for example, public goods; this includes "hard" infrastructure, such as roads, energy and the physical networks required to support trade, as well as "soft" infrastructure, such as institutions, related to the governance of trade. Many competitiveness challenges are regional in nature. For example, a landlocked country is dependent on the appropriate infrastructure being available in transit countries for its trade flows. National development programmes will not normally consider activities with strong regional (or international) externalities as the benefits cannot be fully appropriated nationally.

There is an important role for aid for trade (Aft) and other Overseas Development Assistance (ODA) to advance regional integration. Some of the main advantages of regional approaches to Aft disbursements include those related to economies of scale and scope: the ability to leverage large-scale investments in hard infrastructure, and benefit from economies of scope in relation to disbursement mechanisms at the regional level. Regional forms of disbursement are often considered an effective vehicle for hard infrastructure investments. This is because of the public good element of

such investments and resultant positive externalities which can operate as network effects; since the value of an investment increases with the numbers using it, there may also be spatial redistributive effects. Because of these positive externalities, regional investments in infrastructure are important for small landlocked and island economies.

Of course, regional corridor approaches can also help to reduce transaction costs for donors through economies of scale and the pooling of scarce resources. However, there remain some very real challenges in terms of developing appropriate monitoring and evaluation frameworks at the country level. These challenges are part of a much bigger problem though: a lack of monitoring frameworks linked to trade impact assessments more broadly. Social accounting matrices underpinning trade impact assessments are absent in many developing countries and environmental indicators remain weakly defined.

Because of these knowledge gaps, it is fair to say that challenges related to country-specific AfT evaluations may become amplified at the regional level. Although the economic rationale for regional AfT mechanisms to reduce trade costs is often clearly articulated, there are some conceptual difficulties given the very real forces of convergence and divergence which operate in view of economic geography considerations. These issues should not be shied away from, as in fact they assume a particular importance in view of the practical realities of AfT disbursement, including at the regional level.

2.1 Convergence and Divergence

The literature on regional integration and trade has been informed by new developments within economic theory which recognises how forces of convergence and divergence which can affect welfare gains over time. The model developed by Venables (2003) includes some aspects of new trade theory such as the recognition of forces – for example agglomeration effects – that may foster economic convergence as well as divergence. This leads to the question as to what compensatory mechanisms may be required to manage the distribution of gains among RTA members, where weaker economies are likely to lose (e.g. greater cooperation in services, transit trade, investment, and regional infrastructure development).

The creation of a customs union between two low-income countries with a similar comparative advantage (and therefore similar factor endowments) may lead not only to trade diversion but also to greater economic divergence. Although the inclusion of countries with vastly different *static* comparative advantages may help to promote more economic convergence than divergence, the gains may still be disproportionate.²

The process of fostering closer regional integration entails developing new policy tools. These include regional non-tariff measures (NTMs) to increase intra-regional trade flows, such as harmonized standards, as well as rules of origin which are required to avoid trade deflection. Some NTMs may reflect legitimate public health concerns, others more strategic regional or national developmental objectives. The challenge is to ensure that these types of NTM are not unnecessarily trade restrictive and so do not become non-tariff barriers (NTBs).

“New” regionalism moves beyond static trade creation benefits and emphasizes the potential dynamic trade and welfare gains from reductions in administration, transaction costs and the elimination and/or harmonization of other types of NTB. The reduction of NTBs and harmonization of NTMs such as standards and customs clearance procedures constitutes a deeper form of integration, with the potential for more dynamic gains in terms of trade creation if harnessed correctly. In Africa, there is growing recognition that the barriers to intra-regional trade are less to do with tariffs and regulatory constraints, but infrastructure and undiversified production structures. This broader regional integration approach with its three pillars – market integration, infrastructure and industrial

development (linked to structural transformation) - is today often referred to as “developmental integration” and provides the foundation to strengthen Africa’s competitiveness in the 21st century.

In sum, there are many different pathways through which closer regional integration and the formation of a free trade area can affect intra- and extra-regional trade. Hence, different approaches across regions are apparent, and these have begun to adapt to the ascendancy of GVCs – as we discuss below.

2.2 Lessons from Other Regions

Strong statements are made regarding the relationship between GVCs and regional integration in some regions. For example, Humphrey and Memedovic (2003) find the emergence of regional production systems in the automotive industry itself *resulted in* regional integration.³ They make reference to these processes as driving regional integration in the Triad regions: North America, the European Union (EU) and Japan. These processes can be seen to continue with a self-reinforcing dynamic, as most trade in value added remains within these regions, which are known as the main hubs of global manufacturing activity (Baldwin, 2012).

In the case of Latin America, and in particular Mercosur, Ciravegna (2003) finds that both regional and global value chain integration seem to have provided positive stimuli for product and process upgrading. As predicted by the GVC governance framework, inserting a production unit into a global chain introduces pressures to upgrade. However, the negative implications of this that may typically arise did not manifest themselves. The hierarchical structure of GVC governance was mediated, and the headquarter firms did not absorb more links of the value chain. In view of the Mercosur treaties, a concerted effort was made to ensure that Brazilian automotive plants acquired certain links of the chain, such as product development, and some decisional autonomy. This study therefore highlights the importance of regional integration and interventions that can be designed at this level.

It is well known that the history of European regional integration was driven by a single industry: coal and steel. This sector is not conventionally understood to be as “dynamic” as, for example, light manufacturing. But it clearly is the more additive value chain type discussed in detail by Kaplinsky and Morris (2014), for which productive sector policies including the development of linkages assume a particular importance.

In comparison, open regionalism in Asia was very much driven by the trade within the regional economic communities of intermediate goods, without the use of regional apparatus such as free trade agreements or customs unions. This region is conventionally understood to specialize in the more vertically fragmented type of value chain, driven by the private sector. This involved the use of more bottom-up initiatives that first defined, and then focused on, the removal of barriers for priority products that mattered for regional production networks and GVC integration.

The new evidence on GVC participation in the South African region, as elaborated upon by African Development Bank (AfDB) et al. (2014), suggests that South Africa is a key driver of regional value chains, both as a supplier of inputs and as a destination market for exports. But we don’t know much about the nature of integration of other economies within the Southern African Customs Union (SACU) or the types of product traded.² Recent data shows an increase in intra-regional exports as a share of total exports for sub-Saharan Africa in recent years (Figure 1). We can also see that Southern African Development Community (SADC) intra-regional exports as a proportion of total exports have also outpaced those of other regions in most recent years and particularly since the global financial crisis (Figure 2). Despite these trends, which do suggest some room for optimism, we have very little

² Only recently have intra-SACU trade stats been released.

information on the relative merits of intra- and extra-regional trade in Southern Africa. We intend to shed further light on these aspects in the following sections.

Figure 1. Intra-regional exports as a percent of total

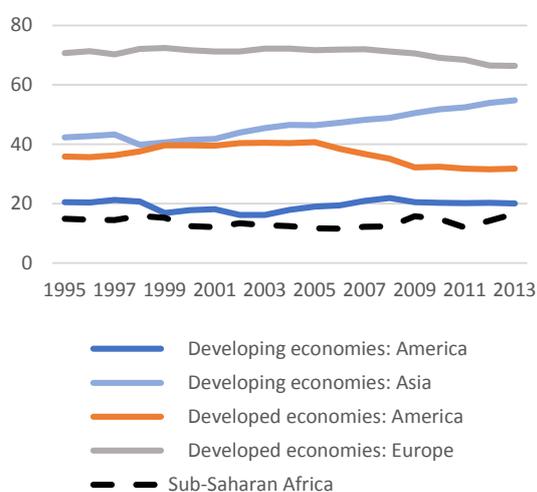
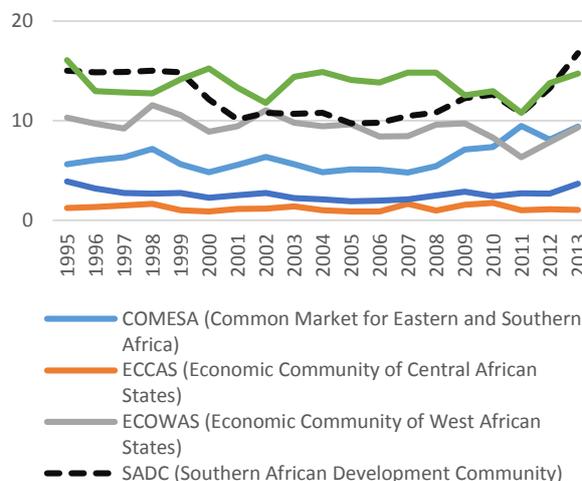


Figure 2. Intra-regional exports by regional economic community (%)



Source: Adapted from UNCTAD dataset on intra-regional trade.

3. SOUTHERN AFRICA: TYPES OF VALUE CHAIN DEVELOPMENT

It is estimated the Southern Africa accounts for 40% of Africa’s total GVC participation, one-third of which is through backward integration – the share of foreign value added embedded in a country’s exports (AfDB et al.; 2014). This method of calculation is based on the Eora database, which combines additive and vertically specialized types of value chain. Although, overall, Europe and Asia are found to be the main sources of foreign value added embedded in African exports, this trend is bucked in Southern Africa. The data created by the AfDB et al. (2014) in their backward integration matrix suggest that other regional partners contribute a range of between 0.01% and 0.1% of imported value added into South Africa’s exports. On the other hand, South Africa provides more than 10% of intermediate goods in Botswana, Namibia, Swaziland, Zambia and Zimbabwe.

Although useful information is provided by AfDB et al. (2014), the type of products, sectors, and lead firms driving these value chains is not discussed in detail. Moreover, the link to trade policy tends to be rather prescriptive, e.g. simply corresponding to the current mainstream discourse of the need to import before exporting, or describing how the penalties for infant industry protection are higher now than in the past (because countries can specialize in tasks rather than complete value chains). However, although it is acknowledged that African participation in GVCs is limited to lower-value activities, no particularly innovative policies are identified to overcome these formidable challenges.

3.1 Upgrading Opportunities in Value Chains

Given the opportunities as well challenges which are acknowledged within the literature regarding engaging with GVCs, particularly the more tightly controlled and hierarchical types, our hypothesis is that regional markets and value chains may be more conducive to some types of upgrading processes by domestic firms than tightly controlled global markets. Hence, we expect there to be differences in firm-level characteristics according to whether firms export products on an intra- or extra-regional basis. We also expect the products traded to be different.

3.2 Identifying Types of Intra-Regional Value Chains

In order to shed more light on the types of firm driving the trends apparent in Southern Africa, descriptive trade analysis was undertaken by Keane and Kennan (2015). This desk-based study was able to identify similar products to those discussed in Stevens et al. (2013) as exported mainly on an intra-regional basis. These products include the following:

- International Standard Industrial Classification (ISIC) 2520: manufacture of plastics;
- ISIC 2424: manufacture of soap and detergents.

These products were identified by Stevens et al. (2013) because there are several African exporters and because most of these products have relatively high regional shares of exports. In the analysis undertaken by Keane and Kennan (2015) these product exporters were linked to specific firms in Botswana, Namibia, and South Africa. Hence, we can confirm that these products are produced by firms included in the World Banks Enterprise Surveys and are traded mainly on an intra-regional basis, which substantiates the findings of Stevens (2013).⁴

The following products are exported by South Africa to other SACU members, which in turn export them back to South Africa:

- Different types of manufactured metal products (relating to ISIC 2899 and ISIC 2811).

The links between these products and the automotive industry deserve further attention.⁵ In comparison, the following products are exported to South Africa by other SACU members, and feature within South Africa's extra-regional exports:

- apparel (ISIC 1810).

Products resulting from the following processes are exported to South Africa by other SACU members, or *vice versa*, but then do not feature as subsequent exports according to our analysis, on either an extra or intra basis. This suggests they may be more conventional regional value chains, with consumers and producers based within the region:

- manufacture of dairy products (ISIC 1520);
- manufacture of cocoa (ISIC 1543);
- manufacture of soap, detergents etc. (ISIC 2424); and
- manufacture of plastics products (ISIC 2520).

The only evidence we have of vertically fragmented vertical trade within the region relates to the textiles and clothing industry. Otherwise, in terms of regional value chain development most evidence relates to more consumer-orientated rather than industrial products.

3.3 Exploring Developmental Aspects of Intra-regional Value Chains

It is recognized within the GVC literature that some upgrading processes, such as functional, may be easier to achieve within intra-regional value chains, precisely because these markets are less dominated by a few lead firms.³ Hence, supplying processed (and branded?) chocolate may be more likely for firms oriented towards intra-regional markets, compared to more tightly controlled global markets.

Although trading within GVCs may offer firms more competitive pressure to upgrade, the problem for new entrants within established markets is that these pressures may simply be too formidable for them to enter and join. The literature on firm-level heterogeneity, although coming from a different

³ See Navas-Alemán, L. (2011) and Kamau (2009).

methodological approach compared to the global value chains discourse, draws attention to the fact that firms which export are more likely to be the largest and most productive.⁴ Whilst the previous wave of the more case-study based GVC literature recognised the highly asymmetric nature of trading relations between actors, the more recent quantitative GVC literature seems to play these aspects down.

Because of lead firm's control of high value added activities within GVCs, the ability of new entrants who are successful at being inserted into a global production network to functionally upgrade into such activities like branding and marketing, are likely to be limited. Moreover, one within GVCs, the competitiveness pressure may be so formidable, that margins, contrary to expectations actually reduce rather than increase overtime with little room to renegotiate in view of the asymmetric nature of bargaining positions between buyers (few) and suppliers (many) within GVCs.

Where reference is made to building local and regional value chains in Africa and within a GVC context, the implied logic seems to be that this is in order to prepare firms subsequently to export globally. For example, UNCTAD (2013) notes that "local and regional value chains have vital roles to play in broadening the manufacturing base of African economies, expanding productive capacity and boosting intra-African trade" (UNCTAD, 2013: 92), and furthermore that:

Regional value chains present opportunities for improving productivity ... both for domestic firms with export potential and those that produce goods predominantly demanded at the national and regional levels. For domestic firms ...regional value chains give them the opportunity to upgrade and achieve international competitiveness, thereby making it easier to connect with GVCs.

Hence, from this perspective, regional markets are understood to provide the environment through which producers may learn and develop their productive capabilities and capacity *before* integrating with GVCs. Demand factors as well as competitiveness considerations are emphasized by UNCTAD (2013). Despite this recommendation, it must be recognized that some countries (in particular the least developed) may have such limited domestic capabilities that attracting regional foreign direct investment and situating this within an investment-led development strategy might in practice be the most viable strategy, at initial stages of economic development. In order to explore these aspects in more detail, Keane and Kennan (2015) match firm-level data with trade data and make a distinction between intra- and extra-regional exporters. We discuss these results below.

3.4 Micro Foundations and Types of Value Chain

Matching trade and firm-level data based on the methodology described in Keane and Kennan (2015) meant it was possible to distinguish between intra- and extra-regional exporters. They make use of the full World Bank Enterprise Survey firm-level sample for SACU countries. Their results suggest the following:

- **ownership:** Foreign-owned firms are much more likely to export on an extra- than intra-regional basis;
- **managers' experience:** the odds ratio suggests that firms employing more experienced managers are more likely to export on an extra- than intra-regional basis ;
- **firm age:** longer-established firms tend to be slightly less likely to export on an extra-regional basis (and hence more likely to export on an intra-regional basis), though this result is only significant at the 16 percent level;
- **customs and trade regulations dummy:** firms that rank these as major and severe barriers to production are much less likely to export on an extra-regional basis, and more likely to export on an intra-regional basis; and

⁴ See Melitz, M.J. and Constantini, J.A. (2008).

- **firm size** (number of employees): though this variable is significant, its effect on the odds ratio is ambiguous.

Analysis suggests a level of heterogeneity across firms included in the Enterprise Surveys according to the type of GVC they export to (domestic; export; intra-regional exports; extra-regional exports). Some generic as well as specific policy recommendations arise from this analysis. Comparing the results for SACU with those of other African exporters, as well as other regions included in the Enterprise Survey, SACU exporters are more likely to experience high or severe barriers to exporting in terms of customs and trade regulations, and this increases the odds of exporting more on an intra- than extra-regional basis. NTBs applied in the region are already known to affect intra-regional exporters to a greater extent than extra-regional exporters (Keane et al., 2010).

Box 1. Supporting, rather than undermining, legitimate public policy objectives

Analysis undertaken by Keane et al. (2010), which looked at the impact of NTBs separately by importing country for Botswana, Namibia and South Africa (data for Swaziland do not allow a separate estimation), revealed that NTBs applied by South Africa have a more significant negative impact on imports from the Southern African Development Community (SADC) than on those from Botswana and Namibia. On the other hand, in the case of Namibia and Botswana, whose imports from SADC are mainly from South Africa, the NTB coefficient is less significant, which is consistent with the hypothesis that traders in South Africa are better able to tackle these barriers than those in other SADC countries.

The analysis suggests that around 43% of the differential impact of NTBs between SADC and non-SADC countries is accounted for by a composition effect, i.e. exports of SADC countries are concentrated in sectors which are relatively more affected by NTBs. This is particularly the case for agro-industrial sectors, where the NTBs have a more negative impact than in the other sectors. These results suggest that the majority of the NTBs' differential impact between SADC and non-SADC countries (i.e. 57%) is accounted for by the different ability of exporters to adapt to the introduction of an NTB.

Overall, these estimates suggest that when South Africa imposes at least one NTB on a sector its imports from other SADC countries drop on average by 60%, while its imports from non-SADC countries rise on average by 6%. The fact that South Africa has the most significant coefficients for the SADC sample, while Botswana and Namibia have less significant coefficients, suggests that economically smaller SADC members face difficulties in tackling NTBs.

For those in favour of regional integration in sub-Saharan Africa the results of the quantitative analysis undertaken should be of concern: they suggest that the imposition of NTBs by SADC countries is usually handled better by non-SADC than SADC countries, and within SADC by the economically larger members. In light of these results, initiatives aimed at tackling NTBs and their impacts on trade at the regional level become even more important.

3.5 Achievement of Structural Economic Transformation⁶

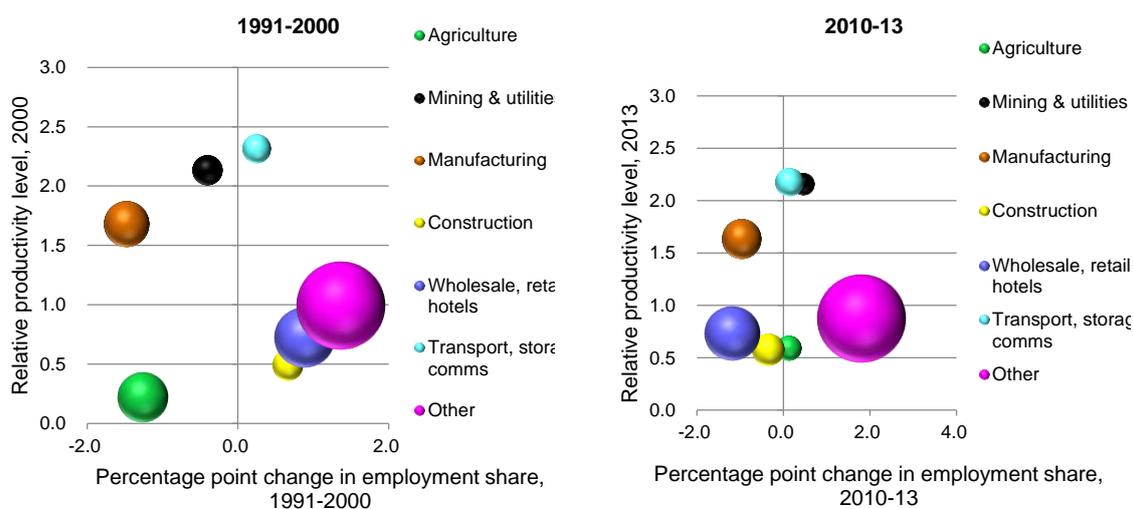
One limitation of relying on Enterprise Survey data is that it only includes data and information on the manufacturing sector and therefore vertically fragmented value chains - not others such as more additive or agro-processing type value chains.⁷ Therefore we simply summarize in the sub-section below the available information we have in relation to current trade patterns for each SACU member, and then supplement this with available data on the achievement of structural economic transformation.

It should be borne in mind that donors already supporting GVC initiatives including in South Africa (such as the UK Trade in GVC initiative) which explore the relation between social and economic upgrading are also interested in the role that investment in regional corridors can have on value chain development: regional and global. Although we are unable to provide information as to how transformations may have been achieved a possible causal link can be made in relation to overall trade patterns for SACU members - major exports and imports.

3.5.1 Southern Africa: structural economic transformation indicators

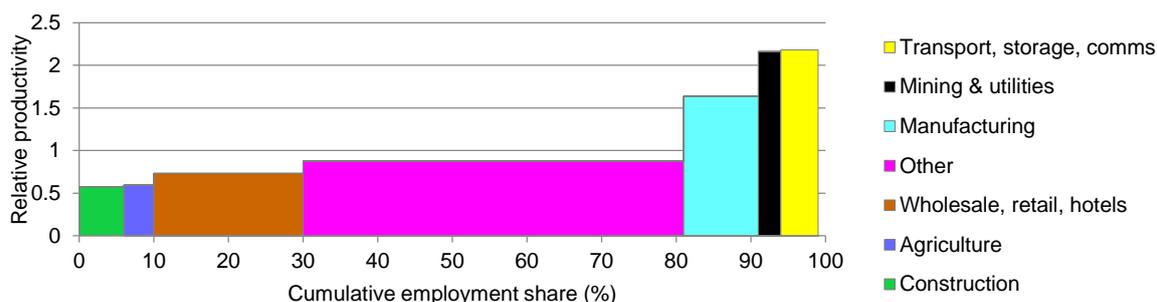
In the case of South Africa, Figure 3 shows that the manufacturing sector generally did not perform as well as others between 1991 and 2000, but had caught up by 2010/13. In terms of relative productivity, the transport and mining sectors performed best in 2013, followed by manufacturing (Figure 4). Agriculture is one of the least productive sectors.

Figure 3. Relative productivity and changes in employment in South Africa



Note: Size of bubbles represents number of persons employed in each sector in the later year of each period.
 Source: Author's calculations using UN data on 'Gross value added by kind of economic activity' (<https://data.un.org/>) and ILO data on 'Employment by sector' (<http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm>).

Figure 4. Sectoral productivity gaps in South Africa, 2013



Source: Author's calculations using UN data on 'Gross value added by kind of economic activity' (<https://data.un.org/>) and ILO data on 'Employment by sector' (<http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm>).

In relation to South Africa's import basket, the following points are notable:

- petroleum oils dominate imports, with the source being Saudi Arabia followed by other African economies such as Nigeria, Angola and Ghana;
- China is the main supplier for two out of South Africa's top five imports – automatic data processing machines and radio/television transmission apparatus;
- the EU is the main source of passenger vehicles, followed by India.

In relation to South Africa's exports, the following points are notable:

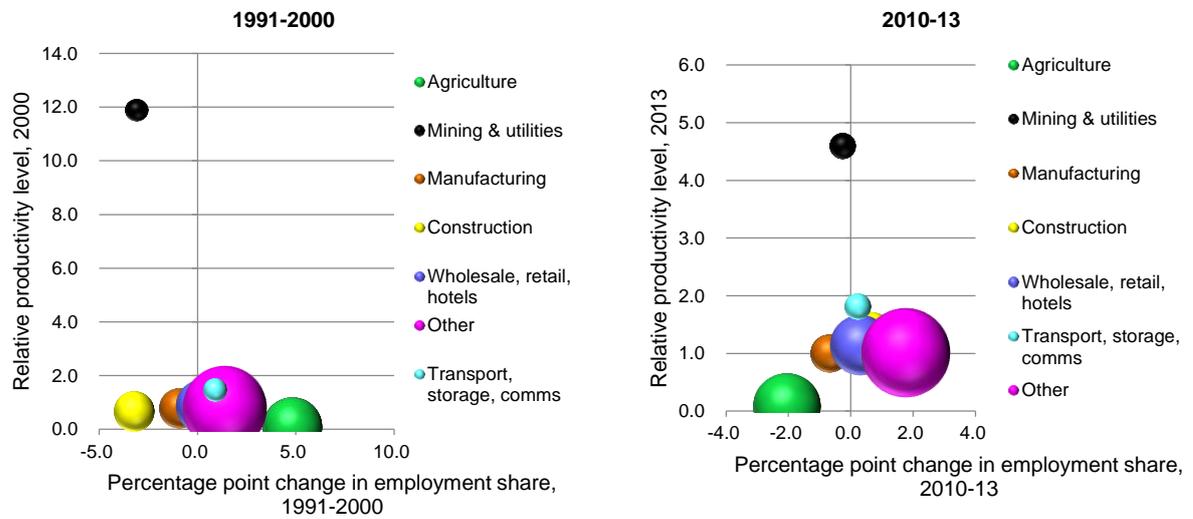
- commodities – including iron ore, platinum, gold and coal – dominate South Africa's exports;
- motor vehicles are the fifth largest export in value terms, and are mainly destined for the US, followed by the EU, Japan, Australia and Namibia.

3.5.2 Botswana: structural economic transformation indicators

Botswana has not been able to increase employment shares or relative productivity levels to as great an extent as South Africa. Mining is the most productive sector, though it has barely increased its share

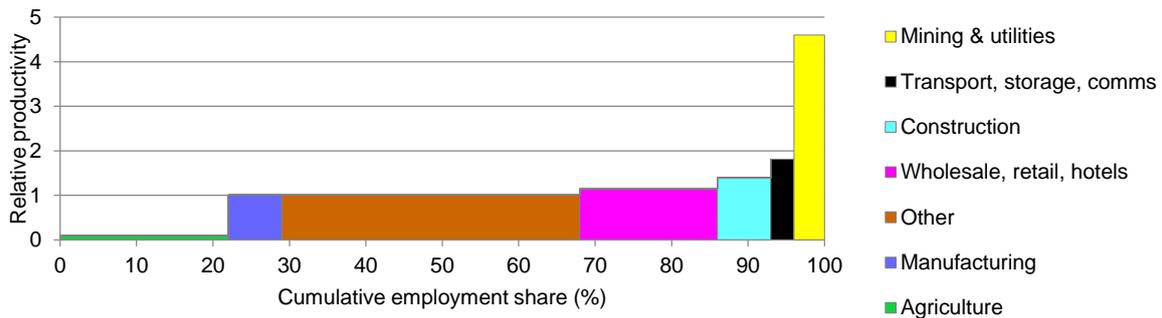
in employment. Agriculture was clearly the least productive sector in 2013, followed by manufacturing. However, agriculture accounted for a fairly large cumulative share of employment.

Figure 5. Relative productivity and changes in employment in Botswana



Note: Size of bubbles represents number of persons employed in each sector in the later year of each period.
 Source: Author's calculations using UN data on 'Gross value added by kind of economic activity' (<https://data.un.org/>) and ILO data on 'Employment by sector' (<http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm>).

Figure 6. Sectoral productivity gaps in Botswana, 2013



Source: Author's calculations using UN data on 'Gross value added by kind of economic activity' (<https://data.un.org/>) and ILO data on 'Employment by sector' (<http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm>).

In relation to the composition of Botswana's imports, the following points are notable:

- South Africa is the main supplier of four out of Botswana's five main imports – motor vehicles (goods and passenger), electrical energy and oil;
- the EU is the main supplier of Botswana's fifth main import, diamonds.

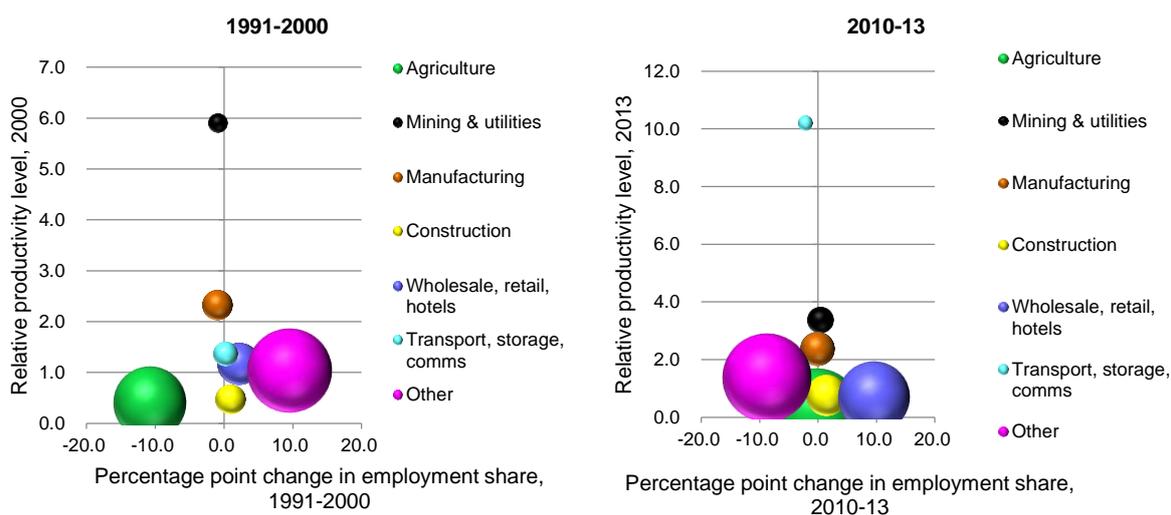
In relation to Botswana's exports, the following points are notable:

- South Africa is the main export market for three out of Botswana's top five exports – beef, copper ores/concentrates and gold;
- Norway and the EU are the main markets for the other two main exports – nickel and diamonds respectively.

3.5.3 Namibia: structural economic transformation indicators

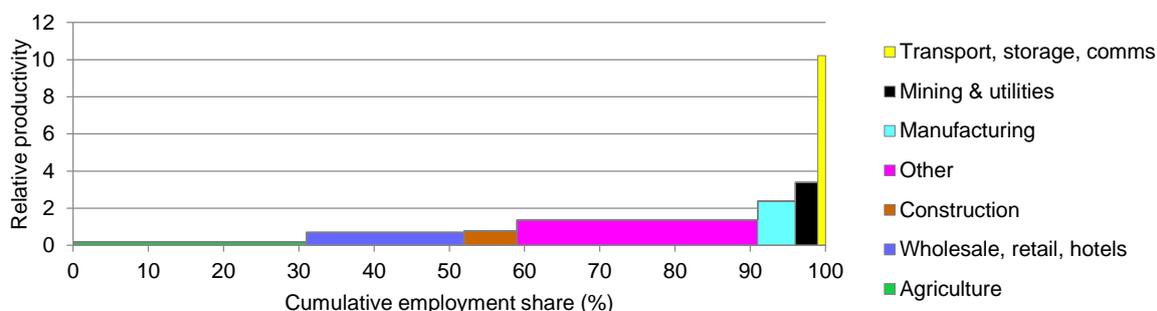
Between the two periods analysed in Figure 7 it is clear in the case of Namibia that agriculture's share of employment fell between 1991 and 2000, and fell very slightly between 2010 and 2013. But its share was much lower in 2013 than in 1991 (31.3 percent compared to 42.1 percent). However, as can be seen from Figure 8, which measures the sectoral productivity gap in Namibia in 2013, agriculture is the least productive sectors by a large margin. Transportation, storage and communications and mining and utilities were the most productive (as was the case for South Africa and Botswana).

Figure 7. Relative productivity and changes in employment in Namibia



Note: Size of bubbles represents number of persons employed in each sector in the later year of each period.
 Source: Author's calculations using UN data on 'Gross value added by kind of economic activity' (<https://data.un.org/>) and ILO data on 'Employment by sector' (<http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm>).

Figure 8. Sectoral productivity gaps in Namibia, 2013



Source: Author's calculations using UN data on 'Gross value added by kind of economic activity' (<https://data.un.org/>) and ILO data on 'Employment by sector' (<http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm>).

In relation to the composition of Namibia's imports, the following points are notable:

- South Africa is the main source for three out of Namibia's top five imports – petroleum oils, passenger vehicles and goods vehicles;
- copper ores from Switzerland also feature, as do diamonds from the EU.

The reliability of these data in terms of whether they relate to actual imports or to goods which have been transhipped deserves further attention.

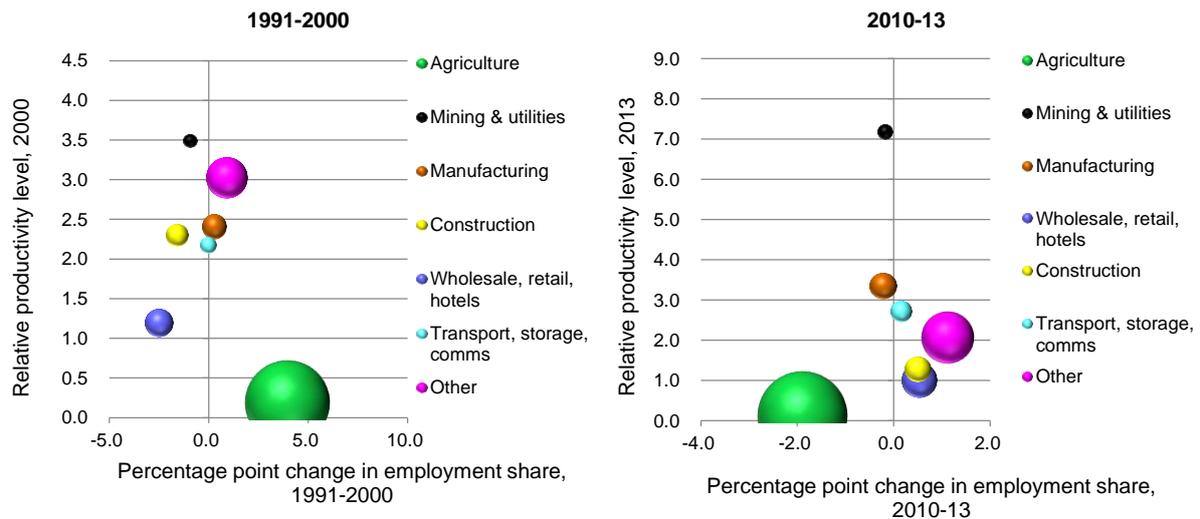
In relation to Namibia's exports, the following points are notable:

- the EU is the main destination for four out of five of Namibia’s top exports – fish and fish fillets, diamonds and unwrought zinc;
- Canada is the major market for uranium.

3.5.4 Lesotho: structural economic transformation indicators

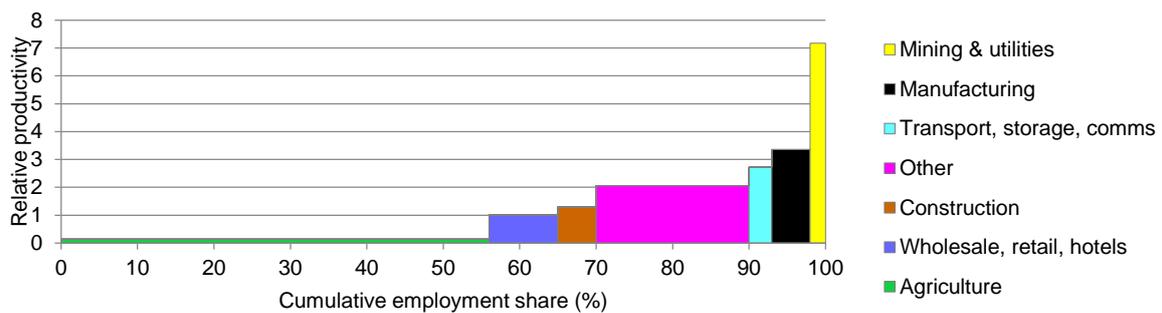
The mining sector accounted for the highest levels of productivity in the two periods analysed in Figure 9. However, in terms of overall levels of employment in Lesotho the agricultural sector is clearly the major employer. This was the least productive sector in 2012.

Figure 9. Relative productivity and changes in employment in Lesotho, 2013



Note: Size of bubbles represents number of persons employed in each sector in the later year of each period.
 Source: Author’s calculations using UN data on ‘Gross value added by kind of economic activity’ (<https://data.un.org/>) and ILO data on ‘Employment by sector’ (<http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm>).

Figure 10. Sectoral productivity gaps in Lesotho, 2013



Source: Author’s calculations using UN data on ‘Gross value added by kind of economic activity’ (<https://data.un.org/>) and ILO data on ‘Employment by sector’ (<http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm>).

In relation to Lesotho’s imports, the following point is notable:

- South Africa is Lesotho’s main supplier of all of its top five imports – petroleum oils, petroleum gases, cotton, passenger vehicles and parts and accessories for motor vehicles.

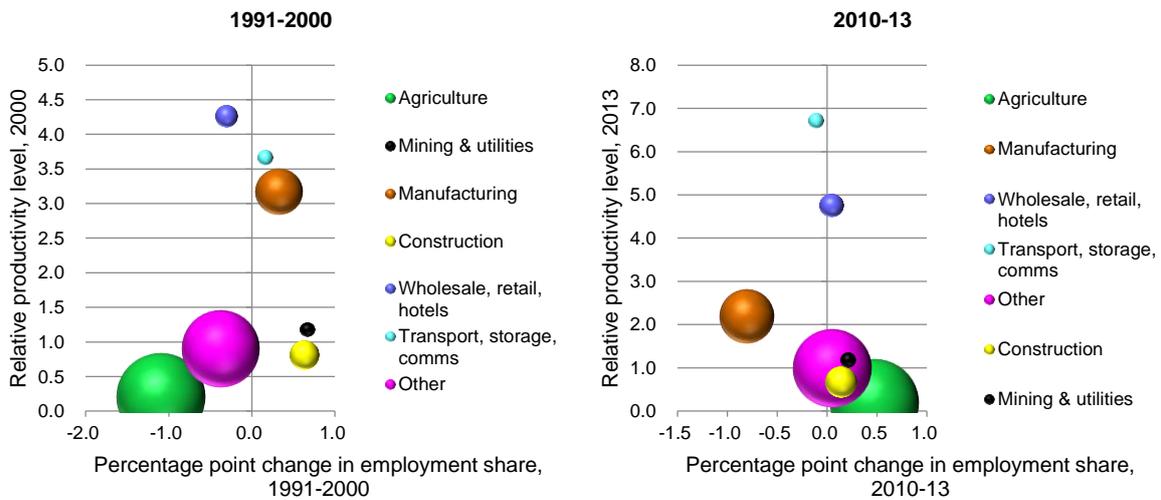
In relation to Lesotho’s exports, the following points are notable:

- South Africa is the sole destination for two of Lesotho’s top five exports – mineral/aerated waters and parts for switching or protecting electrical circuits;
- the US then accounts for the remaining three major exports –women’s or girls’ suits, jerseys and pullovers, and men’s or boys’ suits.

3.5.5 Swaziland: structural economic transformation indicators

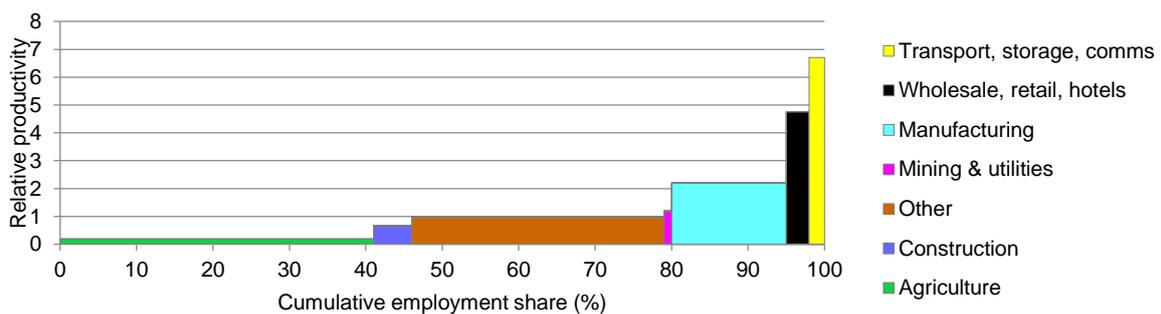
The agricultural sectors share of employment fell between 1991-2000 and increased slightly between 2010-13, but was still lower in 2013 (41.7 percent) than it had been in 1991 (45.5 percent). There has been no major change in terms of relative productivity. The relative productivity of the wholesale/retail/hotels and transportation/storage/communications sectors was consistently high, and increased, over the period analysed.

Figure 11. Relative productivity and changes in employment in Swaziland



Note: Size of bubbles represents number of persons employed in each sector in the later year of each period.
 Source: Author’s calculations using UN data on ‘Gross value added by kind of economic activity’ (<https://data.un.org/>) and ILO data on ‘Employment by sector’ (<http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm>).

Figure 12. Sectoral productivity gaps in Swaziland, 2013



Source: Author’s calculations using UN data on ‘Gross value added by kind of economic activity’ (<https://data.un.org/>) and ILO data on ‘Employment by sector’ (<http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm>).

In relation to Swaziland’s main imports the following point is notable:

- South Africa is the main source of all five of Swaziland’s top imports – maize, petroleum oils, essential oils and resinoids and motor vehicles (passenger and goods).

In relation to Swaziland’s main exports, the following point is notable:

- the EU is the major destination for sugar (Swaziland's largest export) , Australia for essential oils and resinoids, South Africa for binders for foundry moulds and wood pulp, and the US for T-shirts.

3.5.6 What do these indicators tell us?

The results show us that productivity levels are more evenly dispersed across sectors in South Africa than in the other SACU members, which is what one would expect in view of the achievement of structural economic transformation.

Improvements in productivity do not always translate into increases in employment shares, and this is evident across many of the sectors analysed for SACU members. Obviously this creates some conceptual challenges, particularly for donor interventions which seek to link economic and social upgrading.

The process of structural economic transformation therefore is itself likely to create winners and losers in one sector compared to another, for example as labour becomes redundant in one sector and moves to another.

Clearly if the process of regional integration itself is more likely to foster the development of one sector than another, including through intra-regional value chain development and inducing fragmentation and new sourcing strategies, there will similarly be winners and losers.

Policy makers need to be alive to these tensions and to think strategically and constructively as to how to mitigate them effectively, including through the facilitation of labour mobility, upskilling and vocational skills and training. Without adequate data on firms, products and the nature of trade, and an understanding of the different types of value chain in operation and their drivers, which enable policy makers to act in a timely way, tensions may be exacerbated.

4. CONCLUDING REMARKS

In order to utilise the tools available at the regional level effectively, including those relating to trade policy, the micro foundations of firms and workers' participation in different types of trade and related value chains need to be carefully understood. For some regions, such as the EU, understanding the micro foundations including firm-level participation within intra and extra-regional trade has assumed a particular importance in view of the ascendancy of GVCs (Cernat, 2015).

As argued by Keane (2015), other important knowledge gaps also need to be bridged, notably regarding the effects of trade liberalization on firms and workers. Often the social accounting matrices underpinning conventional trade impact assessments, such as computable general equilibrium modelling and so on, are lacking. These are major data omissions which should be addressed within the post-2015 context by donors, with a view to leveraging regional integration to achieve sustainable development objectives.

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Endnotes

¹ This think-piece draws on Keane (2015a); (2015b); Keane et al. (2010).

² Krugman (1993) and Puga and Venables (1995) show how relatively large welfare gains may accrue to the most developed country within a regional trade agreement, or hub, because of conditions of imperfect competition and the agglomeration effects of industries that choose to cluster closer together.

³ Those where the economic power resides in control at the node of production.

⁴ This is the most up to date analysis of intra-regional trade flows to the best of our knowledge.

⁵ For example Barnes and Kaplinsky (2000) discuss developments in the automotive components industry.

⁶ This analytical work draws on the Structural Economic Transformation Programme being coordinated by the Overseas Development Institute, London.

⁷ See Kaplinsky and Morris (2014) for more information on the distinction between these two types of value chain.