# EXPORT PRODUCTS SOPHISTICATION AND PREFERENTIAL TRADE IN THE SADC: LESSONS FROM ASEAN DEVELOPMENTAL REGIONALISM

## SADC における輸出製品高度化と特恵貿易協定： ASEAN の開発指向型地域主義モデルからの教訓

博士後期課程　商学専攻　2016年度入学

ラミアリソン　ヘリー　マホリソア

RAMIARISON HERY MAHOLISOA

【Abstract】

　This paper aims at providing a quantitative and qualitative comparative analysis of the Southern African and the Southeast Asian regionalism. It studies the process and outcomes of regional integration through two analytical frameworks: developmental regionalism and South-South economic integration. We assume in this paper that regional integration between developing countries has growth and structural transformation effects and that the ASEAN experience can explain the failures and shortcomings of other regional projects such as the Southern African Development Community (SADC). Therefore, this study uses both political economy and empirical methodologies in order to show the relevance of the ASEAN model and point out its implication for the growth and structural transformation of the SADC countries. The empirical part will first compare and assess the performance of the ASEAN and SADC using the concepts of trade intensity, export diversification and sophistication. Secondly, we will identify the impact of regional policies in the trade patterns of the SADC countries. More precisely, we will assess the impact of preferential tariffs in fostering export upgrading as suggested by the model proposed in Moncarz et al. (2011). Lastly, the policy analysis part will address the main constraints for the SADC countries in achieving an ASEAN-like industrialization and sustainable growth. We found that the main difference between the ASEAN and the SADC is the ability to attract significant numbers of Foreign Direct Investment in the industrial sector by tackling non-tariff barriers to trade and other market imperfections. Moreover, the ASEAN model of developmental regionalism implies for the SADC group, further efforts and more attention paid to the implementation of regional non-tariff measures and in-

dustrial cooperation.

**Table of contents:**

## 1. Introduction

The Association of Southeast Asian Nation (ASEAN) is a group of developing countries that have managed (or in the process) to escape from the 'development trap'. Indeed, the ASEAN is now widely considered as the most successful project of regionalism in the developing world. Since the late 1960s, these countries (particularly the ASEAN–5) have been able to sustain high economic growth and transformed from an agriculture-based to a more diversified manufacturing-based economy. This rapid growth and structural transformation have been achieved through the combined process of regional integration and industrialization. In this regard, several studies confirmed that the ASEAN developmental model relied heavily on the development and expansion of regional

production networks. The regional production networks expansion in the ASEAN has mainly been fostered by regional initiatives on trade facilitation and foreign direct investment (FDI) promotion. Moreover, these regional policies focused primarily on the modern part of the economy such as the agro-industry or manufacturing sector i.e. the industrial sector in general. Thus, some scholars refer to the ASEAN model as a "developmental regionalism", that is an effort of implementation of development oriented institutions and policies at the regional level (Nesadurai, 2003; Soderbaum and Shaw, 2003; Elumbre, 2014). This model puts emphasis on the role played by regional initiatives and incentives in the upgrading and improvement of the sophistication (or technology content) of the export products from the ASEAN countries.

This ASEAN model can be analysed under two theoretical frameworks: structuralism and industrial policy on one hand and the South-South integration perspective on the other. More precisely, the structuralist and industrial policy framework study the policies and processes of resource reallocation while the South-South integration framework tries to assess the effectiveness and relevance of such reallocation at a regional level in the developing countries. Therefore, the ASEAN model can be a benchmark for studying other regional blocs' performance and thereby identifying their strengths and the obstacles that they are facing. In this work, we are particularly interested in the comparison between the ASEAN and the Southern African Development Community (SADC). Similarly to the ASEAN, the SADC claims to be a development oriented regional initiative. However, in this regard the Southern African countries have been so far outperformed by their Asian counterparts. Thus, the objective of this study is to show the relevance of the ASEAN developmental regionalism and draw its implications for sustainable growth and structural transformation in the SADC countries. The question to be addressed is thus, how can the SADC countries achieve structural transformation and industrial upgrading by learning from the ASEAN model of regional trade and investment policies?

In order to answer this question, our analysis will be divided into two parts; an empirical assessment and then a policy analysis. The empirical part will first compare and assess the performance of the ASEAN and SADC using the concepts of trade intensity, export diversification and sophistication. We will also perform a comparison on qualitative statistics between the two regional blocs. Secondly, we will identify the impact of regional policies in the manufacturing trade patterns of the SADC countries. More precisely, we will assess the impact of preferential tariffs in fostering export upgrading as suggested by the literature and the ASEAN experience. Lastly, the policy analysis part will address the main constraints for the SADC countries in achieving an ASEAN-like industrialization and sustainable growth. We will show that the main difference between the ASEAN and the SADC is the ability to tackle non-tariff barriers to trade and other market imperfections.

Moreover, we will argue that the ASEAN model of developmental regionalism implies for the SADC group, stronger efforts and more attention paid to the implementation of regional non-tariff measures and industrial cooperation.

## 2. The ASEAN Model: the Concept of Developmental Regionalism and South-South Economic Integration

### 2.1. *Developmental Regionalism*

The term ''developmental regionalism'' can be simply interpreted as the application, to a broader geographic scope, *the region*, of Johnson's (1999) concept of ''developmental state''. The developmental state has been originally used to describe the nature of the political and economic institution which enabled the East Asian countries, and Japan in particular, to achieve rapid industrialization and economic development. The East Asian model has been widely studied by scholars (Amsden, 1992; Chang and Grabel, 2014; Williams et al. 2014), in order to understand how industrialization and modern economic growth occur in non-western nations. In short, the developmental state describes a country where the government is committed to achieve economic development and thereby intervenes actively in the process of factor accumulation and resource allocation. Thus, developmental regionalism can be understood as a regional project in which member states are committed to cooperate for the development of the regional bloc as a whole. Similarly to the developmental state, developmental regionalism allows proactive interventions and economic initiatives for accumulation and resource allocation at the regional level.

Nesadurai (2003) conceptualized developmental regionalism by making a distinction between foreign and domestic owned capital. Indeed, Nesadurai (2003) argues that contrarily to the traditional open regionalism or resistance to globalisation model, developmental regionalism lies in between by treating foreign and domestic owned capital differently. In the context of developing countries and more particularly the ASEAN countries, although less developed, domestic capital plays a greater political role. Thus, for several socio-political reasons, economic policies have to insure not to harm the domestic elites' interest. In the case of the ASEAN, this distinction has been salient through the regionalization process. According to Nesadurai (2003) the ASEAN developmental regionalism model nurtured domestic firms through two main instruments: the expanded regional market generated through inter-state competition, and temporary protection or privileges for domestic capital in this expanded market. We will analyse this in detail in a later section but first let us see the economic rationale behind such development strategy.

## 2.2. *South-South Economic Integration*

If the developmental regionalism framework allows us to assess and analyse the political forces at work, the *South-South* economic integration perspective enables the study of the economic rationale behind regional economic cooperation between developing countries. In this study, we focus mainly on the analysis of the relationship between trade, investment and industrialization. Indeed, economic development, in the ASEAN countries in particular, implies an economic diversification through the allocation of greater resources in sectors with higher productivity and product diversity such as the manufacturing industry. In the literature, South-South (S-S) trade and investment cooperation is found to be an effective way to foster the kind of structural transformation necessary for long-term economic growth.

Sperlich and Sperlich (2012) studied the effect of S-S Regional Integration Areas (RIAs) membership on convergence and growth and found that belonging to an RIA has had a significant and positive impact on economic convergence and growth in Latin America, Southeast Asia and Africa. Thus, they suggest that S-S integration could be a stepping stone toward increasing international competitiveness and access to technology transfers (Sperlich and Sperlich, 2012; p. 6). Sanguinetti and Siedschalg (2009) performed an empirical test on the impact of preferential trade agreements in the MERCOSUR. Their results showed that the preferential tariffs have weakened agglomeration forces and that economic activities were distributed along the regional comparative advantage of the members. More interestingly, this study found on the one hand that tariff preference margins did not have a significant effect on agricultural activities, whiles on the other hand, it showed that preferential agreements impacted greatly on the allocation of labour intensive manufacturing industries. In other words, the establishment of preferential tariffs within the MERCOSUR countries resulted in the reallocation of labour intensive industries in human capital abundant countries but had no influence on sectors where they have a global comparative advantage (i.e. agriculture and land intensive industries). Such results suggest that S-S integration can be an effective industrial policy tool especially for nurturing infant industries. In this regard, Amighini and Sanfilipo's (2014) empirical study on African countries revealed that external flows such as FDI and imports have positive effects on diversification of export products and on their quality. More specifically, they observed that S-S trade has a stronger impact on export diversification and is especially important for the manufacturing sectors. Indeed, the authors argue that relative similarity in factor endowments and level of development translates in more diversified trade flows and a higher potential of learning spillover. This latter is explained by the similarity in product technological level which facilitates knowledge and technology transfer (Amighini and Sanfilipo, 2014; p. 7). With regard to product quality, Amighini and Sanfilipo (2014) concluded that imports generally impact positively

Figure 2.1　Export Trade Value of the SADC10[1], in USD
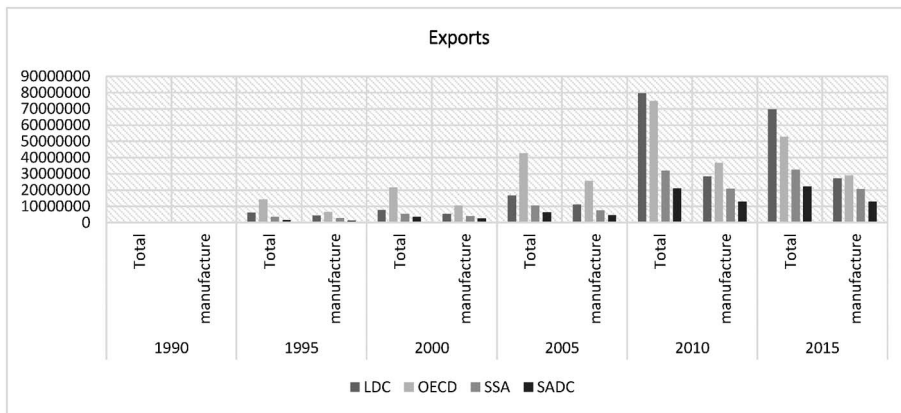
on the quality of exports. However, when country of origin is considered, imports from developed countries appear to have more positive effects than from South countries. Regarding FDI, the same study showed that positive spillover effects on export quality are stronger for S-S investment flows especially in the manufacturing sectors conversely to North-South FDI which have a negative impact in these sectors. Overall, this rapid literature overview suggests that S-S economic integration as a developmental and industrialization strategy stands on solid empirical ground.

Descriptive statistics on the ASEAN and SADC, seem to confirm the empirical results discussed above. Figures 2.1 and 2.2 show the evolution of export trade value (in US dollar) in a five years interval (from 1990 to 2015), respectively for the SADC and ASEAN region. These figures also compare the evolution of regional export in manufacture products as a share of total export. In the two regional blocs, exports to the LDCs grew faster than to other regions since 2005. Moreover, the figures on manufacture exports, particularly for the ASEAN (Figure 2.2), show that LDCs have higher share compared to the OECD countries, and thereby consolidating the empirical results discussed earlier. Moreover, even for a region with low level of industrialization such as the SADC, S-S trade, that is trade with other LDCs, shows higher technological sophistication and thereby higher potential for diversification. Therefore, the remainder of this study will focus on comparing and explaining the patterns of external flows (trade and investments) between the SADC and ASEAN and then exploring the possible policy implications in terms of developmental regionalism for the Southern African economies.

---

[1] Angola, Botswana, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South-Africa, Tanzania and Zambia.

Figure 2.2　Export Trade Value of the ASEAN6, in USD
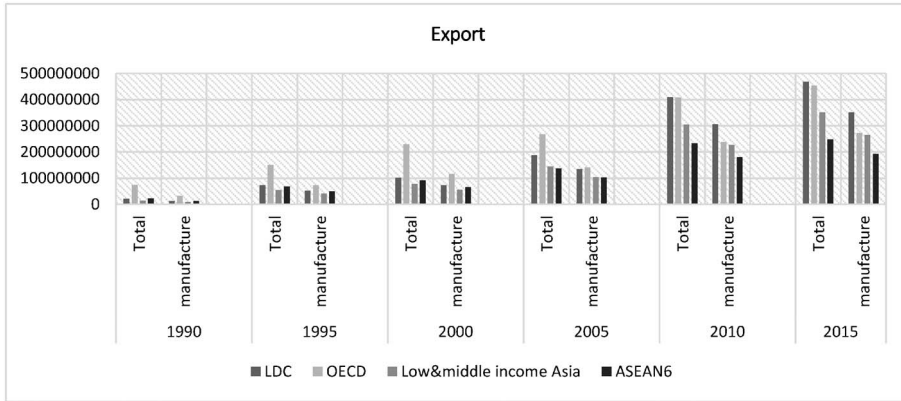


*Source: World Integrated Trade Solution* (D.S: 2018/01/05)

## 3.　Regional Performances and Characteristics: Qualitative and Quantitative Comparative Analyses

### 3.1.　*Quantitative analysis*

By definition, structural transformation is the process in which production factors are reallocated from traditional low-productivity (agriculture and primary sector) to modern high-productivity activities (such as manufacturing and the industrial sector in general). Hence, structural transformation implies an economic diversification, i.e. an expansion of non-traditional activities, and a technological progress, i.e. an increase in the sophistication of production. Assessing the structural transformation performances of RIAs will thus lead us to look at different trade performances indexes such as the export diversification index, export sophistication index and the technological classification of exported goods.

In general, the most commonly used diversification index in the literature is the inverse of the Herfindal concentration index (WTO, 2012; Amighini and Sanfilipo, 2014). Thus, indexing countries by $i$ and sectors by $k$ the Herfindal index is equal to $h^i = \Sigma_k (s_k^i)^2$, where $s_k^i$ is the share of sector $k$ in country $i$'s exports or imports. This index measures the extensive margin of an economy's exports or in other terms the number of products that it exports. Other variants of the index combine both the measure of the extensive and intensive[2] margins (WTO, 2012; IMF, 2017). However, since we are more interested in a cross-country and inter-regional comparison, simply comparing

---

[2] The intensive export margin measure the level of concentration or diversification of a country's export base (IMF, 2017; p. 58)

the SADC and ASEAN countries' number of export products and markets is sufficient and more relevant (see Table 3.1). Figures shows for each country of SADC-10 and ASEAN-10 that, as predicted, by economic theory and demonstrated by existing empirical studies, the Southern African economies, which are less developed on average, are far less diversified compared to their Southeast Asian counterparts. In total, the ASEAN regional bloc exported 14605 products which is roughly three times as high as that of the SADC countries which exported only 4485 products in 2014 (data from WITS website). The gap in the number of destination markets is however less pronounced, standing at 553 and 400 respectively for the ASEAN and SADC in 2014 (https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx). Thus, the level of product diversification seems to be more critical for structural transformation than the number of trade partners. Beside the diversification index, structural change is also assessed by looking at the quality of exports in a given country or region (or degree of sophistication of export products). Indeed, Hausmann et al. (2007) argue that "countries become what they produce" (p. 2) and that specializing in some goods are more conducive to faster economic growth than others. In other words, there is a strong correlation between an economy's income level and the unit value of its export base. More precisely, rich countries are those that produce relatively higher priced products, that is, products with higher quality and embodying more sophisticated production process (Hausmann et al., 2007; Amighini and Sanfilipo, 2014; IMF, 2017). Therefore, fast-growing economies are mostly those that are exporting manufactured goods which tend to have higher unit value than say primary or resource based products. Therefore, we expect that the less advanced SADC regional bloc would specialize in cheaper and less sophisticated exports than the ASEAN.

Indeed, Table 3.1 show the evolution of the SADC10 and ASEAN countries' exports' technological level by comparing figures from 2000 and 2015. The technological classification considered here follows the most commonly used OECD's methodology which consist of 5 categories: high technology, medium technology, low technology, primary products, and resource based products. And the time period 2000 and 2015 were chosen in order to observe the effect of regional agreements implemented in both regions in the late 90s and early 2000s. Thus, here are some observations[3]:

➤The SADC countries are on average specializing in primary products (unprocessed goods) and natural resources which represent respectively 57 and 30 percent of their export in 2015; compared to the ASEAN who has a more balanced distribution although the high-tech sector seems to dominate with 30 percent share in 2015 followed by low-tech manufactures with an average of 23 percent of its members' exports.

---

[3] The data were obtained from the World Integrated Trade Solution databank.

**Table 3.1  Technological classification of export in ASEAN and SADC (2000 and 2015), in percent**

|  | HighTech | | LowTech | | MediumTech | | Primary | | Resource Based | |
|---|---|---|---|---|---|---|---|---|---|---|
|  | 2000 | 2015 | 2000 | 2015 | 2000 | 2015 | 2000 | 2015 | 2000 | 2015 |
| Angola | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 96 | 10 | 4 |
| Botswana | 1 | 1 | 7 | 2 | 5 | 4 | 1 | 4 | 78 | 9 |
| Namibia | 1 | 6 | 3 | 3 | 1 | 1 | 71 | 69 | 24 | 22 |
| Tanzania | 1 | 0 | 4 | 4 | 1 | 1 | 69 | 54 | 25 | 40 |
| South Africa | 3 | 2 | 12 | 4 | 21 | 25 | 28 | 25 | 37 | 43 |
| Madagascar | 0 | 0 | 38 | 23 | 1 | 2 | 49 | 6 | 11 | 15 |
| Mozambique | 1 | 0 | 2 | 2 | 7 | 1 | 69 | 67 | 2 | 29 |
| Mauritius | 2 | 3 | 61 | 36 | 5 | 11 | 9 | 7 | 24 | 44 |
| Malawi | 0 | 0 | 4 | 3 | 0 | 1 | 88 | 86 | 7 | 9 |
| Zambia | 1 | 0 | 6 | 1 | 3 | 3 | 7 | 88 | 21 | 8 |
| SADC | 1 | 1 | 13 | 7 | 4 | 5 | 56 | 57 | 26 | 30 |
| Cambodia | 0 | 4 | 9 | 84 | 1 | 5 | 2 | 6 | 7 | 2 |
| Indonesia | 13 | 1 | 27 | 25 | 13 | 2 | 21 | 20 | 26 | 25 |
| Lao PDR | 0 | 11 | 3 | 7 | 2 | 5 | 11 | 51 | 38 | 26 |
| Malaysia | 63 | 59 | 9 | 9 | 14 | 13 | 5 | 7 | 9 | 13 |
| Myanmar | 1 | 1 | 42 | 19 | 1 | 5 | 27 | 30 | 3 | 44 |
| Philippines | 74 | 65 | 1 | 8 | 7 | 12 | 4 | 6 | 5 | 10 |
| Singapore | 62 | 44 | 6 | 6 | 13 | 17 | 2 | 2 | 18 | 31 |
| Thailand | 37 | 33 | 2 | 13 | 17 | 3 | 1 | 7 | 16 | 17 |
| Vietnam | 3 | 4 | 39 | 35 | 6 | 9 | 47 | 12 | 6 | 5 |
| ASEAN | 28 | 30 | 30 | 23 | 10 | 13 | 14 | 16 | 17 | 19 |

*Source: Constructed from World Integrated Trade Solution (D.S: 2018/01/05)*

➤In each regional bloc the most advanced members, South Africa and Mauritius in the SADC and Singapore and Malaysia in the ASEAN, are specializing in more sophisticated products. This is consistent with what has been observed in the theoretical and empirical literature (Amsden, 2001, Hausmann et al., 2007; Salazar-Xirinachs et al. 2014).

➤On average, the level of export quality and sophistication remained relatively the same during the period 2000–2015 in both regions, however we observe a moderate increase in the high and medium-tech share for the ASEAN and in primary and resource based products for the SADC.

➤Except for Myanmar, the CLMV countries or ASEAN's least developed members, saw a rapid growth in the share of their manufacture exports since 2000 that is roughly the period when they join the regional association. This may imply the positive effect and the effectiveness of the Southeast Asian developmental regionalism model.

## 3.2.  *Qualitative analysis*

The most common qualitative assessment of RIAs is the analysis the evolution of different tariff rates. Therefore, since we are interested in the structural change effect of S-S trade agreements,

we will focus on preferential and effectively applied tariffs on two group of products: agriculture (traditional sector) and manufactures (modern sector)[4]. Focusing on agricultural and manufactured products allows us to observe a possible link between tariff schemes, i.e. the level of liberalization, and the diversification and sophistication of the economy. The orthodox economic literature, following Ricardian principles, argues that complete trade liberalization is the most effective way to achieve high economic growth and a win-win relationship between nations. Indeed, the traditional economic thinking suggests that free-trade would foster international division of labour so that countries would export goods that they are producing the most efficiently and imports the other. However, historical data and dynamic analyses have shown that these assumptions were very simplistic at best. The existence of market imperfections and non-tariff barriers have among others impeded on the equal distribution of labour and exacerbated the economic gap between developed and developing countries (Chang, 2002). Moreover, increasing returns to scale enjoyed by manufactured goods producers and industrialized countries as opposed to the commodity-based developing countries, has been reinforcing the development trap in which many Southern countries have yet to escape.
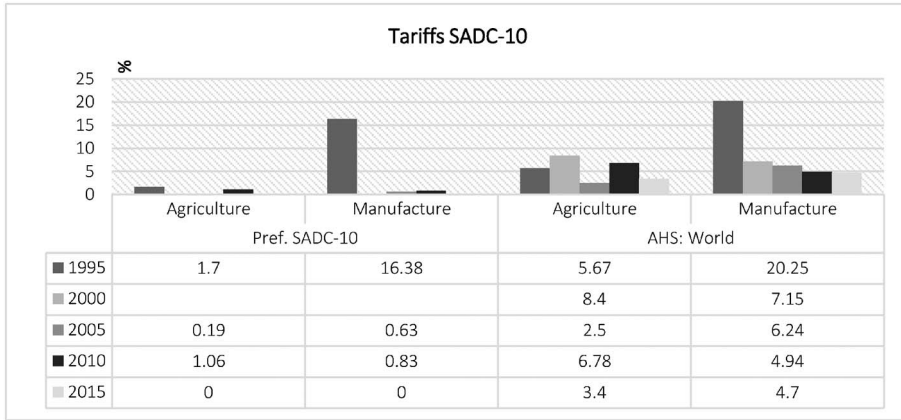
Therefore, it is interesting to compare the trade liberalization process of the SADC and ASEAN while looking at their economic performances. In doing so, we will compare the tariff rates on agriculture and manufacture products in the two regional blocs from 1995 to 2015. The figures represent the weighted average of preferential tariffs and effectively applied tariff (AHS) reported by the regional bloc members (Figure 3.1 and 3.2). Preferential tariffs are those that are reported for imports from regional bloc members and AHS are for imports from the World in general. Overall, the ASEAN-6 is on average slightly more open than the SADC-10 in 2015. The average AHS rates for agricultural and manufacture products are respectively 4.81 and 1.94 percent (Figure 3.2) in the ASEAN-6 against 3.4 and 4.7 percent in the SADC-10 (Figure 3.1). These numbers are consistent with each bloc's overall export patterns as observed in the previous section. Indeed, in the ASEAN-6, the manufacturing sector has lower tariff rate compared to that of agriculture; whereas in SADC-10, trade in primary products are relatively more open than in manufactures.

However, when we look at the preferential rates, the SADC-10 show higher level of liberalization in both sectors than the ASEAN-6. Indeed, on average, tariffs were totally removed (Figure 3.1) within the Southern African bloc, whereas some level of protection are still allowed in the ASEAN-6 (figure 3.2). More interestingly, average preferential rates for manufactured products is more
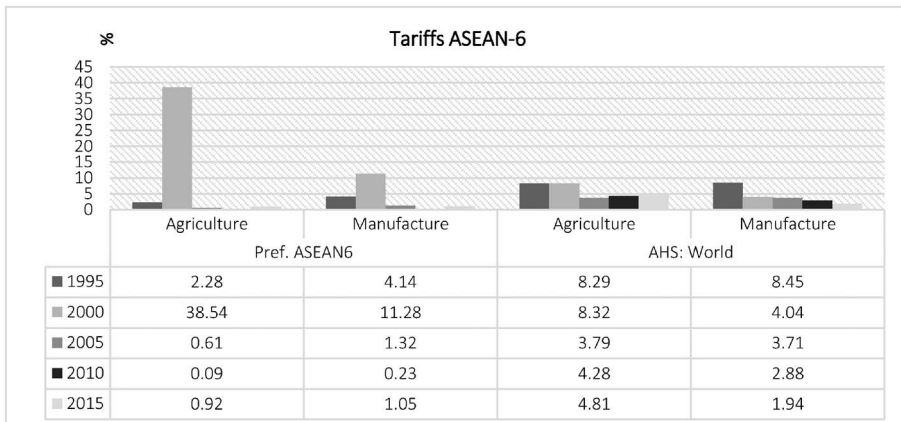
---

[4] Products were grouped according to the ISIC revisions 3 nomenclature and data were sourced from the Word integrated trade solution (WITS) website.

Figure 3.1　Comparison of the Preferential and Effectively Applied Tariffs in the SADC-10, by sector, 1995–2015

**Tariffs SADC-10**

| | Pref. SADC-10 | | AHS: World | |
|---|---|---|---|---|
| | Agriculture | Manufacture | Agriculture | Manufacture |
| 1995 | 1.7 | 16.38 | 5.67 | 20.25 |
| 2000 | | | 8.4 | 7.15 |
| 2005 | 0.19 | 0.63 | 2.5 | 6.24 |
| 2010 | 1.06 | 0.83 | 6.78 | 4.94 |
| 2015 | 0 | 0 | 3.4 | 4.7 |

*Source: Calculated from data extracted from the World Integrated Trade System（DS: 2018/01/22）*

Figure 3.2　Comparison of the Preferential and Effectively Applied Tariffs in the ASEAN-6, by Sector, 1995–2015

**Tariffs ASEAN-6**

| | Pref. ASEAN6 | | AHS: World | |
|---|---|---|---|---|
| | Agriculture | Manufacture | Agriculture | Manufacture |
| 1995 | 2.28 | 4.14 | 8.29 | 8.45 |
| 2000 | 38.54 | 11.28 | 8.32 | 4.04 |
| 2005 | 0.61 | 1.32 | 3.79 | 3.71 |
| 2010 | 0.09 | 0.23 | 4.28 | 2.88 |
| 2015 | 0.92 | 1.05 | 4.81 | 1.94 |

*Source: Calculated from data extracted from the World Integrated Trade System（DS: 2018/01/22）*

important in the ASEAN-6. Thus, these figures seem to confirm the view that the Southeast Asian countries are allowing the use of protectionist measures for industrialization and developmental objectives. Moreover, given that the ASEAN（created in 1967）is older compared to the SADC（established in 1992）, the pace of liberalization appear to be relatively faster for the Southern African group. Therefore, the comparison of the evolution of the tariff schemes in the ASEAN-6 and SADC-10 from 1995 to 2015 suggests that the difference in growth and industrialization performance is not correlated with the level and pace of trade liberalization. On the contrary, and as suggested in the literatures discussed previously, the Southeast Asian economies seem to have used instruments of industrial policy such as selective protectionism and gradual tariff reduction along

with other non-tariff policy tools.

These comparative analyses not only showed that the ASEAN-6 have been performing better than the SADC-10 in terms of economic diversification and industrialization but also that they have done so through an unorthodox path. Indeed, as suggested by the evolution of import tariff schemes (Figure 3.1 and 3.2), the ASEAN countries liberalized at a slower pace than those of the SADC and did not entirely open their economy, particularly the manufacturing sector. This may infer that the Southeast Asian countries are still following the developmental model which led to the success of their predecessors in the Asian region such as Japan, Taiwan and South Korea. Thus, an empirical study on how the SADC preferential agreements have impacted on its members' trade and economic structure is a necessary step to identify the shortcomings and to draw lessons from the ASEAN model.

## 4. Assessing the Structural Transformation Effect in a South-South Preferential Trade Agreements: Empirical Model

Our precedent analyses suggested that what matters for structural transformation or industrialization in S-S economic relationship is not simply trade expansion but its preferential treatment in favour of the participants. This is particularly relevant when we compare the economic performance of the Southeast Asian and the Southern African countries. In this regard, Okabe and Urata (2013) observed that the creation of the AFTA and the implementation of the Common Effective Preferential Tariffs (CEPT) have resulted in the rapid growth of intra-ASEAN imports in electrical machinery and automobile parts (p. 23). They found that the AFTA have promoted the creation of regional production networks in capital goods (such as equipment and machinery) and intermediate goods (such as auto parts and components). Moreover, Urata (2011) reports that preferential tariff reductions on transportation machinery have had the largest trade creation effect because these latter[5] are subject to high effective tariff rates in general.

These findings are consistent with an earlier conclusion reached by Klinger (2009) arguing that S-S trade can be the testing ground for structural transformation. In his study, Klinger (2009) found that although the ''Northbound'' exports (exports to the developed countries) played a significant role in driving structural transformation in fast-growing economies, they have reinforced the status quo in the low-performing countries in Africa and Latin America. Indeed, for these latter Northbound export baskets, which includes mainly raw material and unprocessed products, show

---

[5] Transportation machinery

lower level of *sophistication* and *connectedness*[6] compared to Southbound exports. However, Klinger （2009） pointed that although exporting to the developed countries is what really drives economic transformation in the long-run, S-S trade can be a stepping stone through which developing countries would build their manufacturing capabilities and eventually upgrade their Northbound exports （Klinger, 2009）. In other words, these findings suggest that S-S trade can be strategically used as an industrialization platform.

As discussed and demonstrated previously, the ASEAN, as a regional bloc, contributed to the structural transformation of its original members, and more recently of the Philippines and Vietnam, through the expansion of regional imports and production networks in machinery, electronic goods and auto parts. The ASEAN experience is therefore evidence of the industrialization effect of well-oriented S-S regional cooperation. In this regard, two studies undertaken by Sanguinetti and Siedschlag （2010） and Moncarz et al. （2011） explored the effect of preferential tariff reduction or elimination between developing countries on industrial development. Their analysis focused on the MERCOSUR and generally found that S-S PTAs can promote labour intensive manufacturing activities in countries with intermediate revealed comparative advantage[7] （such as Brazil） but at the expense of smaller and less efficient participants. However, the significance of the cost of industrialization depends on several parameters such as country-size differences, agglomeration forces intensity and the existence or not of a compensation mechanism. In other words, costs can be reduced with the right regional policy of redistribution, infrastructure investments or capacity building.

Thus, it would be interesting to apply similar analysis to the SADC countries and assess the effect of PTA on their manufacturing activities. The result of such analysis will enable us to identify the main obstacles which may prevent the Southern African countries from achieving the same level of economic growth and industrialization as the ASEAN. In doing so, we will follow the empirical model developed by Moncarz et al. （2011） who observed the effects of preferential trade agreement on the industrialization of the MERCOSUR members. We believe that this is the first attempt in applying such empirical method for analysing the industrialization impact of regional integration in the SADC. This model will assess the contribution of revealed comparative advantage （RCA）,

---

[6] The learning potential to enable economic diversification. Connectedness refers to the fact that some products have relatively similar inputs and factor of productions so that they have high learning spillover which will facilitate production upgrading and the reallocation of resources. An example of highly connected industries are computer monitor and flat-screen TVs. （Klinger, 2009; p. 4）

[7] A revealed comparative advantage that is inferior to the rest of the world but superior to other members of the RIA.

country size（GDP）, product sophistication（PRODY）and preferential tariffs on intra-regional trade intensity（ti）.

*The Model: Theoretical Framework*

According to the literature on trade a country's export structure can be analysed and assessed with two main indicators: the revealed comparative advantage（RCA）and the product sophistication（PRODY）from which we can calculate the overall export sophistication（EXPY）. For instance, the traditional trade theory suggest that economies should specialize in product in which they enjoy high RCA, that is technology-intensive products（high PRODY）for the developed countries, and less sophisticated（low PRODY）products for the developing countries. Thus, these two indicators are useful tools not only to determine the economic structure but also to understand the mechanism behind the transformation or stagnation of a country or group of countries.

Since we are particularly interested in studying the impact of preferential trade agreement on the participating countries, we will follow the empirical strategy proposed in Moncarz et al.（2011）in which they assessed the influence of three explanatory variables: preferential margin, revealed comparative advantage and revealed technology content, on trade intensity（*ti*）

（1） **the trade intensity index** which represents the importance of intra-regional export in each country's

export bundles is written as: $ti = \dfrac{x_{g,c,p,t}}{x_{c,p,t}} - \dfrac{x_{g,c,\neq p,t}}{x_{c,\neq p,t}}$

Which is the export share of good g by country c to the preferential partners minus the export share of good g to the non-preferential partners or the rest of the world（ROW）. A positive number would mean that the preferential market is more important than the rest of the world for country c's export of good g while a negative sign would mean the opposite.

（2） **Preferential margin** $Pref_{g,p,t} = t^{AHS}_{g,p,t} - t^{p}_{g,p,t}$ which is the preference margin received from country of the SADC-10 on exports of good g measured as the difference between the two tariffs, MFN and PTA. Note that the tariff figures here are the average import tariffs reported for all the SADC-10 rather than for individual partners as in Moncarz et al.（2011）.

（3） **Revealed Comparative advantage** $RCA^{c}_{g} = \dfrac{X^{c}_{g}/X^{c}}{X_{g}/X}$ where $X^{c}_{g}$ is country c's export of good g, $X^{c} = \Sigma_{g} X^{c}_{g}$ its total exports, $X_{g} = \Sigma_{c} X^{c}_{g}$ world export of good g and $X = \Sigma_{i}\Sigma_{g} X^{c}_{g}$ total world exports.

（4） **Revealed technology content** $PRODY_{g} = \Sigma_{g} RCA^{c}_{g} Y^{c}$ （WTO, 2012）, where $Y^{c}$ is the GDP per capita of country c.

The objective here is to analyse the role played by preferential tariffs on the export and production patterns of the SADC members. Therefore, the equation of the model is written as follow:

(5)　　$ti_{g,p,t} = \beta_1 RCA_{g,t} + \beta_2 PRODY_{g,t} + \beta_3 Pref_{g,p,t} + \beta_{1,3} RCA_{g,t} \times Pref_{g,p,t} + \beta_{2,3} PRODY_{g,t}$

　　　　　　$\times Pref_{g,p,t} + \alpha_g + \alpha_t + \mu_{g,p,t}$

In this model, the sign of the coefficients of the interaction variables i.e. $\beta_{1,3}$ and $\beta_{2,3}$ allow us to determine whether preferential tariffs promoted the exports of goods with high RCA ($\boldsymbol{\beta_{1,3} > 0}$), or the exports of more sophisticated goods ($\boldsymbol{\beta_{2,3} > 0}$), or both. According to Moncarz et al. (2011), there are three theoretical hypotheses that may explain the outcome of the estimation of this model. The first hypothesis is drawn from Cooper and Massell's (1965) theory of regional integration as an industrial policy instrument. The C&M effect is observed if preferential tariffs have fostered the export of highly sophisticated goods overtime. In other words, the industrialization effect of an RTA is observed in our model if $\boldsymbol{\beta_{2,3} > 0}$.

The second interpretation that can be made from the model is on the distance of each member from international technology frontier. Indeed, Moncarz et al. (2011) report that Venables (2003) suggests that S-S preferential treatment would benefit more to the members which are technologically closer to the ROW's standard at the expense of those countries that are at the extreme of the distribution. More precisely, preferences will enable the country with intermediate comparative advantage to export in the regional marker more sophisticated goods in which it has a low RCA ($\boldsymbol{\beta_{1,3} < 0}$ $\boldsymbol{and\ \beta_{2,3} > 0}$). On the other hand, not only will preference reinforce the status quo in the export of the countries with extreme RCA but it will divert their imports of high PRODY goods to the less efficient members at higher cost ($\boldsymbol{\beta_{1,3} > 0\ and\ \beta_{2,3} < 0}$).

The third and last interpretation refers to Grossman and Helpman (1995) who argue that free trade area are only viable by excluding products on which trade creation are expected. Therefore, overall, members of a FTA tend to exchange trade diverting goods ($\boldsymbol{\beta_1 < 0\ and\ \beta_{1,3} < 0}$). In this scenario, members of FTA will trade goods in which they do not have strong RCA.

*Data Description*

For a better comparative analysis, we chose to restrict our study on only five SADC countries rather than the 10 countries considered so far. The reason is that we wanted our observations to be as relevant as possible for a comparison with the ASEAN countries. Therefore, we chose **Botswana, Mauritius, Namibia, South Africa and Tanzania** for the data availability, their membership longevity[8], relative economic importance in the regional bloc, and most importantly for the dynamism of their economy reflected by level of diversification (see Table 3.2). The period consi-

---

[8] This is because some countries joined the SADC only recently and therefore do not allow sufficient time span to appreciate the long-term impact preferential tariffs.

dered here spans from 2005 to 2015, where the SADC FTA has been in force since *18th August 2008* with phased programme of tariff reduction starting from 2001 (Sandrey, 2013). Furthermore, rather than calculating bilateral data between the five countries cited above, all data on preferential tariffs and intra-regional exports were pooled by considering the SADC-10 as the preferential partner. Non-preferential partner is the rest of the world (ROW).

Data for trade intensity (ti) was obtained from the COMTRADE database through the world integrated trade system (WITS). We chose to limit our analysis on 7 range of products under the ISIC revision 3 nomenclature system[9], namely: Agriculture, food products, other mineral and quarrying, textiles, electrical machinery, equipment, and vehicles. These 7 products encompass most of the exports of the SADC countries while allowing an overview of the long-term impact of RTA on the traditional and modern sectors. We voluntarily excluded the petroleum products to eliminate problems of overrepresentation (in the South African case) and facilitate our cross-country observation of structural changes.

Data on comparative advantage RCA as well as the GDP per capita figures used to calculate the PRODY index were sourced from the World Bank database.

And lastly, data on preferential and Most-favored nation (MFN) tariffs were obtained on TRAINS through the WITS platform.

## 5. Results and Discussion

As discussed earlier the main objective of our test is to verify whether preferential tariffs, that is membership to FTA, has been a significant factor in promoting industrialization and structural transformation in the SADC countries. As demonstrated previously, FTA and regional integration have played a crucial role in the economic growth and development of the ASEAN members (mainly Indonesia, Malaysia, Singapore and Thailand but Philippines and Vietnam joined the trend since the mid-2000s). Therefore, in order to make a comparison and draw some policy implications on S-S regionalism, the empirical test is important for identifying the factor of differences between the two regional blocs regarding the long-term impact of regional trade integration. In principle, we expect our result to confirm our preliminary observations that conversely to AFTA, the SADC FTA performed poorly in the promotion of industrialization and structural change among the participating countries.

---

[9] Namely: Agriculture (1), Other mining and quarrying (14), Manufacture of food and beverages (15), Manufacture of textiles (17), Manufacture of machinery and equipment (29), Manufacture of electrical machinery and apparatus (31), Manufacture of motor vehicles (35).

Overall, with an R-squared superior to 0.5 for each of our five regressions, we can say that the model represents a relevant relationship between the dependant variables ti and the other explanatory variables. Moreover, the marginal effect of preferential tariffs on trade intensity $\frac{\partial ti_{g,p,t}}{\partial Pref_{g,p,t}}$ appears to be positive although not significantly[10] for the entire dataset. In other words, in the overall preferential tariffs seem to have moderately promoted intra-regional trade. This is consistent with what has been observed in the descriptive statistics in previous sections.

However, for South Africa preferential tariffs seem to impact negatively on its export to the SADC trade bloc with a negative and significant coefficient $\beta_3 < 0$ as shown in the table below.

Regarding the effect of PTA on industrialization and export patterns, our regression results show that, except for South Africa, preferential tariffs had negative but not significant impact on the other countries (i.e. $\beta_{2,3} < 0$ except for SA[11]). This observation is similar to Moncarz et al.'s (2011) results which showed that the MERCOSUR benefited to Brazil's manufacturing export at the expense of other members. Therefore, according to the C&M theory, although not significant, our result implies that South Africa may use regionalism as an industrial policy tool.

Interestingly, our coefficient on RCA ($\beta_1$) shows negative signs for Botswana and Mauritius which means that they are facing high non-tariff barriers from other SADC countries on products in which they have strong comparative advantage. For instance, Botswana's exports consist predominantly of minerals and quarrying products including diamonds which compete with the exports from other members such as South Africa and Namibia (AFDB, 2016). For Mauritius its low tech manufacture exports such as textiles and processed food products is in competition with exports from Madagascar or Swaziland among other (AFDB, 2016). Furthermore, with a negative $\beta_1$ and $\beta_{2,3}$, Mauritius tends to suffer from trade diversion in non-sophisticated exports within the trade bloc.

Regarding Venables' arguments on factor endowment distribution, our test shows that while Botswana and Namibia's exports are non-sophisticated products ($\beta_{2,3} < 0$) with strong comparative advantage ($\beta_{1,3} > 0$), preferential tariffs encourage,South Africa's exports in high PRODY products. In other words, Botswana and Namibia are standing farther from the technology frontier compared to South Africa. And preferential tariffs reinforce the status quo for the formers. For Mauritius and Tanzania the SADC regional bloc seems to apply strong non-tariff barriers on their export of manufacturing products and on product they have strong comparative advantage.

Therefore, these results suggest that with the exception of South Africa and to a lesser extent

---

[10]  The information and data on this matter are available on demand.

[11]  South Africa

| VARIABLES | (Botswana) ti[12] | (Mauritius) ti | (Namibia) ti | (South Africa) ti | (Tanzania) ti |
|---|---|---|---|---|---|
| lnRCA($\beta_1$) | −0.00351 (0.0308) | −0.000414 (0.0279) | 0.0117 (0.0303) | 0.00937 (0.0321) | 0.00782 (0.0344) |
| lnPRODY($\beta_2$) | 1.515 (1.154) | −0.456 (0.301) | 0.744 (0.885) | 0.0713 (0.210) | −0.802** (0.366) |
| Pref($\beta_3$) | 0.140 (0.302) | 0.162 (0.117) | 0.184 (0.224) | −0.125* (0.0730) | 0.0451 (0.154) |
| ln(RCA)*Pref($\beta_{1,3}$) | 0.000180 (0.00198) | −4.52e−05 (0.00128) | 0.000372 (0.00293) | 0.000778 (0.000785) | −0.000152 (0.000892) |
| ln(PRODY)*Pref($\beta_{2,3}$) | −0.0146 (0.0296) | −0.0155 (0.0120) | −0.0209 (0.0238) | 0.0120 (0.00759) | −0.00467 (0.0157) |
| Constant | −15.40 (11.85) | 4.619 (3.057) | −6.662 (8.100) | −0.621 (2.152) | 8.397** (3.783) |
| Observations | 75 | 75 | 75 | 75 | 75 |
| R-squared | 0.845 | 0.892 | 0.547 | 0.886 | 0.876 |

Robust standard errors in parentheses（*** $p<0.01$, ** $p<0.05$, * $p<0.1$）

Namibia, the SADC integration reinforces trade diversion effect particularly in non-sophisticated products such as agricultural and resource-based products. And since most of the SADC countries exhibit a relatively similar comparative advantage, preferential tariffs tend to result in higher non-tariffs barriers to trade. Consequently, although the marginal effect of PTA among the SADC countries has not been negative, the SADC FTA did not lead to more diversified and more sophisticated exports within the region compared to what has occurred within the ASEAN regional bloc.

However, it is important to note that this does not suggest that the SADC FTA has been a failure and should be abandoned. In fact, the positive effect on South Africa's industrial exports demonstrates that there are possibilities for an industrial learning and expansion within the regional bloc. The main issues to be addressed, such as infrastructure investments to enhance regional connectivity, education and capacity building, removal of non-tariff barriers, industrial cooperation, etc, are political in nature. This leads us to the next section to discuss the implications of the ASEAN developmental regionalism in addressing the obstacles on structural change within the SADC regional bloc.

## 6.   Implication of the ASEAN Model for Long-term Growth of the SADC Regions

As discussed in previous sections, there are economic arguments in favour of S-S regionalism as an instrument of structural change and economic development in the developing countries. Empiri-

---

[12]  ti is the dependant variable Trade intensity which measure the level of intra-regional trade compared to the ROW. Mathematically, it is the difference between the share of intra-regional export and the share of export to the ROW.

cal studies performed on ASEAN countries revealed the positive role played by RTAs in poverty reduction and economic diversification（Amelia, 2017）. In this regard, the ASEAN model provides the missing empirical evidence to support the economic rationale for S-S economic integration. Moreover, comparative analysis between ASEAN and SADC regionalism stressed that the Southeast Asian initiative differed from its Southern African counterparts in two main points. First, the pace of economic liberalization has been gradual and slower compared to the SADC given their year of establishment. The second point, which is related to the first, is that the ASEAN regionalism goes beyond the traditional static and short-term economic debates and address more dynamic issues related to long-term growth and industrial upgrading. Indeed, as we have observed for the SADC countries the main constraints to economic diversification and industrialization in a South-South trade setting are non-economic in nature. For instance, they include constraints such as non-tariff barriers and other market shortcomings that can only be addressed through proactive policymaking. This is where the ASEAN model, which embodies a 21st century version of the so-called East Asian model, can provide interesting lessons for the development of the SADC countries. Therefore, let us highlight some of the characteristics and achievements of the ASEAN with regard to developmental regionalism.

### 6.1.　ASEAN developmental regionalism: The State-market nexus

Comparatively the ASEAN benefited from more experiences than its Southern African counterpart since it has been established earlier（August 1967）. Accordingly, it went through longer processes of trials and errors in terms of policymaking and institution building. However, as shown in previous sections, SADC's economic integration process has been faster or at least at the same pace as the ASEAN. For instance, despite being launched in 1992 the AFTA only achieved to reduce tariffs to between 0–5％ among the original members by 2008（Okabe and Urata, 2013）, while the SADC FTA[13] achieved the maximum requirement of zero tariff duty among the participating countries[14] by 2007 for the SACU[15] countries and by 2012 for the others. Moreover, the regional institution of the ASEAN is much less bureaucratic than the SADC which has several hierarchical ramifications and subdivisions.

However, the determining characteristics which set the ASEAN apart are related to the particular dynamics existing between the domestic-oriented States and the Multinational corporations

---

[13] The SADC protocol on trade was passed in 24th of August 1996 (SADC website, 2012)

[14] According to the last update on the SADC website, Angola and the Democratic Republic of Congo are still outside the FTA and 13 out of the 15 SADC countries are inside (SADC, 2012)

[15] Southern African Customs Union

MNCs (Yoshimatsu, 2002). Indeed, Yoshimatsu (2002) argues that it was this particular interplay between seemingly diverging interests that shaped the regional development of the ASEAN (particularly the ASEAN-5). In other words, while "authoritarian" Southeast Asian governments prioritized national interests they had to acknowledge the importance of the MNCs as essential resources to promote industrial development and economic diversification. Hence, the ASEAN regionalism has been primarily an instrument to reconcile the economic development priorities of the Southeast Asian nation-states with the efficiency and profit-seeking goals of foreign investors. The ASEAN regional initiatives were essentially aimed at providing an ideal environment for the expansion of industrial activities across the region. In other words, the ASEAN developmental regionalism consisted primarily of industrial policy initiatives. In doing so, the ASEAN states did not hesitate to intervene in order to correct the failure of the market in allocating the resources necessary for industrialization and structural transformation (Jomo, 2002; Ohno, 2003).

### 6.2. *Industrial policy and regional integration*

It is widely recognized that the East Asian countries' economic dynamism has been sustained by trade and investment in the manufacturing sectors. However, while the first tiers East Asian countries (e.g. Japan, South Korea and Taiwan) relied heavily on domestic capitals, FDI played a crucial role in leading the industrialization in the ASEAN regional bloc. Therefore, various initiatives have been implemented in the ASEAN to attract FDI and enable technology and knowledge transfer in the process. In this regard, unlike the SADC, the ASEAN regional integration process mobilized numerous political and institutional resources than simple tariff liberalization. Indeed, regional initiatives in the Southeast Asian regional bloc aimed particularly at correcting market failures associated with scale economies and technological dynamism through tariff sequencing, technology transfer requirement, public research and development, joint ventures.

Notable examples demonstrating the industrial policymaking role of the ASEAN were the implementation of the Brand-to-Brand complementation BBC scheme (October 1988) and the ASEAN Industrial Cooperation AICO (September 1995). Although these two policy measures were the result of MNCs lobbying for deeper economic integration to benefit from lower production costs and larger market size, they still had to comply with sets of rules imposed by the ASEAN states. Thus, in order to benefit from the 50 percent tariff margin and local content accreditation under the BBC scheme, companies were required to locate their production plants in an ASEAN countries. This scheme, although still modest, was the first successful industrial cooperation within the regional bloc. According to Yoshimatsu (2002), the BBC scheme resulted in substantial increases in the activities of Japanese automakers such as Toyota which increased its transaction value of

parts and components within the ASEAN from 1.6 billion yen in 1992 to 15.5 billion yen in 1995 (p. 131). This period corresponds to the period of the second wave of economic growth acceleration in the original ASEAN members with the exception of Philippines where steady growth acceleration occurred in later period in the 2010s.

However, with increasing criticisms and demand for reforms of the BBC scheme from both local and other foreign companies, particularly in the manufacturing sector, the ASEAN came up with a new proposal of industrial cooperation, the AICO, in 1995. This new regime of industrial cooperation integrated more activities in the manufacturing sector in addition to the existing automobile assembly. In this regard, auto parts manufacturers such as Japan's largest auto parts manufacturer Denso, strongly lobbied for the opening of the BBC scheme to other manufacturers. Consequently, the AICO scheme replaced the BBC scheme after the ASEAN economic Ministers (AEM) meeting in Singapore in April 1996 (Yoshimatsu, 2002). The AICO originally granted the participants a tariff preference between 0–5 percent, local content accreditation and other non-tariff incentives. However, the beneficiaries had to agree to some requirements such as a minimum 30 percent ASEAN national equity, and willing to undertake resource pooling, industrial complementation, industrial cooperation activities, and the participation of at least two companies in two different ASEAN countries. Initially, the new scheme faced some problems caused by administrative loopholes and investors' scepticism about the requirements, particularly the 30 percent national equity clause. However, at the aftermath of the Asian financial crisis, under the pressure of the MNCs, the ASEAN countries accepted to relax several of original criterions. Thus, the 30 percent national equity condition was suspended during the period 1999–2000 and AICO application was opened to foreign companies that are not registered in any ASEAN countries. Moreover, administratively, the ASEAN plays the role of a one-stop-shop where companies submitted their application documents instead of to each ASEAN state authority as previously. As a result, the number of applications to AICO increased from 17 in 1997 to 89 in 2000 (Yoshimatsu, 2002; p. 138).

These examples show that not only has the ASEAN countries been using the regional platform to promote industrialization but also to negotiate and share information with the private sector. Beside the neutral macroeconomic measures such as tariff elimination, the ASEAN countries have been proactive in monitoring, correcting, and orienting the market to serve their ultimate objective of industrialization and economic diversification. Therefore, conversely to the SADC, the ASEAN policies allowed its members to upgrade their export product sophistication without sacrificing their competitiveness on traditional products in which they have strong comparative advantages. The cooperation scheme gave enough room to the countries to pursue their national goals as well as to remain attractive and integrated to the world market.

### 6.3. Regional imbalances and catching-up process

While the economic diversity and imbalances between the SADC members impacted the regionalization process by reinforcing the status quo, the ASEAN regionalism has been promoting the catching-up process of its less developed members namely the CLMV countries. In this regard, Amelia (2017) reports that poverty rates are now lower than the LDCs average in Laos and Cambodia. According to Amelia (2017), notable examples are Vietnam moving from low-income to lower-middle income in in 2008 and Lao PDR in 2010. Therefore, although regional imbalances between the advanced and less-advanced ASEAN members are still significant, the progress from the latter is clearly observable. Experts attribute this progress to the deepening of regional integration which has been driven by the expansion of production networks (Kuroiwa, 2008; Ohno, 2010; Amelia 2017).

Kuroiwa (2008) notes that as with the situation in latecomer countries of the 21st century, the CLMV countries are facing dual obstacles to industrial policy implementation: the shrinking policy space due to the strengthening globalization and the weak institutional capability of the state. Indeed, while the progress of globalization results in more restriction on the prerogative of the state in intervening on the market, weak institutional capabilities are increasing the risk of failure and thereby the costs of state intervention. This explains why selective industrial policies such as in the 20th century Northeast Asian countries are rare if not absent among today's developing countries. However, this is where the ASEAN regional bloc played a pivotal role in the development of the CLMV countries.

As demonstrated previously, while the SADC regional economic integration process simply focused on trade liberalization, the ASEAN has addressed other non-tariff and non-economic obstacles to trade and industrial development. Numerous regional and sub-regional development programs were implemented in order to reduce costs of production fragmentation and vertical integration. On the one hand, the integration of the CLMV countries into the ASEAN and the elimination of tariff and cross-border barriers fostered the relocation of some labour-intensive industries such as in textile and clothing. These firms could benefit from efficiency gains by moving their labour-intensive production process in the low wage CLMV countries. This type of production fragmentation has been facilitated by the integration of geographically close countries (e.g. Laos and Thailand) and the development of regional core infrastructures such as the Eastern Seaboard Development Program or the Hanoi-Haiphong transport corridor among others.

On the other hand, more sophisticated industries which are characterized by increasing returns to scale (IRS) and are prone to agglomeration effects require more proactive policies. These industries include medium-technology products such as automobile and electronics which constitute the

bulk of the ASEAN production networks. According to Kuroiwa (2008), these types of industries are attracted to: (1) home market-size; (2) vertical (backward or forward linkages); (3) hub formation; (4) formation of a specific input market; (5) spillover of technical/information market. Therefore, among the measures to promote the expansion of the industries mentioned above are the implementation of economic corridors (e.g. North-South and the Southern economic corridor), creations of special economic zones (SEZs) in metropolitan areas, border areas and transport hub such as in Phnom Penh (18 SEZs) or Bavet (Vietnam-Cambodia border area). These measures have been reinforced by broader regional frameworks under the ASEAN economic community. Heretofore, the results were that skill-intensive exports have more than doubled in the Philippines and Vietnam. In Cambodia, manufactures exports increased from 3 to 8 percent.

### 6.4. *Bargaining power with public and private partners: geopolitical implications*

Although it is not directly related to economic growth and structural transformation, another implication of the ASEAN developmental regionalism model is the importance of bargaining power when negotiating trade and investment deals or cooperation and assistance with third parties such as MNCs and governments of the OECD countries. Indeed, ASEAN as a S-S cooperation scheme, has understood the benefit of pooling not only productive resources but also diplomatic capabilities in order to obtain the best outcomes in multilateral negotiations. The SADC has also been outperformed by the ASEAN in this regard.

Throughout its fifty years of existence, the ASEAN has established itself as an essential player in the Asia and Pacific regions. The ASEAN managed to cooperate with and bring together non-member countries that often have competing interests and delicate diplomatic relationships such as China and Japan. Unlike the SADC, the ASEAN is also very active in seeking trade and investment partnership with different partners under the ASEAN+ scheme. The ASEAN has established FTA deals with different dialogue partners such as Australia, China, India, Japan, South Korea or New Zealand (ASEAN, 2015). Not only does this reflect the increasing regional weight gained by the Southeast Asian bloc but also results in a better position when it comes to trade and investment negotiations at the multilateral level.

For instance, this increasing bargaining power enabled the ASEAN countries to sit on the same table and discuss with rich donor countries such as Japan and obtain her assistance in various areas such as infrastructure development, capacity building and public-private partnership among others. Accordingly, the ASEAN countries have been the largest recipients of Japanese ODA. Moreover, the ASEAN regional bloc also managed to become the top destination of Japanese FDI compared to other developing regions in the world; financial flows from other emerging countries such as China

and South Korea are also expanding. The importance of bargaining power has also been demonstrated by the ability of the ASEAN to negotiate and revise different investment schemes directly related to specific industries such as the BBC and the AICO for the automobile sector.

Despite the fact that regional economic integration often focuses on trade and investment performances. Our comparative analysis of the ASEAN and the SADC showed that trade and investment are not the only factor at play when it comes to long-term growth and structural transformation. Indeed, non-economic factors such as the shift in bargaining power should also be taken into account.

## 7.  Concluding Remarks

Throughout this study, we have demonstrated the relevance of the ASEAN developmental model by contrasting its regional integration process with that of the SADC. More precisely, we compared and analysed these two regional economic integration projects under the prism of two complementary theoretical frameworks, namely: the concept of developmental regionalism, and the South-South economic integration. By combining these two conceptual frameworks, we aimed to reconcile the political economy with the purely economic perspective in the analysis of the ASEAN in particular and regional integration in developing countries in general. This strategy allowed us on one hand to empirically test the structural effects of economic factors such as preferential tariffs or regional exports; while understanding the final regional economic outcomes by analysing the political and social forces which shaped the resource allocation process on the other.

Therefore, our comparative analysis showed that although South-South trade exhibits the highest growth rate and higher export sophistication than with the North for both regional blocs, the overall economic performance of the ASEAN and the SADC has been highly divergent. Indeed, since the early 1990s (the period of establishment of FTA in both regional bloc) while the ASEAN countries have seen a consistent increase in the sophistication of their export products, the SADC countries (except South Africa) have been trapped in their status of resource-based economies. Indeed, for most of ASEAN members, including the CLMV countries, an improvement in the share of export of manufactured goods are observed since the 1990s. Moreover, in terms of product and market diversification the ASEAN is outperforming their Southern African counterparts. However, while mainstream trade theory would suggest that the ASEAN has been liberalizing tariffs faster and reduced state intervention to the minimum compared to the SADC, our study showed a rather nuanced picture. Indeed, for instance, a close observation in the evolution of tariff liberalization showed that the SADC economic liberalization was at a higher pace than the ASEAN, particularly when the year of establishment of both regional bloc is taken into account.

Thus, in section 4 we performed an empirical test in order to assess the impact of preferential

tariffs on the regional trade patterns of the SADC countries. The objective was to investigate whether regional economic liberalization promoted export diversification and improved product sophistication as observed in the ASEAN regional bloc. In doing so, we adopted a model constructed in Moncarz et al. (2011) which enables the observation of the impact of revealed comparative advantages, product sophistication and preferential tariffs in 5 SADC member countries (Botswana, Mauritius, Namibia, South Africa and Tanzania) from 2005 to 2015. The main feature of this model is the interaction variables which assess the consequence of preferential tariffs on regional export patterns. After running the regression on the 75 observations for each countries, the results[16], have confirmed our original assumptions. Indeed, the results show that in general tariff liberalization has had a positive impact on regional trade intensity. Moreover, a detailed observation of the coefficients shows rather contrasted outcomes between the five countries. Our regression result shows that the industrialization effect is only valid for South Africa where regional tariff preference resulted in increasing exports of more sophisticated goods. For Botswana and Namibia the regional market liberalization only reinforces the status quo, i.e., the export of non-sophisticated products in which they enjoy strong comparative advantage. And lastly, for Mauritius and Tanzania the SADC preferential tariffs result in higher export of non sophisticated product, in which they do not have strong comparative advantage. In general, these results imply that SADC exporters are facing high non-tariff barriers to trade, particularly in the manufacturing products. These non-tariffs trade restrictions not only include quotas on competitive products but also other geographical, political or infrastructural obstacles.

The last section addressed the political economy behind the success of the ASEAN and drew implications for the SADC countries. Therefore, we argued that the main difference between the ASEAN and SADC regionalism is the capacity and willingness of the former into tackling different non-tariff barriers at the regional level. Moreover, governmental entities in the ASEAN participated actively in shaping the conditions and outcomes of resource allocation. For instance, the concept of developmental regionalism highlights that the ASEAN states worked actively on reconciling their national development objectives with the requirements of the markets (e.g. foreign companies). We also suggested that the regional production networks in manufacturing industries were the result of the active involvement of regional resources in the negotiations and regulations of the terms of trade and investments with the MNCs. Thus, industrial policies were implemented at the regional level within the ASEAN regional bloc. With regard to economic development, the ASEAN has put in place different regional programs and initiatives to help the catching-up process of least

---

16 Although due sample size and data quality the results are not always statistically significant.

developed members. And lastly, ASEAN has used its increased bargaining power to negotiate and implement favourable trade and investment deals with powerful third parties such as MNCs and countries of the OECD.

In light of these analyses, we conclude that regional economic integration, particularly in the developing regions, calls for the consideration of more dynamic and complex processes than simple market liberalization. Therefore, our comparative study of the ASEAN and the SADC showed that empirical models should be complemented with deeper political economic analysis to understand the difference in economic and developmental performances. In this regard, we demonstrated that long-term growth and structural transformation in a given regional bloc are not only explained by market forces but also by other non-market actors and variables. The specificity of the ASEAN model in particular and the East Asian one in general is the acknowledgement of necessary interactions between market and non-market forces to achieve long-term objectives of growth and structural transformation. Therefore, we argue that the ASEAN specificity may inform us in the measure to be take to correct the current failures in the SADC regional economic integration process. The next step in this study will be the identification and determination of specific regional measures and policies in the context of the Southern African region.

**References**

AFDB（2016）, 'African Statistical Yearbook 2016', *Africa Development Bank*, Cote d'Ivoire: Abidjan.

Agatiello, Osvaldo（2007）, 'Is South-South Trade the Answer to Bringing the Poor into the Export Process?', *in UNCTAD Expert Meeting on Participation of Developing Countries in New and Dynamic Sectors of World Trade: The South-South Dimension, Geneva'*, pp. 16–17.

Amelia, Santos-Paulino（2017）, 'The Asian Economic Integration Cooperation Agreement: lessons for economic and social development', *UNCTAD Research Paper* Vol. 3.

Amighini, Alessia, and Marco Sanfilippo（2014）'Impact of South-South FDI and trade on the export upgrading of African economies', *World Development*, Vol. **64**, pp. 1–17.

Amsden, Alice（2001）, *The rise of "the rest": challenges to the west from late-industrializing economies*, Oxford University Press, USA.

Amsden, Alice（1992）, *Asia's next giant: South Korea and late industrialization*, Oxford University Press.

ASEAN（2015）, *ASEAN Integration Report*, ASEAN Secretariat, Jakarta: Indonesia.

Chang, Ha-Joon, and Ilene Grabel（2014）, *Reclaiming development: an alternative economic policy manual*, Zed Books Ltd., London and New York.

Chang, Ha-Joon（2002）. "Breaking the mould: an institutionalist political economy alternative to the neo-liberal theory of the market and the state." *Cambridge Journal of Economics*, Vol. **26**, pp. 539–559.

Cooper, C. and B. Massell（1965）, 'Toward a General Theory of Customs Union for Developing Countries', *Journal of Political Economy*, Vol. **73**, pp. 461–476.

ELUMBRE, Adonis（2014）'Interpreting ASEAN Developmental Regionalism through Discursive Institutionalism', *Journal of Third World Studies*, Vol. **29**, *Kasarinlan: Philippines*.

Grossman, G. and E. Helpman（1995）, 'The Politics of Free Trade Agreements' *American Economic Review*, Vol. **85**, pp. 667–690.

Hamid, Mohammed & Aslam, Mohamed (2017), 'Intra-regional Trade Effects of ASEAN Free Trade Area in the Textile and Clothing Industry', *Journal of Economic Integration*, Vol. **30**, pp. 660–688, South Korea.

Hausmann, Ricardo; Jason, Hwang, and Dani, Rodrik (2007), ''What you export matters.'' *Journal of economic growth*, Vol. **12**, pp. 1–25.

IMF (2017), *Sub-Saharan Africa: Fiscal Adjustment and Economic Diversification*, Regional Economic Outlook IMF, USA: Washington.

Johnson, Chalmers (1999). 'Chapter 2: The developmental state: Odyssey of a concept', *The developmental state*, Woo-Cumings, Meredith Ed., Cornell University Press, pp. 32–60.

Klinger, Bailey (2009), 'Is South-South Trade a Testing Ground for Structural Transformation?', *UNCTAD*, Vol. **40**, Switzerland: Geneva.

Lavopa, Alejandro (2015), *Structural transformation and economic development: can development traps be avoided?*, Maastricht University.

Moncarz, Pedro; Olarreaga, Marcelo. & Vaillant, Marcel. (2016), 'Regionalism as industrial policy: Evidence from MERCOSUR', *Review of Development Economics* Vol. **20**, pp. 359–373.

Nesadurai, Helen (2003), 'Attempting developmental regionalism through AFTA: the domestic sources of regional governance', *Third world quarterly*, Vol. **24**, pp. 235–253.

Ohno, Kenichi (2016), 'The quality of Industrial Policy as Determinant of Middle IncomeTraps Comparing Vietnam with other Countries', *VNU Journal of Science*, Vol. **32**, pp. 179–189.

Ohno, Izumi & Ohno, Kenichi (2010), 'Dynamic Capacity Development: What Africa can learn from industrial policy formulation in East Asia', *Unpublished conference paper for Initiative Policy Dialogue*, Ethiopia:Addis Ababa. (http://www.grips.ac.jp/vietnam/KOarchives/doc/EP28_dcd5_forIPD.pdf)

Ohno, Kenichi (2003), 'The Role of Government in Promoting Industrialization under Globalization: The East Asian Experience', *National Graduate Institute for Policy Studies (GRIPS)*, Vol. **28** Tokyo, Japan.

Okabe, Misa & Urata, Shujiro. (2013), 'The impact of AFTA on intra-AFTA trade', *ERIA Discussion Paper Series*, pp. 1–43.

Salazar-Xirinachs, Jose; Nübler, Irmgard; Kozul-Wright, Richard & Altenburg, Tilman (2014), *Transforming economies: Making industrial policy work for growth, jobs and development*, International Labour Organization, Geneva.

Sanguinetti, Pablo; Siedschlag, Iulia and Martincus, Christian, (2010), 'The impact of south-south preferential trade agreements on industrial development: an empirical test', *Journal of Economic Integration*, Vol. **25**, pp. 69–103.

Shafaeddin, Mehdi (2008), South-South Regionalism And Trade Cooperation in The Asia-Pacific Region', Technical report, *University Library of Munich*, Germany.

Shafaeddin, Mehdi (2010), 'The rationale for South-South trade; An Alternative Approach', *University Library of Munich*, Germany.

Sandrey, Ron (2013), 'Analysis of the SADC free trade area', *TRALAC*.

Soderbaum, Frederik. & Shaw, Timothy (2003), *Theories of new regionalism*, Palgrave Mcmillan, USA: New York.

Sperlich, Stefan, and Yvonne Sperlich (2012), '*Growth and Convergence in South-South Integration Areas: Empirical Evidence*', *Institut d'Economie et Econométrie Université de Genève*.

Sundaram, Jomo (2002), 'State and Market in Economic Development: Southeast Asian industrial policy in comparative East Asian perspective', *Promoting Growth And Welfare: Structural Changes And The Role Of Institutions In Asia. Santiago*, pp. 2–28.

Thrasher, Rachel & Gallagher, Kevin (2008), '21st century trade agreements: implications for long-run development policy', *The PARDEE PAPERS Boston University*, Vol. **2**, USA: Massachussets.

Urata, Shujiro. (2011), 'Economic Impacts of Free Trade Agreements (FTAs)', *The International Economy*,

Vol. **15**, pp. 75–95.

Urata, Shujiro（2009）'Chapter 1: Industrial development strategy in CLMV', *in ERIA Research Project Report*, Eds. Akifumi, Kuchiki and Shuji Uchikawa, ERIA, Indonesia: Jakarta, pp. 13–32.

Venables, A. J.（2003）, 'Winners and losers from regional integration agreements', *The Economic Journal*, Vol. **113**, pp. 747–761.

Williams, Michelle, ed.（2014）*The end of the developmental state?*. Routledge, London and New York.

WTO（2012）, *A Practical Guide to Trade Policy Analysis*, WTO, World Trade Organization.

Yoshimatsu, Hidetaka（2002）, 'Preferences, interests, and regional integration: the development of the ASEAN industrial cooperation arrangement', *Review of International Political Economy*, Vol. **9**, pp. 123–149.

**URL:**

https://comtrade.un.org/

https://www.rug.nl/ggdc/productivity/pwt/

http://www.sadc.int/

https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx

https://data.worldbank.org/