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RULES OF ORIGIN AND INTERNATIONAL TRADE

The Case of the Textile and Clothing Industry in Madagascar

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Abstract

This study investigates the impact of rules of origin (ROO) on the Malagasy textile and clothing industry. The ROO of two different preferential trading arrangements for developing countries, the African Growth and Opportunity Act (AGOA) of the US and the Lomé/Cotonou agreement of the EU, are compared and related to Malagasy clothing exports and textile imports. The AGOA ROO are found to be more liberal than the ones in Lomé/Cotonou, especially when it comes to input sourcing. This study shows that strict ROO have a negative impact on Malagasy clothing exports. Clothing exports to the EU tend to grow slower, be less diversified and use less diversified inputs than exports to the US. Further, strict ROO are not found to increase vertical integration in the Malagasy textile and clothing industry. It can therefore be questioned whether using strict ROO as a tool for development policy in highly fragmented sectors is effective. Lastly, the utilization rates for AGOA apparel are higher than the ones for Lomé/Cotonou apparel, reflecting the higher costs of exporting to the EU due to strict ROO. In conclusion, the limited input sourcing possibilities in the Lomé/Cotonou ROO can be said to have limited the expansion and diversification possibilities of the Malagasy textile and clothing industry.

Keywords:

Rules of origin, Madagascar, textile & clothing, AGOA, Lomé/Cotonou

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Abbreviations

ACP	African, Caribbean and Pacific
AGOA	African Growth and Opportunity Act
ATC	Agreement on Textiles and Clothing
ASEAN	Association of South East Asian Nations
CACM	Central American Common Market
ESA	Eastern and Southern Africa
EPA	Economic Partnership Agreement
EEC	European Economic Community
EU	European Union
EBA	Everything But Arms
EPZ	Export Processing Zone
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
IEPA	Interim Economic Partnership Agreement
IMF	International Monetary Fund
LDC	Least Developed Country
LTA	Long Term Agreement Regarding International Trade in Cotton Textiles
MFN	Most Favoured Nation
MFA	Multi Fiber Agreement
OTEXA	Office of Textiles and Apparel
PTA	Preferential Trade Agreement
ROW	Rest of the World
ROO	Rules of Origin
SADC	Southern African Development Community
SITC	Standard International Trade Classification
T&C	Textile and Clothing
UN COMTRADE	United Nations Commodity Trade Data Base
UNCTAD	United Nations Conference on Trade and Development
US	United States
USD	United States Dollar
VAT	Value Added Tax
WTO	World Trade Organization

1 Introduction

Rules of origin (ROO), which are an essential tool in international trade, determine the geographic origin of goods. The policy usages of ROO are diverse and include for example collecting trade statistics, applying import tariffs and safeguard measures, marking products as a service to consumers and imposing anti-dumping duties on unfairly traded goods. In addition, ROO are also used in Preferential Trade Agreements (PTAs) to ensure that only the intended countries benefit from preferential treatment.¹ Globalization has lately made production processes more fragmented and increased the number of PTAs in the world rapidly.² This has made origin marking harder and in turn highlighted the importance of ROO.

The increasing importance of ROO has meant that more and more attention has been diverted towards them. Their supply-switching effects through inflexible input sourcing rules and administrative costs have been found to have a negative effect on trade.³ Questions about how trade enhancing a PTA with strict ROO really is have therefore been raised. Rules of origin also reduce the value of the tariff concessions in preferential trading arrangements for developing countries.⁴ This is problematic since it limits trade creation and development for poor countries and hence counteracts the whole purpose of these trading arrangements. Critical voices have even accused ROO of being a form of hidden protectionism.⁵ These accusations make it interesting to examine to what extent ROO can affect trade between countries in general and especially in the case of preferential trading arrangements for developing countries.

Madagascar is one example of a developing country that is dependent on preferential trading arrangements. In order to reduce poverty, Madagascar has chosen an outward-looking development strategy where the Export Processing Zone (EPZ), Zone Franche, has played a crucial role. The Malagasy EPZ is one of few economic success stories in sub-Saharan Africa

¹ Ahmad (2007) p. 1

² Ghoneim (2003), p. 598

³ Augier, Gasiorek and Lai-Tong (2005) p. 576

⁴ Brenton and Manchin (2003) p. 767

⁵ Ahmad (2007) p. 1

and the reason behind the success is foremost a booming Textile and Clothing (T&C) sector. The sector's expansion has been heavily reliant on the preferential access to both the European Union (EU) and the United States (US) granted to Madagascar for being a Least Developed Country (LDC). The ROO for clothing in the EU and the US preferential trading arrangements differ however. The EU rules have traditionally been quite strict while the US rules are known to be liberal, especially in terms of input sourcing. This fact makes Madagascar an excellent candidate for a case study on the impact of ROO on the T&C sector.

1.1 Purpose

The purpose of this study is to examine the impact of ROO on the T&C sector in Madagascar. The analysis focuses on final good exports and input imports to study the effects of liberal versus strict ROO and aims at answering the following:

- Is it possible to see different trade patterns with the US and the EU when it comes to Malagasy clothing exports? If so, what are the differences and can they be related to ROO?
- Further, can ROO be deemed to influence the choice of inputs in the Malagasy T&C industry? In what way?
- To what extent is preferential access requested for Malagasy clothing exports to the US and to the EU? Is there a difference between the utilization rates for AGOA and Lomé/Cotonou apparel?

1.2 Delimitations

The paper is mainly based on data up until the year 2006. This means that the effects of this year's political crisis in Madagascar and of the new Interim Economic Partnership Agreement (IEPA) between the EU and Madagascar are not covered by the data and hence not analyzed further. The IEPA is however mentioned in chapter four and chapter six includes a short update to recent events and their possible long-term effects for Madagascar.

1.3 Method and Material

The study is based on economic theory in relation to economic integration and ROO. A comparative method is used to examine the differences, if any, between the trade effects of the US and EU ROO. The trade effects are analyzed by looking at export and import responses to the different preferential trading arrangements. In particular, the composition of final good exports to different markets is examined and related to the imports of input material. The data is collected from the United Nations Commodity Trade Data Base (UN COMTRADE), the EU's Eurostat and the US Office of Textiles and Apparel (OTEXA). The classification system used for data collection from UN COMTRADE is the Standard International Trade Classification (SITC) revision 2. This older system is used in order to get long time series on a reasonably disaggregated level. Utilization rates of the preferential trading arrangements and an examination of domestic input alternatives also serve to deepen the understanding of the effects of ROO.

As a complement to the quantitative method described above, interviews were also conducted in Madagascar to get a better knowledge of the Malagasy textile and clothing sector. Interviews were held with representatives for private sector organizations, companies and the Delegation of the European Commission in Madagascar. It is important to note that this is only a case study and that the interviewed companies and organizations do not represent a scientific sample of the textile and clothing sector in Madagascar. The current political situation in Madagascar also forced me to shorten my stay in Antananarivo and made the number of visited companies quite small.

All material, except interviews, in this paper is collected from articles published in scientific journals, reports from leading organizations/research centers like the World Bank or from electronic sources. Electronic sources are foremost taken from the sites of governments and such organizations just mentioned to get a high reliability. Data has been collected from different well-known sources, see above, and then compared to make sure that a just result is presented.

1.4 Disposition

Chapter two of this paper gives a quick background to the textile and clothing sector in Madagascar. Special attention is devoted to the EPZ's importance for the sector's development

and the effects of the phasing out of the Multi Fiber Agreement (MFA). The next chapter covers the economic theory in relation to ROO to give a theoretical background to the examined issues. Chapter four further describes the different preferential trading arrangements of the EU and the US, Lomé/Cotonou and the African Growth and Opportunity Act (AGOA). This is followed by chapter five which presents the empirical material of the paper. This part is focused on the Malagasy export and import responses to Lomé/Cotonou and AGOA and these responses' connection to ROO. Finally, chapter six summarizes the study's findings and gives an update to the latest developments in the Malagasy textile and clothing sector.

1.5 Previous Research

A few studies have previously examined the impact of ROO on clothing exports from sub-Saharan Africa. The entry into force of AGOA triggered several comparative studies on the effects of the EU and US preferential trading arrangements for LDCs. Most of the studies mentioned below looked at sub-Saharan Africa as a group and Madagascar was included in a majority of the samples. None of the studies is a case study of only Madagascar.

That strict ROO have a negative effect on preferential market access is generally accepted and supported by findings by Cadot, Djiofack and De Melo.⁶ When it comes to African clothing products, it is foremost the limitations in fabric sourcing that reduces the effects of tariff concessions. Portugal-Perez has investigated this further and found that the relaxing of ROO by allowing producers to use fabric from anywhere in the world would increase African clothing exports by as much as 300 %. Rules of origin have also been found to restrict the possibilities of export diversification.⁷ De Melo and Portugal-Perez have showed that this restriction of diversification is expected to be in the 30-60% range.⁸ In addition, Ahmad has concluded that liberal ROO lead to increased sourcing from developing countries which means that strict ROO serve as impediments to South-South trade. The cost of this limited South-South trade as an effect of strict ROO is estimated to be USD 20 million annually.⁹ Rules of origin have also been showed to restrict developing countries when it comes to efficiency and producer networks.

⁶ Cadot, Djiofack and De Melo (2008) p. 45

⁷ Portugal-Perez (2008) p. 21

⁸ De Melo and Portugal-Perez (2008) p. 19

⁹ Ahmad (2007) p. 34

Brenton and Ozden found that more liberal ROO would increase the African textile and clothing producers' possibilities to create an efficient industry through enhanced integration into global and regional production networks.¹⁰ Finally, PricewaterhouseCoopers conducted a case study of the garment sector in Lesotho on behalf of the European Commission in relation to the Economic Partnership Agreement (EPA) negotiations. The strict preferential ROO were found to be the core reason for the low volume of Southern African Development Community (SADC) clothing exports to the EU. Increased fabric sourcing flexibility through a single transformation rule, as AGOA ROO, or lower value-added thresholds were recommended.¹¹

¹⁰ Brenton and Ozden (2005) pp. 20, 22

¹¹ PricewaterhouseCoopers (2006) pp. 37, 72

2 Madagascar and Textiles

Chapter two serves as a background chapter and aims to give a better understanding of the present situation in the Malagasy textile and clothing industry. The first part is a sketch of the economic background of the country, which is followed by an introduction of the Malagasy T&C sector. A special focus is diverted to the EPZ's and the Multi Fiber Agreement's importance for Malagasy clothing exports.

2.1 Madagascar's Economic Background

In the first years of independence from the French colonial rule in the 1960s, Madagascar was one of the better-off countries in sub-Saharan Africa when it came to income and living standards. This head-start was later lost due to decades of economic mismanagement during which per capita income declined, from USD 473 in 1970 to USD 290 in 2005.¹² In the 1980s, the government started to implement reforms supported by the International Monetary Fund (IMF) and the World Bank, in an attempt to get the country's economic situation back on track. Import substitution was abandoned in favor of a more outward-looking development strategy and the allocation of public resources was improved.¹³ In the mid 1990s, the economic effects of the reforms finally started to materialize in terms of higher Gross Domestic Product (GDP) growth and increased exports. So far the economic improvements have however only reached a few geographical areas due to inadequate redistribution policies.¹⁴ Madagascar is today one of the poorest countries in the world, and more than two thirds of the population live below the poverty line of USD 1 a day. The country has a Human Development Index (HDI) of 0.533 which ranks the country as number 143rd out of 177 countries. The ranking places Madagascar as a country of medium human development, surrounded by countries like Nepal and Cameroon.¹⁵

¹²<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/MADAGASCAREXTN/0,,menuPK:356362~pagePK:141132~piPK:141107~theSitePK:356352,00.html>

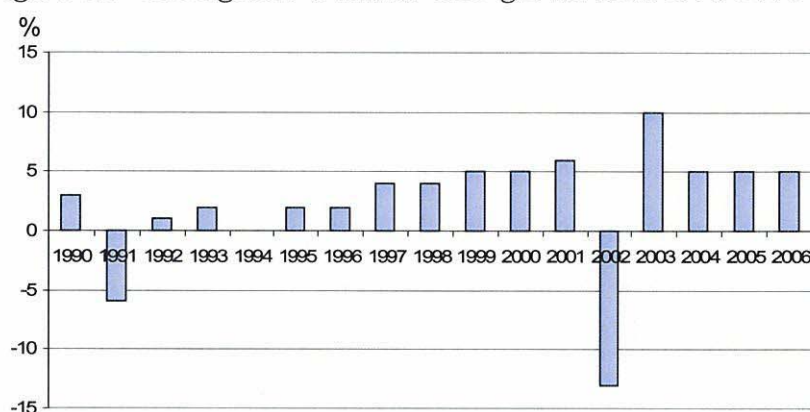
¹³ Cling, Razafindrakoto and Roubaud (2004) p. 5

¹⁴ AfDB/OECD (2005) p. 279

¹⁵ <http://hdr.undp.org/en/statistics/>

Figure 2.1 shows the annual GDP growth from 1990 to 2006. The overall positive picture is only disrupted by the negative growth rates of 1991 and 2002. That economic progress was put to a halt these years is explained by severe political instability. The big drop in the growth rate from 2003 to 2004 is partly explained by the two violent cyclones that hit Madagascar in the beginning of 2004.¹⁶ Cyclones are a recurrent problem every rain season and often have severe consequences for the already poor Malagasy population.

Figure 2.1 - Madagascar's annual GDP growth in % 1990-2006



Source: WDI Online

2.2 The Textile and Clothing Sector

The labor-intensive textile and clothing sector is a key sector for many developing countries. It is a sector, possibly the only successful one, where poor countries have been able to diversify and increase exports. This has been possible through exploitation of developing countries' comparative advantage in low-cost labor. Further characteristics that make the T&C sector suitable for developing countries are low start-up investments, simple technology, a demand for low-skilled labor and limited importance of scale economies. That many LDCs in sub-Saharan Africa have preferential access to the EU and US markets has provided an additional incentive for developing T&C production in this area of the world.¹⁷

Madagascar's T&C industry is one of the fastest expanding in sub-Saharan Africa.¹⁸ The sector has gone through a period of impressive growth since the government's more liberal economic

¹⁶ AfDB/OECD (2005) p. 280

¹⁷ Brenton and Ozden (2005) p. 4

¹⁸ Nicita (2006) p. 5

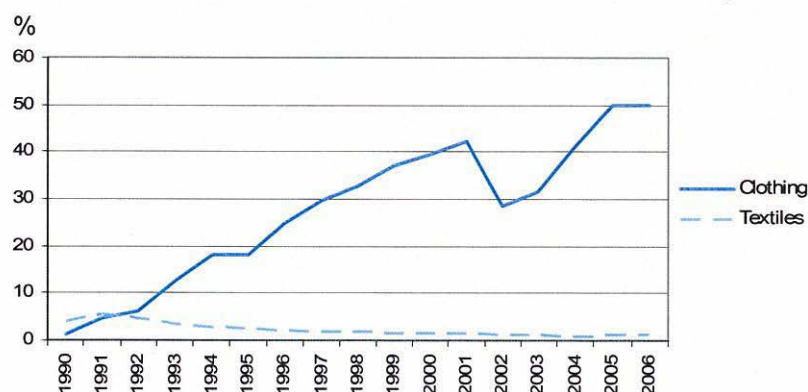
policies were introduced in the late 1980s. The sector's expansion has been especially positive during the last 15 years after the creation of the EPZ. In 1990, the number of garment producing firms was only 10.¹⁹ In 2007, this number had increased to 120. By then the Malagasy garment manufacturers employed 120 000 people, making the T&C sector supply over 30% of formal jobs in the economy.²⁰ The textile and clothing sector's focus on export has made clothing the dominant export good today, as can be seen in Table 2.1 below.

Table 2.1 - Top 5 exported products in 2006²¹

	USD million	% of total export
1. Articles of apparel and clothing accessories	583	49,9
2. Fish, crustacean and molluscs, and preparations thereof	218	18,6
3. Coffee, tea, cocoa, spices, and manufactures thereof	133	11,4
4. Vegetables and fruit	40	3,4
5. Miscellaneous manufactured articles, nes	23	1,9
Other commodities	172	14,7
Total	1169	100

Source: UN COMTRADE

Figure 2.2 – Textile and clothing exports as a share of total export²²



Source: UN COMTRADE

Further, Figure 2.2 shows the evolution of textile and clothing exports as shares of total export. From having had a negligible share of exports in the beginning of the 1990s, clothing alone now

¹⁹ http://www.mefb.gov.mg/don_stat/don_sec/t12_nbzffis.pdf

²⁰ Global Development Solutions (2007) p. 21

²¹ The products are classified according to SITC Rev. 2 where, *Articles of apparel and clothing accessories* have number 84, *Fish, crustacean and molluscs, and preparation thereof* number 3, *Coffee, tea, cocoa, spices & manufacs. thereof* number 7, *Vegetables and fruit* number 5 and *Miscellaneous manufactured articles, nes* number 89.

²² Exports are mirror exports.

accounts for 50% of total exports. Textile has on the other hand had a rather stagnant development and has therefore not contributed to the sector's expansion. In addition, the Figure shows that exports of clothing were hit hard by the political crisis in 2001-2002 but also that the sector recovered quickly and now exports more than before the crisis year of 2002. Finally, it seems like the fast expansion pace of clothing exports has experienced a slowdown since 2005 which could be explained by the phasing out of the Multi Fiber Agreement, see section 2.2.2 for more information.

The main destinations for Malagasy textile and clothing exports are the EU and the US. Europe, and in particular France, has traditionally been the most important trading partner for Madagascar. The entry into force of AGOA in 2000 has however changed the picture and the US is now also a major export destination. In the year 2006, the EU and the US received 52% and 43%, respectively, of Madagascar's total T&C exports. The export to the US has showed a slowdown the last few years, while the export to the EU on the other hand has been increasing slightly.²³ Most of the clothing exports go to specialized retailer chains, supermarkets and mail order firms like the GAP, Carrefour and La Redoute.²⁴

2.2.1 Export Processing Zone

The Export Processing Zone, or Zone Franche, was introduced in 1990 as a part of the export-led growth strategy under the structural adjustment program of the IMF and the World Bank. Law 91.020, passed a year later in 1991, defines the rules for the free-zone companies.²⁵ The main eligibility requirement for EPZ participation is export orientation. Companies must export at least 95% of their production or provide services and/or inputs to EPZ exporters. In addition, employment opportunities must be created and adequate environmental safeguards must be provided. Companies should also "strive to achieve significant technical know-how and technological transfer".²⁶

The rewards for meeting the requirements are found in several tax breaks and special regulations concerning foreign ownership. EPZ companies are exempt from all duties and taxes on both

²³ COMTRADE and author's calculations

²⁴ Limantour (2006) p. 12

²⁵ Cling, Razafindrakoto and Roubaud (2004) p. 5

²⁶ Cadot and Nasir (2001) p. 6

exports and imports. However, in order to hinder firms supplying the local market from setting up an EPZ company, a Value Added Tax (VAT) on imported inputs was introduced in 1997. This VAT can later be refunded if the company shows a proof of export of the final good for which the input was imported. There is also a total exemption from profit tax the first 2 years for labor-intensive farming and fishing companies, and the first 4 years for industrial and service companies (i.e. T&C companies). After the first grace period, companies pay a fixed 10% in profit tax which is substantially lower than the normal 35% for non-EPZ companies. Moreover, companies are given a profit tax reduction equal to 75% of the cost of new investment. Important is also the special access to foreign currency and the total freedom for capital transfers for all EPZ companies.²⁷ A 100% foreign ownership is further allowed as well as free repatriation of profits after payment of taxes. Since foreigners could not get property rights to land at the time of the passing of the EPZ law, foreign companies were granted 99 year leases for investment in land.²⁸

Thanks to the EPZ, Madagascar has experienced an export boom from the mid-1990s and has become the only successful African new exporter of manufactures, in addition to Lesotho, during the last decade. The free-zone has hence helped Madagascar to move from a dependency on agricultural products, mainly vanilla and coffee, to a more diversified economy. The manufactures produced mainly belong to the T&C sector. In 2001 Madagascar became the number two African clothing exporter in Sub-Saharan Africa after Mauritius.²⁹ The same year the sector accounted for around 90% of total EPZ output in Antananarivo and Antsirabe, where the majority of EPZ companies are located.³⁰ The T&C sector is still in total dominance of the EPZ today and accounts for more than 50% of all companies in the Zone.³¹

The expansion of the EPZ was from the start driven by French investors who were attracted by the many French-speakers among the Malagasy population and by an already large French community.³² Investors became more diverse in time among which Mauritian companies have been especially important for the T&C boom. Mauritius is a country that a few years previous to

²⁷ Cling, Razafindrakoto and Roubaud (2005) p.787

²⁸ Cadot and Nasir (2001) p. 6

²⁹ Cling, Razafindrakoto and Roubaud (2007) p.5

³⁰ Cadot and Nasir (2001) p. 6

³¹ <http://www.gefp.com/statistiques.php?id=secteurs>

³² Cling, Razafindrakoto and Roubaud (2005) p.787

Madagascar experienced a similar development of their own textile industry. When wages rose in Mauritius and a US quota restriction on Mauritian imports was introduced, Mauritian investors looked for a suitable place to relocate. Important reasons why Mauritian investors chose Madagascar were the proximity to Mauritius, the high productivity of Malagasy workers compared to other Sub-Saharan countries, the French-speaking population, no quota restrictions and the low labor cost. It can be mentioned that the average monthly salary for a machine operator in Madagascar is less than one-third of that in Mauritius. However, managers have stated that Madagascar would not have been interesting without the implementation of the EPZ initiative despite the just mentioned advantages.³³ A third phase of investment inflow came from Asia in the late 1990s in relation to the entry into force of AGOA in 2000. Production abroad was a way to circumvent the textile quotas faced by Asian companies. The choice of Madagascar was again motivated by the EPZ, low labor costs and by preferential access to both the EU and the US.³⁴ The most common nationalities among EPZ owners in 2008 were French (29%), followed by Malagasy (20%), Mauritian (16%) and Chinese (12%).³⁵

In sum, the success of the Malagasy textile and clothing sector has been based on a combination of factors: low labor costs and a relatively high productivity have given unit production costs among the lowest in the world, preferential access to the US and EU markets has created a possibility for foreign investors to circumvent their own restricted access to the large markets, a French-speaking population has simplified potential communication difficulties and the EPZ has created the essential incentive to attract the foreign firms.

2.2.2 The Multi Fiber Agreement

Textiles and clothing have traditionally been a heavily protected sector both in the US and in Europe. The competition from developing countries using their comparative advantage in low-cost labor was considered to threaten jobs in the labor-intensive T&C sector. Already in the 1950's, Asian low-cost countries agreed to introduce voluntary export restraints for cotton textiles to the US. In 1962 the Long Term Agreement Regarding International Trade in Cotton Textiles (LTA) entered into force, and was later renegotiated and replaced by the MFA in 1974.

³³ Cadot and Nasir (2001) p. 7

³⁴ Cling, Razafindrakoto and Roubaud (2005) p.787

³⁵ http://www.gefp.com/statistiques.php?id=nationalites_proprietaires

The agreement extended trade restrictions to wool and man-made fibers in addition to cotton. The MFA aimed at avoiding market disruptions when new markets opened up to trade which meant that the agreement was supposed to be temporary during an adjustment phase. There was however no clear definition of what constituted a “market disruption”. Consequently, the MFA came to comprise most developing country textile exports to the EU and the US. A system of bilateral quota agreements was set up that violated the principles of the multilateral trading system in several ways: it used quantitative restrictions instead of tariffs, it violated the most favored nation principle, it discriminated against developing countries and it was non-transparent. The MFA finally expired in 1994 but was followed by the Agreement on Textiles and Clothing (ATC) the purpose of which was to serve as a transitory regime between the MFA and the complete integration of T&C into the multilateral trading system. The ATC progressively phased out the quotas during a period of ten years. From 1 January 2005, T&C have been subject to the general rules in the General Agreement on Tariffs and Trade (GATT), after 40 years of restricted trade.³⁶

The phasing out of the quotas has brought about changes for Malagasy T&C producers. It has been shown that there is a strong correlation between the success of export processing zones and the MFA because the foreign direct investments in the zones have been a way to circumvent the quotas. It was expected that Asia, and especially China, would be the main beneficiary of the phasing out of the quotas. This has also turned out to be true. Even if Madagascar as a LDC still benefits from preferential access to EU and the US, the main incentive for Asian investors, circumventing the quota, is no longer there.³⁷ This means that less investment from Asia is expected in the following years. It is also hard for Madagascar to compete with the high productivity of Asian workers. The increased international competition has already been noticed in Madagascar. The expansion of the Zone Franche and T&C exports has come to a halt since 2005, see Figure 2.2. This development is far from unique; T&C producers in Africa have suffered from a decline or stagnation of exports in general after the MFA phase out. Of the major African T&C exporters (Mauritius, Madagascar, Lesotho and Kenya), Madagascar is still the country that has had the most positive development since 2003.³⁸ See Table A.1 in Appendix for

³⁶ Nordås (2004) pp. 1, 13

³⁷ Cling, Razafindrakoto and Roubaud (2004) p. 22

³⁸ Cling, Razafindrakoto and Roubaud (2007) p. 8

a closer look at the development of African and Asian T&C exports after the phasing out of the MFA quotas.

Investments did decline after 2005 in Madagascar and some Chinese owned clothing companies closed down.³⁹ Many investors have however come back the last two years after disappointments with Asian quality.⁴⁰ Nonetheless, Madagascar will never be able to compete with the low costs and weak environmental protection of Asia (foremost China and Bangladesh) when it comes to basic apparel production in the long run. Madagascar is therefore now trying to specialize in more technical products with higher value-added like embroidery. Designer brands with haute couture lines have for example taken an interest in Madagascar lately and this market is deemed to have a great potential if exploited correctly.⁴¹ The new direction of the industry can possibly explain why Madagascar has had the most positive development of the major African T&C exports since 2003.

Lastly, the increased competition from Asia has also affected wages and labor standards in the EPZ. From having been a driving force for better working conditions in Madagascar, the EPZ has since 2005 lowered wages, labor standards and non-wage benefits. Working hours have gotten longer, company medical services, paid holidays, etc. which used to be much higher than in the private formal sector have now been substantially reduced. Wages are nonetheless still higher on average than in the informal sector, which is the main alternative for the low-skilled mainly female labor force of the Zone Franche.⁴²

³⁹ Interview Text'file Mada

⁴⁰ Interview GEFP

⁴¹ Interviews Text'file Mada and GEFP

⁴² Cling, Razafindrakoto and Roubaud (2007) p. 18

3 The Economics of Rules of Origin

This chapter will begin with an introduction to and a definition of ROO. What are the different types and how is origin determined? Second, the effects of ROO are analysed and the critique that ROO are a protectionist tool is met. Special attention will be diverted to ROO and preferential trading arrangements for developing countries.

3.1 Background to Rules of Origin

Two types of ROO exist, non-preferential and preferential. Non-preferential ROO are simply used to determine where a product is produced. They are a way to separate domestic from foreign products so that for example safeguard measures and origin marking can be used. Preferential ROO, on the other hand, are used in a PTA to establish if products exported from one member to another qualifies for preferential treatment in the form of better market access.⁴³ The better market access usually comes in the form of a lower customs tariff, or in the case of a Free Trade Agreement (FTA), a tariff-free entry. The rest of the paper will focus on the role of preferential ROO in FTAs.

The usage of preferential ROO in a FTA is justified by the risk of trade deflection. Trade deflection is a form of fiscal fraud and occurs when products from non-members are shipped through a transit country, a FTA-member with a low tariff, to a member country with a higher tariff.⁴⁴ This trade deflection is possible since the FTA practises free trade between members but it has no common external tariff like a customs union has. An example of trade deflection would be if country A and country B are members of the same FTA and practise free trade between each other. Country B can then ship its products tariff free to country A and vice versa. Country C is on the other hand not a member of the FTA. Therefore C has to pay tariffs when exporting to both A and B. For argument's sake, we can say that country A has a 10% tariff on all imports

⁴³ Estevadeordal and Souminen (2003) p. 1

⁴⁴ Krishna (2005) p. 3

from non-FTA members and country B only a 2% tariff. In that case, country C could theoretically ship its goods to country B, pay the 2% tariff and then re-export to country A tariff-free. In this way, the higher tariff in country A is avoided.

Due to the fact that the production process often is fragmented and conducted in several different countries it has gotten harder to determine a product's origin. As a consequence, the preferential ROO have become rather complicated. There are today different methods of determining origin of a product. There are two central criteria, recognized by the Kyoto Convention, to determine origin of a product: wholly obtained or produced and substantial transformation.⁴⁵ The wholly obtained or produced criterion is uncontroversial and means that the country where the product has been entirely grown/harvested/extracted from the soil or produced using only material that has been domestically grown/harvested/extracted from the soil is the origin country. Simply put, no second-country components or material is allowed in the production process.⁴⁶

The substantial transformation criterion is more difficult and subjective. There are three main ways to determine if the product has gone through substantial transformation and different tests, sometimes a combination of tests is necessary to determine origin. The first possible test is a *change in tariff classification* according to the Harmonized Tariff Schedule between the input and the exported good. This can be more or less strict depending on how extensive the change must be. The change in tariff classification rule can demand that the product alter its chapter (2-digit level), heading (4-digit level), sub-heading (6-digit level) or item (8-10-digit level). The change on chapter level is the strictest of these versions. The second test is *value content* which means that a certain percentage of value must have been added to the product to get origin status. This criterion can take three different forms: a) import content test: imported inputs are not allowed to exceed a certain percentage of the final good's value; b) domestic content test: a minimum percentage of local value must be added in the last country where the product was processed; c) value of parts test: originating parts must account for a certain percentage of the final good's value.⁴⁷ The exact percentage differs between trade agreements and products but for

⁴⁵ The Kyoto Convention has been adopted by the World Customs Organization to standardize and harmonize customs procedures and policies around the world. It was originally adopted in 1974.

⁴⁶ Estevadeordal and Souminen (2003) p. 3

⁴⁷ Falvey and Reed (1998) p. 213

the import content test the percentage is usually around 40%.⁴⁸ The third test is a *specific process rule* which requires the product to undergo (positive test) or not undergo (negative test) a certain manufacturing process in the originating country.⁴⁹

There are advantages and disadvantages with all three tests. The change in tariff classification test has the advantage of being relatively simple, easy to apply and it could be used uniformly across countries. Difficulties, on the other hand, are applying a commodity classification designed for several purposes and the habit of having lists of exceptions when it comes to this rule. The value content test is potentially quite costly since it requires examination of production costs, decisions on how to value inputs and what inputs should be used. The advantage of the specific process rule test is that it can be adjusted to any special case. However, it is very difficult to construct technical tests for every product. It is also hard to verify information in order to determine which process actually took place in third countries and therefore it can be easy to manipulate the facts.⁵⁰

Finally, there exist some complementary rules, used in combination with one or several of the above tests, to make ROO less restrictive. Cumulation rules allow producers to use inputs from certain countries without losing the preferential status given to them in a FTA. This cumulation can be bilateral, diagonal or full. Bilateral cumulation is the most common form and operates between two FTA partners. Partner A can use inputs originating from the partner B as if they were A's own, and vice versa, without affecting the final good's origin status. Diagonal cumulation means that beneficiary countries that are members of the same preference program can use inputs originating from each other and still be granted origin status for the final product. Full cumulation is the least restrictive form and extends diagonal cumulation. Here, countries tied together by the same preferential origin rules can use goods produced in any part of the area, even if they were not originating products. All processing done in the preference area is regarded as if it had taken place in the final processing country.⁵¹

⁴⁸ Augier, Gasiorek and Lai-tong (2004) p. 1452

⁴⁹ Estevadeordal and Souminen (2003) p. 4

⁵⁰ Falvey and Reed (1998) pp. 213-214

⁵¹ Ahmad (2007) pp. 10-11

Two other complementary rules exist. First, the de minimis rule that accepts a certain maximum percentage of non-originating inputs in the production without affecting origin. Finally, there is the absorption principle which means that products which have gained origin status are allowed to be considered originating when used as inputs in subsequent production.⁵²

3.2 Rules of Origin - a protectionist tool?

Rules of origin can have an impact on trade and investment flows and how well a FTA with ROO promotes trade liberalization has been questioned. ROO raise domestic production and administrative costs and this in turn affects trade. Production costs are increased due to supply-switching effects and the technical criteria imposed by the ROO regime. The supply-switching leads to trade diversion and the rise in production costs can also decrease final goods production. Administrative costs are increased because producers have to get the origin certification and because the import country's customs has to verify the origin. The administrative costs work as a form of transaction cost and are likely to reduce bilateral trade creation.⁵³ An attempt to compare costs between different ROO has been done by Carrère and de Melo. They found that a change in tariff heading is the least costly to comply with, followed by value content rules and finally, a technical requirement is found to be the most costly.⁵⁴ ROO also have an investment effect. In the long run, ROO can create investment diversion when extra-FTA producers choose to locate plants inside the FTA in order to satisfy the ROO and benefit from preferential treatment.⁵⁵

3.2.1 Rules of Origin as transaction costs

The complexity of the origin rules can act as a blocker of the potential trade creating effects of the tariff concessions granted in a FTA. Trade creation is the phenomenon when domestic production is replaced by cheaper imports, due to relative price changes when free trade is introduced, from a more efficient FTA-partner. Different certification mechanisms impose costs on both firms and governments. These costs are often far from small and increase even more when countries are members in several FTAs, which is a common phenomenon. The administrative burden offsets the tariff liberalization and leads to underutilization of preferences.

⁵² Estevadeordal and Souminen (2003) pp. 4-5

⁵³ Augier, Gasiorek and Lai-Tong (2005) p. 576

⁵⁴ Carrère and de Melo (2004) p. 27

⁵⁵ Estevadeordal and Souminen (2003) p. 8

Firms can simply avoid all the ROO administrative costs if they choose to act as Rest of the World (ROW) producers and instead pay the non-preferential tariff. As long as this tariff is reasonably low, which it often is between developed countries, the distortion of trade between FTA-partners is limited but trade creation will, of course, still be affected.⁵⁶ In the case of a high non-preferential tariff, the effect on trade creation is larger and producers can then choose to use inputs from the ROW and only produce for the home market and the ROW instead of producing for the FTA partner.

3.2.2 Increased production costs through supply-switching

According to classic Vinerian analysis with trade creation and trade diversion, FTAs will lead to some supply-switching, with FTA-suppliers as the beneficiaries, when preferential tariffs change the relative price of imports. Partner country imports become relatively cheaper than before and third country imports become relatively more expensive, which induces a natural supply-switching in favour of partner firms despite more efficient third country producers. Supply-switching to a FTA-supplier from a more efficient third country producer is called trade diversion and creates economic inefficiencies. This classical analysis does not take ROO into account which is unfortunate since ROO can aggravate the supply-switching effects of FTAs.

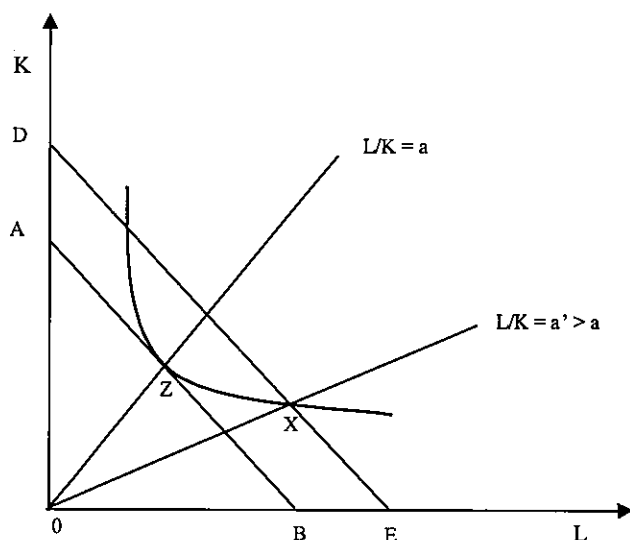
The impact of the preferential tariff aside, ROO distort trade patterns both between members of the FTA and between members and the rest of the world. In order to meet the ROO, firms often have to change suppliers from extra-FTA to intra-FTA (to domestic suppliers in the case of no cumulation). This means that ROO create an extra element of trade diversion. In the ordinary trade diversion case described above, a country switches suppliers to a partner country because it would be cheaper when zero tariffs between partners are introduced. In the case of FTAs and ROO, producers would switch suppliers even if it meant more expensive inputs to comply with the ROO. This additional trade of inputs between members can easily be mistaken for evidence of trade creation which they are not. That ROO have a supply-switching effect can be used by protectionist governments or industry lobbies. A country can protect its own industries on a partner country's market even if the partner country in question has zero tariffs to the rest of the

⁵⁶ Augier, Gasiorek and Lai-Tong (2005) p. 576

world. A country with high cost producers can in this way export protection of its industries to member countries through restrictive ROO.⁵⁷

The effect of supply-switching because of restrictive ROO on production costs can be shown graphically according to a model developed by Kala Krishna.⁵⁸ Figure 3.1 shows how costs rise when the choice of inputs is limited through a value content test with bilateral cumulation. The model contains two types of inputs, FTA-inputs (L) and third country inputs (K), that are used to produce the good in question under constant returns to scale. The curve in the figure depicts the unit isoquant which symbolises the number of goods produced. At a given price for L and K firms will choose the input mix at point Z, using L and K so that their ratio equals a. The height of the line AB represents the lowest unit costs attainable for that input mix. If binding ROO then are introduced which require L/K to be at least $a' > a$, Z would no longer be a feasible option because only points below the ray from the origin with slope $1/a$ and above the isoquant would be possible. The unit costs are therefore now minimized at point X and represented by the height of line DE. The ROO have raised the production costs and distorted the input mix in favour of the FTA-inputs for any given level of output. It is also possible to see that as the ROO become more restrictive, as a rises and the ray from the origin swings down, unit cost will rise, shift out.

Figure 3.1 – Value content ROO and Costs



⁵⁷ Krueger (1993) pp. 9-10

⁵⁸ Krishna (2005) p. 10

3.2.3 Trade preferences for developing countries and ROO

The LDCs have received preference treatment in the multilateral trading system since 1971. Preferences are granted in the form of reduced or zero tariff rates over the Most Favoured Nation (MFN) rates for selected products in order to increase LDCs' export earnings, promote their industrialization and to accelerate their rates of economic growth. Several programs for trade preferences for developing countries have evolved in the world, presently there are 13 national preference schemes notified to the United Nations Conference on Trade and Development (UNCTAD).⁵⁹

The motive for including ROO in preferential trading arrangements differs from the usual trade deflection justification. In the case of North-South integration it would namely be the preference granter that would benefit from trade deflection since tariffs in general are lower in developed than in developing countries. Reasons why ROO are seen as necessary are hence found elsewhere. First, preference-granters do not want to extend the preferences involuntarily to non-eligible producers or producers that only transform their goods superficially. Second, the ROO can be a way to control the process of preferential liberalization through a reduction of adjustment costs in the North. Third, the usage of ROO in preferential programs is sometimes described as a tool for development policy because ROO are believed to encourage vertical integration in developing countries. The demand to use domestic inputs is seen as a form of infant industry protection of local producers further down the value chain.⁶⁰

Vertical integration is however not an easy target in developing countries where light and labor intensive industry often is the only possible and credible industrialization option. It is therefore harder to create sustainable vertical integration since input industries can be more capital intensive than the final good production. If vertical integration takes place, the result risks being inefficient due to the protection effect of the ROO which means that the new input-supplying industries serve to institutionalize the trade deflection effect of regional integration.⁶¹ Certain sectors' characteristics make it especially hard to make ROO lead to an increase of locally sourced inputs or vertical integration. This is for example true for the textile and clothing

⁵⁹ <http://www.unctad.org/Templates/Page.asp?intItemID=2309&lang=1>

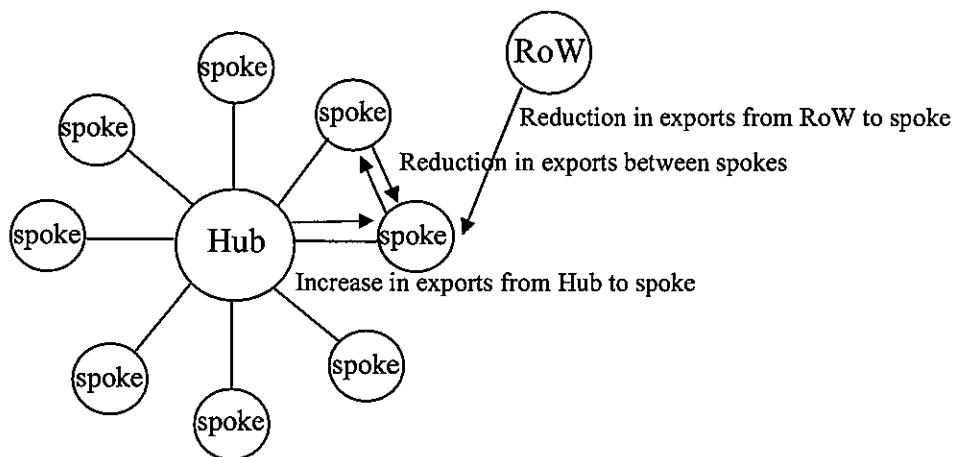
⁶⁰ Cadot, Djiofack and De Melo (2008) p. 13

⁶¹ Cadot, Djiofack and De Melo (2008) p. 14

industry where global dynamics require unregulated access to low cost materials to be competitive and where “buyer-driven value chain realities” dictate producer choices.⁶²

Restrictive ROO can lead to strong supply-switching effects that are more damaging in developing countries just because they often lack domestic suppliers of inputs and because it is hard to build up such an input industry. These effects can be shown in a sketch of the hub-and-spoke system which exemplifies how both FTA-members and third countries are affected by ROO. A hub-and-spoke system evolves when one country forms bilateral FTAs with many other countries, for example when the EU creates a preferential trading arrangement for developing countries. The EU then becomes the “hub” of the system and the developing countries that are connected to the EU through bilateral FTAs are called “spokes”. Below, Figure 3.2 shows a hub-and-spoke pattern. Bilateral FTAs, as mentioned above, tend to diminish trade between spokes because of two phenomena: the preferential tariffs the spokes grant firms in the hub but not firms in other spokes, and the ROO that lead to supply-switching towards domestic or partner firms in order to meet origin requirements. Exports from the ROW to the spokes also tend to be depressed because of the same reasons just mentioned. There is however no first-order effect on exports from spokes to the ROW.⁶³ Diagonal or full cumulation can of course reduce the loss of exports between spokes.

Figure 3.2 – Hub-and-spoke system



⁶² Neumann (2008) p. 11

⁶³ Augier, Gasiorek and Lai-Tong (2005) pp. 579-580

If a developing country takes part in a preferential trading arrangement and there are no domestic suppliers of inputs, the country will be forced to use expensive inputs from the hub instead of using the cheapest option on the world market in order to comply with the ROO. In this way it will be hard for the developing country to develop its industries and to compete on the world market since the products produced will be more expensive and more inefficient than otherwise would have been the case. It is also harder for a poor country with low labor costs to comply with high value-added requirements in the ROO relative to countries with higher labor costs.⁶⁴ Moreover, it happens that the ROO themselves are so strict for labor intensive products, which is what developing countries in general export, that it is difficult for spokes to gain origin status for this type of goods.⁶⁵ This means that the value of the tariff concessions is greatly reduced for developing countries and that the preferential trading arrangements can be more protectionist than first thought.

⁶⁴ Brenton (2006) p. 281

⁶⁵ Brenton and Manchin (2003) p. 767

4 Preferential Trading Arrangements

Chapter four presents the EU and the US preferential trading arrangements for LDCs with a focus on the ROO of the programs. Madagascar is eligible for preferential market access to both the EU and the US market, a fact that has largely contributed to the development of the Malagasy T&C sector. Since Madagascar is an African country, only preference programs concerning Africa will be covered below.

4.1 EU Preferential Trading Arrangements

4.1.1 Lomé and Cotonou

Europe's colonial history has led to a special cooperation between the EU and the African, Caribbean and Pacific (ACP) countries. The beginning of this cooperation dates back to the Treaty of Rome establishing the European Economic Community (EEC) in 1957, then with a particular focus on French-speaking African countries. The accession of the United Kingdom to the EEC in 1973 started a wider reaching cooperation program. In 1975 the first Lomé convention governing trade relations between the EEC and 46 ACP countries was signed in order to promote economic development. Several updates of the convention followed but the main focus of non-reciprocal trade preferences, mainly duty-free and quota-free access, for most ACP exports to the EU remained the same.⁶⁶

The Lomé convention was replaced by the Cotonou Agreement in 2000 to prepare the EU-ACP collaboration for complete fulfilment of the World Trade Organization (WTO) rules since non-reciprocal exclusive trade preferences violate the principle of non-discrimination in the GATT.⁶⁷ The old trade preference scheme remained in force until 1 January 2008 when EPAs replaced the trade chapters of the Cotonou Agreement. The EPAs entail a deeper cooperation with rights and obligations for both sides of the partnership, a partnership based on reciprocity.⁶⁸ Each EPA is

⁶⁶ http://ec.europa.eu/development/geographical/cotonou/lomegen/lomeitoiv_en.cfm

⁶⁷ <http://www.acp-eu-trade.org/index.php?loc=epa/background.php>

⁶⁸ http://ec.europa.eu/trade/issues/bilateral/regions/acp/nepa_en.htm

negotiated separately between the EU and the country or groupings of countries in question which means that the degree of trade liberalization will differ between EPAs. ACP-countries that chose not to sign an EPA before the end of 2007 were offered the Everything But Arms (EBA) trade initiative instead, an arrangement known to be stricter in terms of market access than ACP-regulation.⁶⁹ An important note is that the EBA only was an option for the LDCs among the ACP-countries. There is no time limit for the EPAs while the Cotonou Agreement was concluded for a twenty-year period and is hence valid until 2020.⁷⁰

Madagascar signed an Interim Economic Partnership Agreement (IEPA) as a part of the Eastern and Southern Africa (ESA) grouping in December 2007. The IEPA entered into force on January 1 2008 and is limited in duration until the full EPA comes into force. This interim agreement was put in place in order to give more time for finalizing the EPA negotiations which broke down due to differences in market access offers.⁷¹ The IEPA gives Madagascar 100% free access to the EU market with a transition period for sugar and rice. In exchange Madagascar will progressively liberalize market access for about 80% of the country's imports from the EU during an adjustment period of 15 years. This means that by 2022 80% of Malagasy imports from the EU will enter the country duty free. Madagascar has also chosen to exclude a range of sensitive agricultural and industry products from liberalization, for example fish, cereals and plastic.⁷² The EPA negotiations are hoped to be concluded before the end of this year but according to a representative for the European Commission's Delegation to Madagascar this goal will probably not be met due to disagreements over levels of development assistance.⁷³

4.1.2 Rules of Origin for Textiles and Clothing

The preferential market access granted to ACP-countries through the Lomé convention and the Cotonou Agreement was contingent on the fulfilment of certain product specific ROO. The EU ROO for the T&C sector are known to be quite strict. Clothing has to be manufactured from

⁶⁹ http://trade.ec.europa.eu/doclib/docs/2008/march/tradoc_138457.pdf

Everything But Arms is the EU's Generalized System of Preferences (GSP) from 2001 which provides quota-free and duty-free access to the EU market for the 50 least developed countries in the world. The agreement covers all goods but arms and ammunition.

⁷⁰ http://ec.europa.eu/development/geographical/cotonouintro_en.cfm?CFID=2311138&CFTOKEN=de5549ec566e53bc-44BE1EAC-BCAD-6AE3-85FE869240E498A7&jsessionid=243062fb88384a375d62

⁷¹ Watson (2007) p. 6

⁷² http://trade.ec.europa.eu/doclib/docs/2007/november/tradoc_136959.pdf

⁷³ Interview Delegation of the European Commission in Madagascar

wholly produced or qualifying yarn. The production from yarn further has to comply with the double transformation rule which means that two different production processes must take place in the beneficiary country. For clothing this implies that yarn must be woven into fabric which then, in turn, must be cut and made-up into clothing. Bilateral and full cumulation from African countries is allowed which gives that qualifying yarn must originate in the beneficiary country, the EU or any other African ACP-country. It is the full cumulation rules of the Cotonou Agreement that made most African countries also eligible for EBA continue to export under Cotonou when the EBA initiative was introduced in 2001. EBA only allows regional cumulation for the Association of South East Asian Nations (ASEAN), the Central American Common Market (CACM), and the Andean Community. Hence, African countries are only allowed to use bilateral cumulation under EBA, meaning that inputs must originate in the beneficiary country or the EU in order not to lose origin status of the final product.⁷⁴ Madagascar is one of the many countries that chose to continue to export under Cotonou even if the country is eligible for EBA.

The IEPA entails substantial changes of the ROO for T&C compared to previous rules in Lomé and Cotonou. The EU has left the double transformation rule behind and has agreed that only single transformation is necessary to obtain origin status. This means that Madagascar as a signatory to an IEPA now is allowed to source fabrics from anywhere in the world, transform them and then export both quota and tariff free to the EU.⁷⁵ The ROO for T&C of the final EPA will not differ from the ROO of the interim agreement.⁷⁶

4.2 US Preferential Trading Arrangement

4.2.1 African Growth and Opportunity Act (AGOA)

The African Growth and Opportunity Act is part of the Trade and Development Act, a law signed by President Clinton in 2000. The AGOA initiative provides quota- and duty-free access to the US market for 38 Sub-Saharan countries.⁷⁷ The Act originally covered eight years, i.e. the period from 2000 to 2008, but was extended in 2004 until 2015. Products included for preferential market access are all goods previously eligible for the US GSP program as well as

⁷⁴ De Melo and Portugal-Perez (2008) p. 4

⁷⁵ Naumann (2008) p. 8

⁷⁶ Interview Delegation of the European Commission in Madagascar

⁷⁷ Brenton and Ozden (2005) p. 6

an additional 1800 product tariff lines specially added for AGOA. Among the new products are for example apparel, footwear, wine, chemicals and steel.⁷⁸

Country eligibility for AGOA takes into account several requirements, including political and economic criteria. Market-based economies, rule of law, elimination of barriers to US trade and investment and a strategy for poverty reduction are examples of criteria that must be fulfilled. Countries that are not eligible at present are Zimbabwe and Sudan. Moreover, the Central African Republic and Eritrea were removed as AGOA beneficiaries in 2003 while Mauritania and Côte d'Ivoire have been suspended. Madagascar has been an AGOA beneficiary since the beginning of the program in October 2000.⁷⁹

However, AGOA eligibility does not imply the right to export clothing and certain textile products duty-free to the US. In order to do so countries must, in addition to AGOA eligibility, also comply with the “Wearing Apparel” provisions. To be qualified for these extra provisions, countries must implement a product visa system in compliance with the AGOA ROO that has been approved by US authorities. Presently, 29 of the 38 AGOA eligible countries have fulfilled the “Wearing Apparel” conditions. Madagascar has been one of these countries since March 2001 and is thereby granted the right to export apparel to the US duty-free.⁸⁰

4.2.2 Rules of Origin for Textiles and Clothing

If the “Wearing apparel” provisions are fulfilled, countries that want to export apparel duty-free to the US must also comply with the special set of ROO for T&C. Clothing made in qualifying countries from US fabric, yarn and/or thread are granted duty- and quota-free access to the US market with no further limitations. Clothing made from domestically produced fabric and yarn, or from fabric and yarn produced in other AGOA-beneficiaries has duty-free access to the US but is subject to a cap of 1.5% of total US apparel imports. The percentage was to increase progressively to 3.5% of total imports in 2008 and then remain unchanged at 3.5% until 2015. Amendments to AGOA have however been made that doubled the applicable percentages of this

⁷⁸ <http://www.agoa.info/index.php?view=about&story=about>

⁷⁹ http://www.agoa.info/index.php?view=about&story=country_eligibility

⁸⁰ http://www.agoa.info/index.php?view=about&story=country_eligibility

cap which means that the quota presently is set to 7%.⁸¹ The quota has so far not hindered export from AGOA-beneficiaries. The quota fill rate reached about 60% in 2001-2002 but has after that been around 30-35% each year.⁸²

There are also additional rules concerning apparel that is mainly made from qualifying inputs. A garment otherwise eligible for AGOA preferential access shall not be disqualified due to the fact that the article “contains certain interlinings of foreign origin”. The value of these interlinings must nevertheless not exceed 25% of the cost of all components of the garment. Finally a de minimis rule says that apparel can always benefit from duty-free access if the total weight of foreign, i.e. not of US or AGOA-beneficiary origin, fibers or yarn is not more than 10% of the total weight of the article.⁸³

What separates AGOA from all other preferential trading agreements is the possibility for LDCs to benefit from special ROO. LDCs are allowed to use third country fabrics, not US or AGOA, and still be granted duty-free access to the US market. This means that inputs can be sourced from wherever in the world.⁸⁴ The special provisions for LDCs were originally meant to expire in 2004 but have been extended two times, first until 2007 and now until 2012. All AGOA-beneficiaries, except Gabon, Mauritius, the Seychelles and South Africa, have enjoyed LDC status from the start. Mauritius has however benefited from access to third country fabrics since October 2008 after legislative amendments to AGOA.⁸⁵

⁸¹ http://www.agoa.info/index.php?view=about&story=apparel_rules

⁸² http://www.agoa.info/index.php?view=trade_stats&story=apparel_quotas

⁸³ http://www.agoa.info/index.php?view=about&story=apparel_rules

⁸⁴ Brenton and Ozden (2005) p.7

⁸⁵ http://www.agoa.info/index.php?view=trade_stats&story=apparel_trade

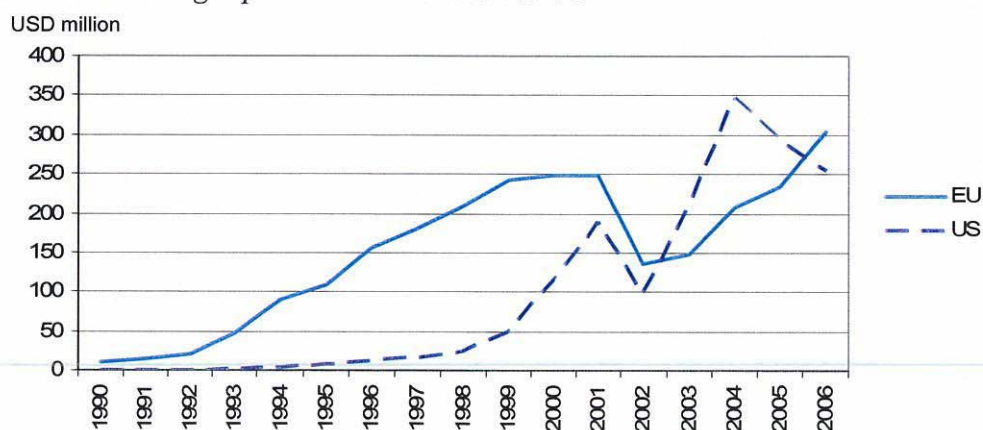
5 Impact of AGOA and Lomé/Cotonou

This chapter investigates the trade impacts of the US and EU preferential trading arrangements on the Malagasy textile and clothing industry. The analysis will compare Madagascar's trade with the US to the country's trade with the EU in order to assess the impact of ROO on trade patterns. In the first step of the analysis, export data is examined and related to AGOA and Lomé/Cotonou. The second step is devoted to import data since theory predicts that ROO can affect the choice of input goods. This will also give indications of the importance of the 3rd country fabric-rule for increasing investments and exports. The chapter ends with an evaluation of vertical integration and of the utilization of trade preferences.

5.1 Response to AGOA

The figure below shows clothing exports to the EU and the US from the creation of the export processing zone in 1990 and onwards. This picture gives the starting point of the analysis and shows the dramatic expansion of Malagasy clothing exports to its main markets, the EU and the US.

Figure 5.1 - Clothing exports to the EU and the US



Source: COMTRADE

As Figure 5.1 shows, clothing exports to the US were basically non-existent until the late 1990s. Interestingly, exports started to increase already in 1998-1999, that is before the entry into force of AGOA in 2000. Clothing exports increased for example by as much as 136% between 1999 and 2000. This anticipation effect can be a sign of the high expectations investors had of the US agreement. In 2000-2001, after the entry into force of AGOA, clothing exports to the US continued to increase rapidly until the crisis year of 2002 when exports plummeted due to political instability. However, exports recovered very quickly and reached a new all time high already in 2003. The following year, 2004, even surpassed the numbers of 2003 and is still today the peak year of Malagasy clothing exports to the US. Exports have namely slowed down, as Figure 5.1, shows after 2004. This can be related to the already mentioned end of export quotas for Asian countries in 2005. That exports to the US seem to have been affected more by the phasing out of export quotas than exports to the EU can in part be explained by the fact that the export boom to the US has been driven by Asian investors.⁸⁶ The latest data from OTEXA show a slight increase in clothing exports to the US again in 2007 to USD 289 million, indicating that the negative trend might be stoppable.⁸⁷

These new numbers also support the already mentioned statement by a representative for a private sector organization in Antananarivo. It seems to be true that Asian companies, who mainly export to the US, left at first in 2005 after the MFA phase out but then many came back a few years later.⁸⁸ Another factor that probably reduced the negative export trend to the US is the American imposition of safeguard quotas on textile and apparel imports from China in November 2005. These safeguard quotas did not expire until December 31 2008 so the real effects of the MFA phase out will not be felt until this year. What this will mean for the Malagasy T&C sector is yet too early to say but the US has already noticed a growth in imports from China of certain key clothing products of great importance for Africa.⁸⁹ It is therefore safe to say that competition from Chinese producers is likely to get fiercer for the Malagasy T&C sector in the coming years.

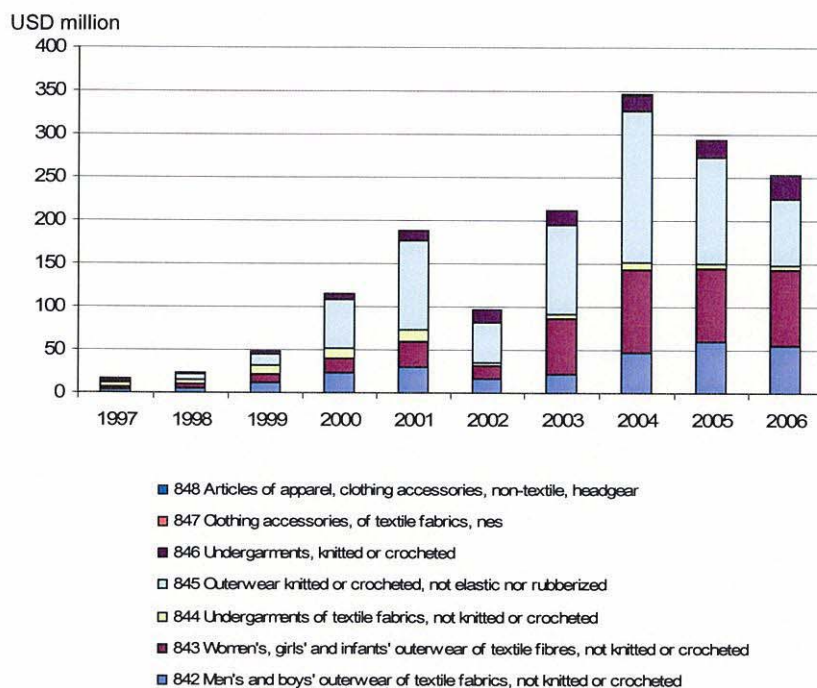
⁸⁶ Cling, Razafindrakoto and Roubaud (2005) p. 787

⁸⁷ OTEXA

⁸⁸ Interview GEFP

⁸⁹ Rydberg (2009) p. 2

Figure 5.2 - Exports of Clothing to the US



Source: COMTRADE

To further assess the impact of AGOA, clothing exports to the US have been broken down to a 3 digit level in Figure 5.2. It is possible to see that the product group that has benefited the most from AGOA is *Outerwear, knitted or crocheted* (845). Yet, the importance of this product group has decreased after the MFA phase out. In 2006 it was instead *Women's, girls' and infants' outerwear of textile fabrics, not knitted or crocheted* (843) that was the main product group exported to the US. In general, knitted or crocheted products were more important before the MFA phase out than after. The last few years, products of textile fabrics that are not knitted or crocheted have surpassed knitted and crocheted products in export value.

In order to get a general idea of what type of inputs are used in the different clothing products, a further look at the most exported clothing categories in 1998, 2003 and 2006 is necessary. The year of 1998 is chosen because it shows the situation before the entry into force of AGOA. The year 2003 then gives an indication of the trade pattern in the middle of the expansion phase. It is important here to keep in mind that 2003 was the year after the crisis in 2002. The numbers for 2003 are therefore smaller than otherwise would have been the case. Finally 2006 is the last year of available data and a year after the MFA phase out.

Table 5.1 - Most exported clothing categories to the US in USD million

	1998	2003	2006
8439 Women's, girls' and infants' other outer garments of textile fabrics, not knitted or crocheted	3.6	62.3	85.6
of cotton	100%	97%	95%
of man-made fibers	0%	1%	4%
8423 Men's and boys' trousers, breeches and the like, not knitted or crocheted	5.6	21.7	52.7
of cotton	100%	98%	74%
of other fibers	0%	0%	17%
of man-made fibers	0%	2%	8%
8451 Jerseys, pullovers, slipovers, cardigans, etc. knitted or crocheted	5.4	72.2	49.1
of cotton	53%	59%	67%
of synthetic fibers	0%	13%	18%
of wool or fine animal hair	47%	n.a.	n.a.
8459 Other outer garments and clothing accessories, knitted or crocheted	0.4	31.3	27.6
of cotton	100%	62%	72%
of synthetic fibers	0%	37%	28%
8462 Undergarments, knitted or crocheted	1.6	12.7	26.4
of cotton	100%	100%	100%

Source: COMTRADE

Table 5.1 is organized according to the most exported products in 2006. All three years have the same most exported products but the order between the products changes during the examined period.⁹⁰ *Men's and boys' trousers, breeches and the like, not knitted or crocheted (8423)* was the most exported product in 1998, while *Jerseys, pullovers, slipovers, cardigans, etc. knitted or crocheted (8451)* was the most exported good to the US in 2003. This category was however not far behind the most exported one in 1998. In 2006, it is instead *Women's, girls' and infants' other outer garments of textile fabrics, not knitted or crocheted (8439)* that has taken over as the most exported good. The distance to the second most exported good is also larger than before.

Certain trends can also be identified when it comes to the inputs used. Cotton is by far the most used input during the examined period even if cotton is less important in 2006 than in 1998. There is also a tendency to use more synthetic fibers and more other fibers in the 2000s in comparison to the late 1990s.⁹¹ Wool or fine animal hair is on the other hand less used in the end

⁹⁰ The only exception to this statement is category 8459 which was not one of the top five exported clothing products to the US in 1998.

⁹¹ Clothes made of synthetic fibers are also subject to a higher tariff than clothes made of cotton when entering the US. Since Madagascar can export tariff-free to the US it is more profitable to export clothes made of synthetic fibers than clothes made of cotton. Source: Interview GEFP

of the period and is no longer one of the most important inputs for products aimed at the US market.

5.2 Exports to the EU

Because the Lomé convention was in place before the creation of the export processing zone, that is to say before any large scale clothing production took place in Madagascar, it is harder to see a direct effect of the EU preferential trading agreement. It is still possible to analyze the trade pattern to the EU in order to compare possible effects of different ROO.

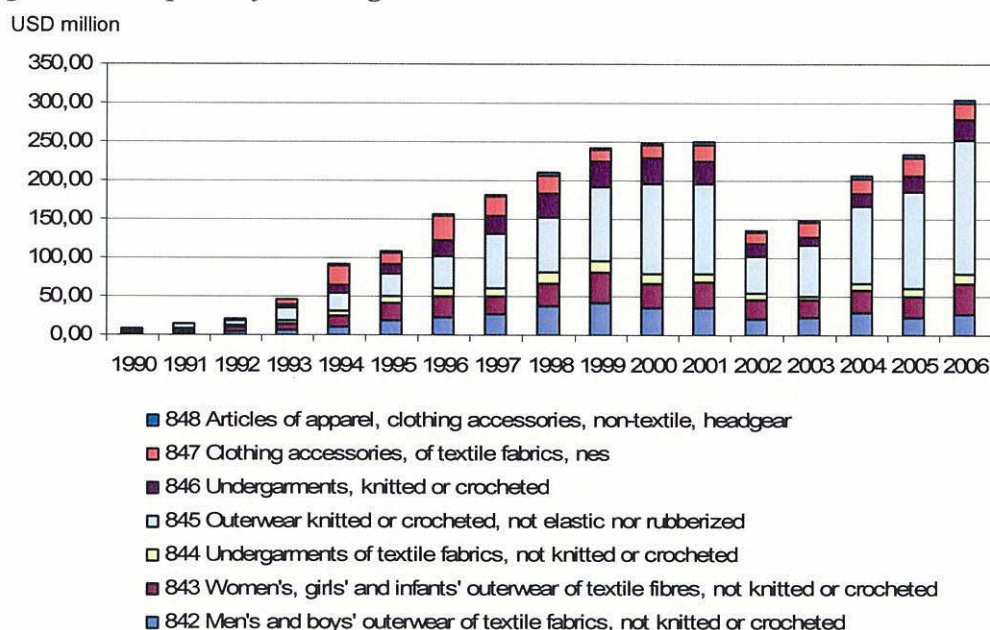
As both Figures 5.1 and 5.3 show, exports to the EU took off before the export boom to the US. This is not surprising given the preferential access to the EU market and the historically close ties to Europe, in particular France. As already mentioned, French investors were also the first to devote attention to the Malagasy export processing zone. Even if the clothing exports to Europe expanded relatively fast, the expansion pace must be deemed as slower than the one of exports to the US in the late 1990s. Further, signs of stagnation for exports to the EU are found already before the crisis year of 2002. Export values are basically the same from 1999 to 2001. The exports to the EU also recovered more slowly than those to the US after the crisis. The same export level as before the crisis year was not reached until 2006. On the other hand, exports to the EU do not seem to be affected to the same extent as the exports to the US by the end of export quotas for Asian countries. Instead, export volumes are still growing and the EU is therefore again the most important export market for Malagasy clothing goods with an export value of USD 304 million in 2006, see Figure 5.1.

Among the managers interviewed there were diverging opinions about exporting to the EU. One manager, of a company that mainly exported to the EU, stated that exporting to the EU market felt more reliable just because European clients tend to react slower to demand changes than the American ones. To export to the US is therefore sometimes seen as riskier since those exports are more volatile. In this manager's view, the slower expansion pace for EU exports was therefore not that problematic but instead a sign of trustworthy long-term business relationships.⁹² On the other hand, a manager whose company mainly exported to the US thought

⁹² Interview ARAWAK

it was difficult to export to the EU. It was believed to be easier to enter the US market than the European one, especially because Europeans tended to take slower decisions. At this company, the faster pace of American decision-making was appreciated and the American business culture was seen as more transparent.⁹³

Figure 5.3 - Exports of Clothing to the EU



Source: COMTRADE

Figure 5.3 shows the development of clothing exports to the EU on a 3 digit level to further compare exports to the EU to those destined for the US. The most exported clothing product group to the EU from 1993 and onwards is *Outerwear knitted or crocheted (845)*. The dominance of this product group is even greater than in the US case since it does not show a slowdown after 2004. It has in fact gotten even more important the last few years. This implies that exports to the EU do not show any decreased percentages of knitted or crocheted goods, as was the case for exports to the US. The expansion of exports of *Outerwear knitted or crocheted (845)* further means that non-knitted or crocheted products have become less important for the EU market. The difference between knitted and non-knitted products is interesting and consistent with the findings of Brenton and Ozden who found that ROO requirements are more costly for non-knitted than knitted products. This because the ROO for non-knitted items demand that both

⁹³ Interview MIW

the fabric and the yarn of which the fabric is made must come from the EU, ACP-countries or Madagascar. Since there usually is no fabric involved in the making of knitted products the ROO become less costly to meet in that case.⁹⁴ That Madagascar exports more knitted products to the EU than to the US can hence be an effect of the different ROO because it is more costly to produce non-knitted products for the EU than for the US.

A look at the top five exported clothing goods to the EU in 1994, 2000 and 2006 in Table 5.2 also shows a different composition of the most important clothing categories in comparison to the US case. *Clothing accessories of textile fabrics, not knitted or crocheted (8471)* was the most exported good to the EU in 1994 while *Jerseys, pullovers, slipovers, cardigans, etc. knitted or crocheted (8451)* was the most exported good in both 2000 and 2006. Interestingly, the difference in export value between the most exported good and the others is a lot larger than in the US case. The exports to the EU market thus seem less diversified.

Table 5.2 - Most exported clothing categories to the EU in USD million

	1994	2000	2006
8451 Jerseys, pullovers, slip-overs, cardigans, etc. knitted or crocheted	22.57	107.07	161.96
of wool or fine animal hair	87%	73%	n.a.
of cotton	10%	20%	15%
8439 Women's, girls' and infants' other outer garments of textile fabrics, not knitted or crocheted	7.84	21.58	22.58
of cotton	83%	88,5%	72%
of man-made fibers	15%	9%	14%
8471 Clothing accessories of textile fabrics, not knitted or crocheted	23.43	16.91	21.73
of cotton	n.a.	n.a.	n.a.
8423 Men's and boys' trousers, breeches and the like	7.60	27.12	17.25
of cotton	97%	98%	98%
8462 Undergarments, knitted or crocheted	10.02	24.49	15.31
of cotton	100%	100%	100%

Source: COMTRADE

Inputs for exports to the EU market also differ from the inputs used for exports to the US. Cotton is again the most important input but wool or fine animal hair is also of great importance which can be related to the fact that knitted products are more important for the EU market. Unfortunately there is no available data for how much of category 8451 is produced of wool or fine animal hair in 2006 but figures for 1994 and 2000 make one believe that this input is still

⁹⁴ Brenton and Ozden (2005) p. 8

highly important in 2006, especially when the expansion of the category 8451 is kept in mind. Moreover, the most exported goods to the EU do not use any synthetic fibers or other fibers which were relatively important inputs for exports to the US. Exports to the EU consequently seem less diversified also when it comes to the inputs used.

These first results are related to ROO. The expansion of clothing exports to the US was for example a lot faster than the expansion to the EU. This could be a result of the more liberal AGOA ROO that allow 3rd country fabric. The investigation of exported products to the US and the EU also seems to suggest that liberal ROO make it easier to diversify, possibly due to the fact that input sourcing is less restricted. The finding that goods produced for the US use more synthetic and other fibers seems to support this theory as well.

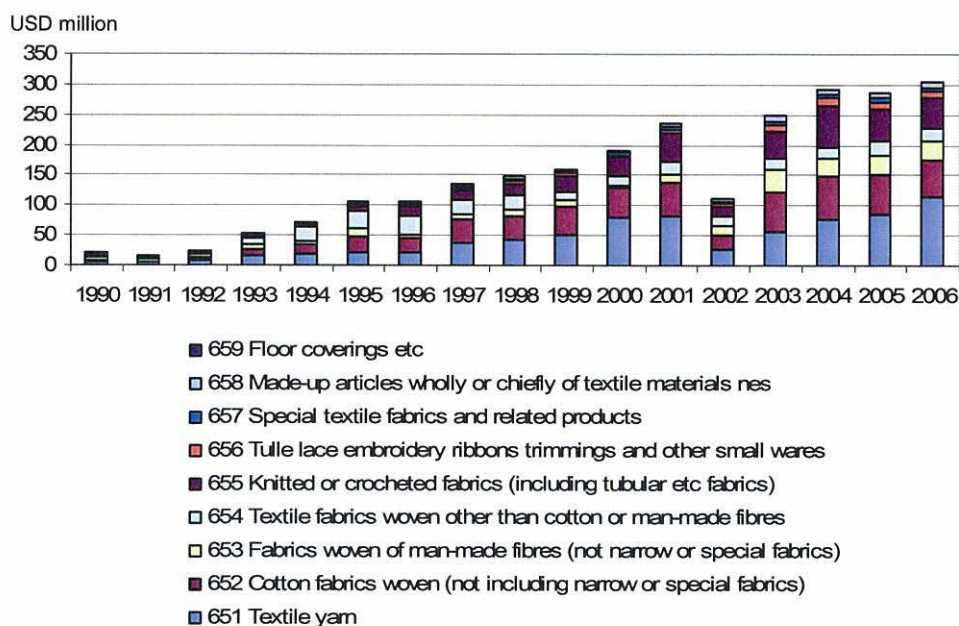
5.3 Textile Inputs

The second step of the analysis deals with the composition and origin of inputs. Has AGOA with its liberal ROO meant more import of textile yarn and fabrics? If so, where are the inputs sourced from? Theory would predict that more liberal ROO would lead to imports from more efficient low-cost producers. In this case it would mean increased imports from Asia where the most productive textile producers are located. It is further interesting to see if inputs are sourced from producers in the EU or US which can be a sign of a ROO effect. Lastly, input origin can also give an indication of how successful vertical integration has been. This can answer whether it is justifiable to use strict ROO as a tool for development policy.

Imports of textile yarn and fabrics have increased with the expansion of exports of clothing. Figure 5.4 below shows the composition of textile inputs from 1990 to 2006. The most imported textile good has been *Textile yarn (651)*, followed by *Cotton fabrics woven (652)* and *Knitted or crocheted fabrics (655)*. Another observation is that *Textile fabrics woven other than cotton or man-made fibers (654)* that was the most imported textile good in the middle of the 1990s, today accounts for a relatively small percentage of total imports. AGOA seems to have benefited other products instead. Examples of such products are *Tulle lace embroidery ribbons trimmings and other small wares (656)* as well as *Special textile fabrics and related products (657)*. In general more different kinds of products are imported after the entry into force of AGOA than in the

1990s. Moreover, imports of textile yarn and fabrics still show a positive trend. The growth rate of imports is slower than in the middle of the 1990s but Madagascar has never imported as much textile as in 2006, the last year with available data.

Figure 5.4 - Total import of textile yarn and fabrics 1990-2006



Source: COMTRADE

The most imported product in Figure 5.4, *Textile yarn (651)*, consists of different kinds of yarn. The most imported kind of textile yarn since 1990 is *Yarn of wool of animal hair (6512)*. In 2006, this sub-category accounted for 87% of textile yarn imports.⁹⁵ The second most imported yarn is *Cotton yarn (6513)* followed by *Yarn 85% of synthetic fibers (6514)*. The imports of synthetic yarn have become increasingly important since the year 2000 which coincides with the increased exports of products of synthetic fibers to the US. For a complete picture of the composition of category 651, see Figure A.1 in Appendix.

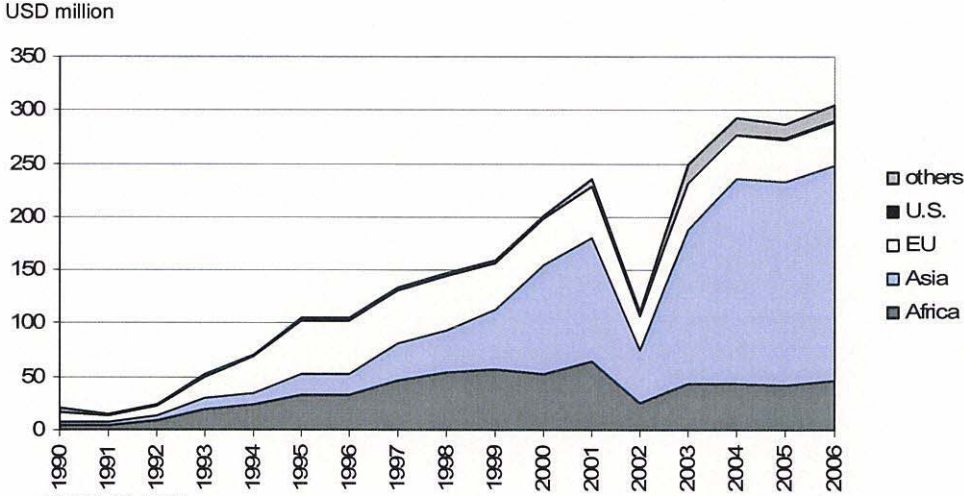
5.3.1 Origin of Imported Inputs

To be able to relate the use of inputs to ROO, the origin of inputs must also be examined. Figure 5.5 below shows imports of textile yarn and fabrics by origin. In the beginning of the 1990s

⁹⁵ COMTRADE and author's calculations

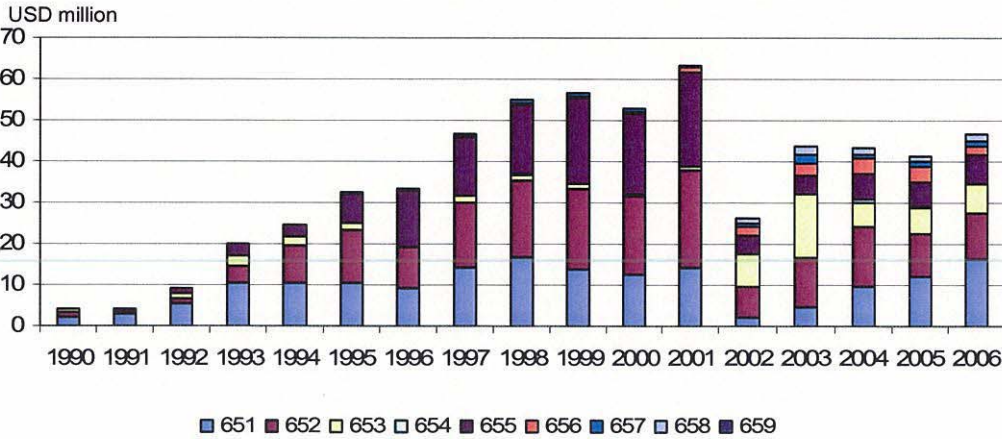
inputs were mainly sourced from the EU and Africa which can be expected from the cumulation rules of the Lomé/Cotonou ROO and the fact that exports to the EU took off in the beginning of the 1990s. Imports from the US are virtually non-existent during the whole examined period. AGOA has hence not benefited American textile producers. The main beneficiaries in relation to AGOA and input sourcing are instead Asian producers. From having been responsible for only a small share of total textile inputs in the early 1990s Asian producers now dominate the input market. Other producers have also gained slightly from the entry into force of AGOA. The 3rd country fabric rule consequently seems to be widely used among Malagasy clothing producers and one of the main explanations why exports to the US have been so successful.

Figure 5.5 - Total import of textile yarn and fabrics 1990-2006 by origin



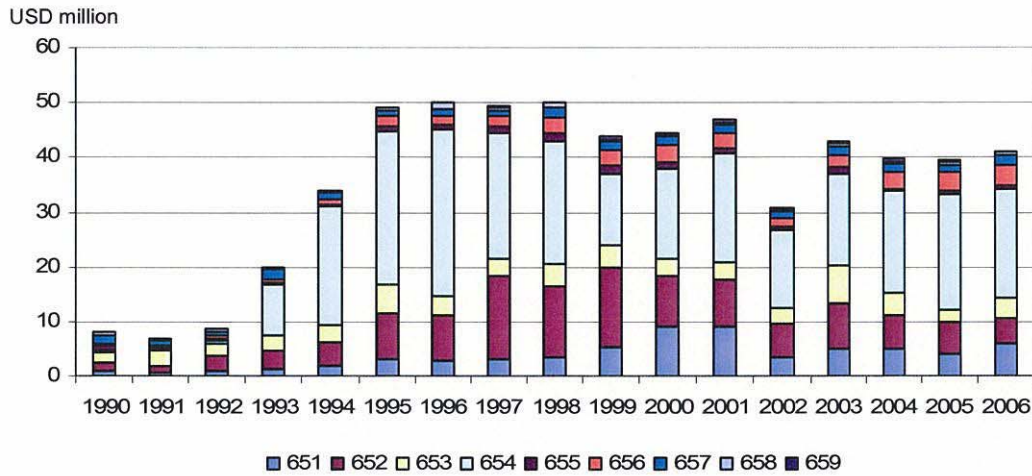
Source: COMTRADE

Figure 5.6 - Textile yarn and fabric imports from Africa 1990-2006



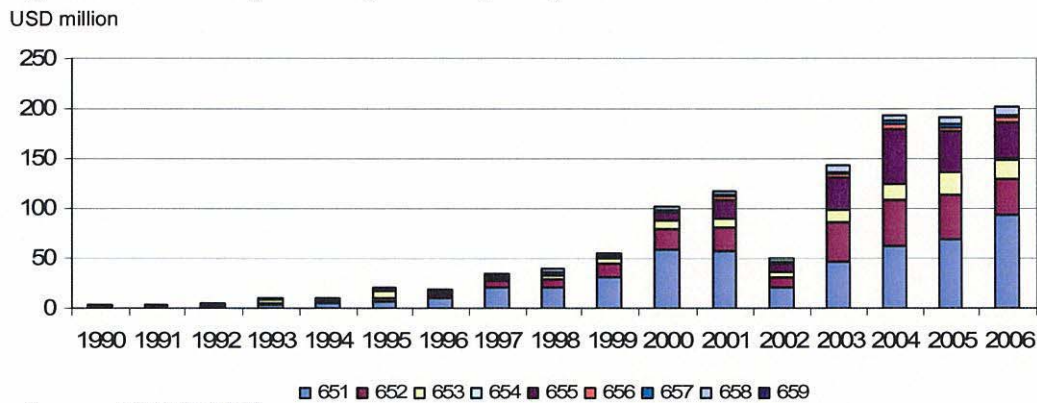
Source: COMTRADE

Figure 5.7 - Textile yarn and fabric imports from the EU 1990-2006



Source: COMTRADE

Figure 5.8 - Textile yarn and fabric imports from Asia 1990-2006



Source: COMTRADE

Looking more closely at the types of textile inputs sourced from Africa, the EU and Asia, certain patterns can be revealed. Figures 5.6, 5.7 and 5.8 show textile yarn and fabric imports from Africa, the EU and Asia respectively broken down at a 3 digit level. Note the different scales of the figures. The y axis of Figure 5.8 for Asia goes up to USD 250 million while the y axis of Figures 5.6 and 5.7 only reach USD 70 million and USD 60 million respectively. Also, see Figure 5.4 if more explanation of textile categories 651-659 is wanted.

Imports of African inputs took off in the early 1990s and show a positive trend until the crisis year of 2002, as can be seen in Figure 5.6. This result can be related to the Lomé/Cotonou ROO

that demand inputs to be sourced from the EU, domestically or another African ACP-country.⁹⁶ Input sourcing from Africa would hence be allowed for products destined for the EU market. African inputs were also most important in the 1990s during the expansion of EU exports. As clothing exports to the EU later stagnated in the late 1990s, so did imports from Africa. As mentioned, the crisis year of 2002 marks a shift when it comes to African inputs. First of all, imports from Africa have never completely recovered from the crisis. Second, the composition of imports changed. African textile inputs were dominated by three products until 2001: *Textile yarn (651)*, *Cotton fabrics woven (652)* and *Knitted or crocheted fabrics (655)*. Since 2002, imports have become more diversified and in particular category *Fabrics woven of man-made fibers (653)* has become more important. That imports from Africa never recovered from the crisis can be due to the fact that several Mauritian companies left Madagascar during 2002 and never returned. The political instability was considered to be too damaging for business.⁹⁷ The increased diversification of imports can have been affected by the leaving of some Mauritian companies but it could also be an effect of AGOA. As already has been established, exports designated for the US use more and more of other fibers than cotton and wool.

Even if input imports from Africa have experienced a decrease in importance since 2002, the strict Lomé/Cotonou ROO seem to have benefited African LDC producers and increased South-South trade which would be positive from a development perspective. A closer look reveals that Mauritius, that has outsourced much of its clothing production to Madagascar, accounts for at least 98% of imports from Africa from 1990 to 2003. From 2004 to 2006, Mauritius' share is down to about 94% because of an increase of textile imports from South Africa.⁹⁸ This further highlights the importance of the leaving of Mauritian companies in 2002. The leading position of Mauritius puts Madagascar's African input sourcing in a slightly different light but the increased input trade between Madagascar and Mauritius is nonetheless an example of South-South trade that has been positively affected by the Lomé/Cotonou ROO.

Imports of EU inputs show a somewhat similar pattern to the import of African inputs which again can be related to the strict cumulation rules of the Lomé/Cotonou ROO and to the fact that clothing exports to the EU started in the beginning of the 1990s. Close historical ties between

⁹⁶ De Melo and Portugal-Perez (2008) p. 4

⁹⁷ Cling, Razafindrakoto and Roubaud (2004) p.20

⁹⁸ COMTRADE

Madagascar and Europe and the early French investments in the Malagasy T&C sector can also explain the input imports from the EU. Imports of inputs from the EU showed signs of stagnation as early as in the mid-1990s and import volumes of European textile have actually decreased by about 20% since 1998. This is in turn a reflection of the relative stagnation of clothing exports to the EU market. Moreover, the entry into force of AGOA has not benefited European textile producers. This was an expected result since imports from the EU are relatively expensive so if you can source inputs from anywhere in the world, it is rather unlikely that EU inputs would be chosen.

Textile imports from the EU have a different composition to the African or the Asian inputs. By far the most imported textile good from the EU since 1993 has been *Textile fabrics woven other than cotton or man-made fibers (654)*, a product that is basically not imported from Africa at all. That fabric and not yarn is the most imported good from the EU is not that surprising when the strict ROO for non-knitted products are kept in mind. Further, there is no substantial change in the composition of imports since the middle of the 1990s. This is not surprising since the composition of exports to the EU also has remained about the same.

Finally, as Figure 5.8 shows, textile imports from Asia did not really take off until the end of the 1990s which as mentioned above can be related to the entry into force of AGOA. That many producers focused on the American market are financed by Asian investors should also have simplified the sourcing of inputs from Asia.⁹⁹ In comparison to imports from Africa and the EU, imports from Asia recovered very quickly from the crisis in 2002 which can be related to the fast recovery of exports to the US. Imports from Asia are also still increasing even if exports to the US have decreased after 2004. The composition of imports is to some extent similar to that of imports from Africa, but *Textile yarn (651)* is a more important good among imports from Asia than among those from Africa. *Tulle lace embroidery ribbons trimmings and other small wares (656)* are on the other hand a less important category than for imports from both Africa and the EU.

The Asian inputs are foremost sourced from China but India, Singapore and Pakistan are other countries that have contributed to the increase of Asian inputs in Malagasy clothing

⁹⁹ Cling, Razafindrakoto and Roubaud (2005) p.787

production.¹⁰⁰ Input sourcing from Asia is dominated by a single country to almost the same degree as input sourcing from Africa was dominated by Mauritius but the volumes of inputs sourced from Asia are much larger than volumes from Africa. AGOA ROO must therefore be considered to be more favorable for South-South trade than Lomé/Cotonou ROO and above all less trade distorting since Chinese textile producers are known to be the most efficient at the moment.¹⁰¹

5.3.2 Domestic Inputs

To assess the success of vertical integration in the Malagasy T&C sector, an examination of domestic input supplies is needed in addition to the above analysis of imported inputs. The previous section showed that imports of textile fabrics and yarn have increased substantially which seems to suggest that the degree of vertical integration in Madagascar has been low. If this is the case, using strict ROO as a tool for development policy has not been a successful strategy.

Over 80% of the raw materials used in garment production are today imported. There are simply not enough domestic supplies available in terms of both quantity and quality.¹⁰² Certain fabrics used in clothing production do not have any domestic producers at all. The main input that can be sourced domestically is cotton but the share of domestic cotton used in clothing production has decreased since the middle of the 1990s. In 1993 only 34% of the Malagasy cotton demand was imported. As the garment sector grew, cotton fabric production did not, due to the closure of several textile mills. This was in turn an effect of the falling cotton production which above all depended on falling cotton prices but also on harder growing conditions.¹⁰³ The lowest level of international cotton prices coincided with the crisis year of 2002 which put many cotton producers out of business.¹⁰⁴ The Malagasy cotton industry is today more or less destroyed and it is hard to see that it will recover in the near future. This is considered to be a great loss for the country since many jobs could have been created in the countryside.¹⁰⁵

¹⁰⁰ COMTRADE

¹⁰¹ Cadot and Nasir (2001) p. 7

¹⁰² Global Development Solutions (2007) p. 57

¹⁰³ The region of Tuléar where most cotton is grown is fighting both soil erosion and the lowest precipitation levels in Madagascar. This in combination with a poor irrigation system makes it hard to grow anything at all.

¹⁰⁴ Global Development Solutions (2007) pp. 8-9

¹⁰⁵ Interview Delegation of the European Commission in Madagascar

This confirms the suspicions of a low degree of vertical integration. Not only has it not been successful, the situation has even gotten worse. In conclusion, the Lomé/Cotonou ROO have hardly contributed to an increase of usage of domestic inputs. There has consequently not been any form of infant industry protection through the ROO either. This result supports the critique of using ROO as a tool for development policy. Creating vertical integration in a competitive sector such as T&C where low-cost inputs are essential to stay competitive is hence very difficult in a developing country. A representative for a private sector organization further stated that forced vertical integration does not work in Madagascar; the country is too small and the global T&C industry is too fragmented. Development of the cotton industry must thus be demand driven which means that first you create a cut and sew industry and when this is working properly people interested in making a profit will come and invest in spinning and weaving on their own.¹⁰⁶

5.4 Utilization Rates

Another way to investigate the impact of preferential trading arrangements and the impact of their ROO is to look at utilization rates. Utilization rates show exports under a preferential trading arrangement as shares of total export to the country in question. Studies have previously shown that a high value of preferences offered increases the probability that preferences are requested. It has been found that the difference between preferential and 3rd country tariff rates must be at least 4% in order for traders to have incentives for requesting preferences. If the difference between tariff rates is lower than that, the costs of obtaining preferences are expected to be higher than the gains from getting preferential access. The majority of the costs are found in cost of documentation and administration of ROO. ACP countries like Madagascar are expected to face higher costs due to among other things information disadvantages and institutional difficulties.¹⁰⁷

AGOA has, as seen above, had a large impact on the Malagasy T&C sector. The success of AGOA has been related to liberal ROO. This leads to an assumption of high utilization rates for AGOA apparel. Table 5.4 confirms this assumption by showing that the utilization rates for AGOA apparel are very high. The high utilization rates prove that the AGOA regulations are

¹⁰⁶ Interview GEPF

¹⁰⁷ Manchin (2005) pp. ii, 21

not too costly to comply with for clothing producers. The liberal ROO have probably contributed to this result. Low utilization rates would on the other hand mean that the procedures for getting preferential access are too complex and costly which in turn would make producers export as 3rd country producers instead. Another connection to ROO is that the 3rd country fabric rule for AGOA apparel is heavily used, as much as 99% of all AGOA apparel uses 3rd country fabric. The liberal ROO that allow 3rd country fabric for LDCs have consequently been a prerequisite for the AGOA success.

Table 5.3 - Utilization rates for AGOA and Lomé/Cotonou apparel 2002-2007

	2002	2003	2004	2005	2006	2007
Utilization rate for AGOA apparel	84%	95%	97%	99%	96%	97%
Proportion using 3rd country fabric of AGOA apparel	91%	92%	95%	99%	99%	99%
Utilization rate for Lomé/Cotonou apparel	85%	82%	82%	81%	81%	88%

Source: agoa.info, Eurostat and author's calculations

Utilization rates for Lomé/Cotonou apparel are overall lower than the utilization rates for AGOA. The only exception is 2002 but this crisis year, as has already been mentioned, cannot be seen as representative for clothing exports in general. Other years, utilization rates for Lomé/Cotonou are more than 10 percentage points lower than those for AGOA. Input restrictions in the Lomé/Cotonou ROO make exporting to the EU more costly than exporting to the US. Producers consequently choose to export as 3rd country producers to a larger extent for exports going to the EU market than for exports going to the US market. It should also be kept in mind that the MFN tariff for clothing in the EU ranges between 6.5%-12%. The most imported items, *Jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted* face for example a 12% import tariff.¹⁰⁸ The minimum 4% difference between preferential and 3rd country import tariff rates is therefore met since apparel under Lomé/Cotonou enters the EU duty free. That still almost 20% of Malagasy apparel exports to the EU were exported without using the possibility of preferential access from 2003 to 2006 is a sign of the high costs of the Lomé/Cotonou regulations and then in particular the high costs of the ROO.

¹⁰⁸ <http://exporthelp.europa.eu/thdapp/taric/TaricServlet?languageId=EN>

6 Conclusions

Textile and clothing often offers an opportunity for developing countries to diversify into manufactured products. Madagascar is one of several African countries that have lately become successful clothing exporters to the EU and the US. Part of the success is due to preferential access to the EU and US markets. The preferential trading arrangements of the EU, Lomé/Cotonou, and the US, AGOA, differ however when it comes to ROO for clothing. AGOA has very liberal rules for input-sourcing and allows Madagascar to source inputs from anywhere in the world (3rd country fabric rule). The ROO of Lomé/Cotonou are on the other hand stricter and demand that inputs must be sourced domestically, from Africa or from the EU. This study has tried to analyze the impact of these different ROO on the Malagasy textile and clothing industry by looking at export and import patterns as well as utilization rates.

Several conclusions are drawn from the study. First, clothing exports to the EU tend to be less diversified and contain more knitted products than exports to the US. Second, products destined for the US market are made of more diversified inputs than those destined for the EU market. The inputs used for exports to the EU are for example mainly cotton and wool while products for the US market, in addition to cotton and wool, also are made of man made and synthetic fibers. Third, exports to the US have grown more rapidly than exports to the EU after the entering into force of AGOA with its liberal ROO in 2000. Fourth, imports of textile fabric and yarn from Asia have increased dramatically since the year 2000. When the Malagasy T&C sector mainly exported to the EU, i.e. before 2000, inputs were only sourced from Asia to a limited extent. The majority of inputs were instead sourced from Africa or the EU. This is consistent with the theory's predictions. The ROO of Lomé/Cotonou limited Madagascar's input sourcing possibilities which led to supply-switching towards European and African producers due to strict cumulation rules. When the more liberal ROO of AGOA were introduced inputs were instead sourced from the most efficient producer on the world market, Asia. The possibility to source inputs from Asia to competitive prices made it easier to expand and to get materials that otherwise would have been too expensive or simply not available.

A few additional conclusions were also drawn. AGOA's ROO were found to promote South-South trade to a larger extent and to be less trade distorting than the Lomé/Cotonou ROO. Economic inefficiencies are avoided through AGOA since inputs are allowed to be sourced from the cheapest and most efficient producer on the world market. Moreover, utilization rates for AGOA have been higher than the utilization rates for Lomé/Cotonou indicating that the ROO in Lomé/Cotonou are perceived as complicated and costly. The 3rd country fabric rule is also heavily used for products exported under AGOA which even further underlines the importance of flexible input sourcing rules for expansion possibilities. Finally, no signs of increased vertical integration were found. The usage of domestic inputs has instead decreased substantially and the domestic cotton industry has almost been destroyed. To use strict ROO as a tool for development policy in the T&C sector hence does not seem to have been effective in Madagascar.

The future of the Malagasy T&C sector is uncertain. Recent events in Madagascar and international trade can highly affect the sector's future, both positively and negatively. The liberal ROO in the IEPA have created new incentives for European investments and are expected to increase exports to the EU. One manager stated for example that her company already had gotten new clients thanks to the new ROO and that exporting to the EU now was much easier.¹⁰⁹ It is still too early to see any statistical effects of the IEPA but it is a possible future research topic. Further, South Africa has thanks to SADC become more and more interested in Malagasy clothing products. Exports to South Africa are therefore also expected to increase.

There are nonetheless obstacles that can hinder a prosperous future of the T&C sector. Current weaknesses are for example the high cost of energy, the long distance to the world markets and the poor domestic infrastructure. The main problem is however political instability. The current Malagasy political crisis has had a high price for the T&C sector. Firms have gone out of business due to lost contracts and companies have even been burnt down during riots.¹¹⁰ As if this was not enough, the major threat to the industry right now is that Madagascar risks losing its AGOA eligibility in January 2010. Since AGOA eligibility requirements include the rule of law and political pluralism, the recent Malagasy coup d'état is not accepted by the Obama

¹⁰⁹ Interview MIW

¹¹⁰ Interview Text'ile Mada

administration. If free elections are not held before the end of the year AGOA eligibility will therefore most probably be lost. That would mean the end of Malagasy clothing exports to the US and possibly the beginning of the end of the entire T&C sector. Up to 100 000 jobs are expected to be lost indirectly if AGOA eligibility is lost and American clients are not expected to return because of the expiration of AGOA's 3rd country fabric rule in 2012.¹¹¹

The possibility to draw any general conclusions from the results of a case study is limited. What nonetheless can be established is that, in the case of Madagascar, ROO have had the power to affect both clothing exports and textile input imports. The 3rd country fabric rule of AGOA has led to a considerable expansion of the Malagasy T&C sector and diversification both in terms of final goods produced and inputs used. Consequently, liberal ROO have helped to create thousands of needed formal jobs in Madagascar and thereby promoted development.

¹¹¹ Interview GEFP

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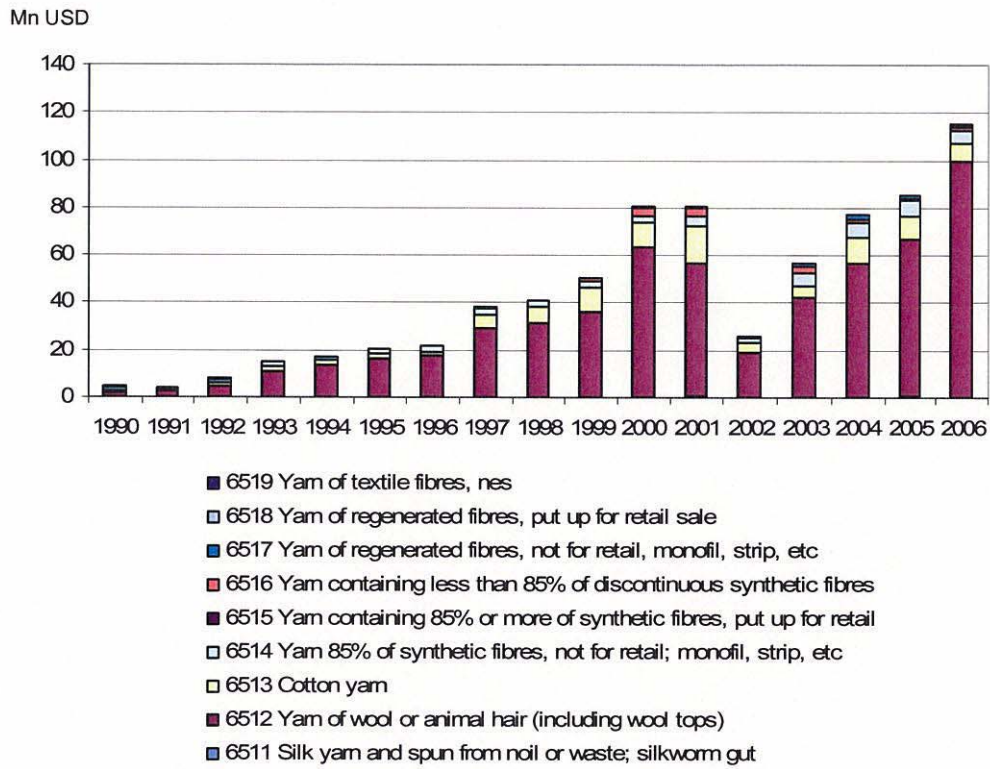
Appendix

Table A.1 – Clothing exports of African and Asian producers in million USD after the MFA phase-out

	2003	2004	2005	2006	2006/2004 (%)
Mauritius					
Total	896	865	712	721	-16,6
EU	627	638	555	602	
USA	269	227	167	119	
Madagascar					
Total	347	520	506	526	1,2
EU	151	197	229	288	
USA	196	323	277	238	
Lesotho					
Total	394	457	392	388	-15,1
EU	1	1	1	1	
USA	393	456	391	387	
Kenya					
Total	192	280	278	265	-5,4
EU	4	3	7	1	
USA	188	277	271	264	
China					
Total	13 970	18 288	45 365	49 981	173,3
EU	12 361	13 730	22 960	22 974	
USA	11 609	14 558	22 405	27 067	
Vietnam					
Total	3 115	3 478	3 793	4 611	33
EU	631	758	912	1 215	
USA	2 484	2 720	2 881	3 396	
Cambodia					
Total	1 726	2 085	2 319	2 841	36
EU	475	643	592	690	
USA	1 251	1 442	1 727	2 151	

Source: Adopted from Cling, Razafindrakoto and Roubaud (2007) p. 8

Figure A.1 – Composition of Malagasy import of textile yarn 1990-2006



Source: COMTRADE