STUDY OF THE IMPACT OF NIGERIA'S TEXTILE IMPORT RESTRICTIONS

FINAL REPORT

By

Study Team T. Ademola Oyejide¹ Abiodun S. Bankole Adeolu O. Adewuyi Afolabi E. Olowookere

Submitted to DFID Nigeria

26 September, 2013

¹ Team Leader

Table of Contents

| EXECUTIVE SUMMARY | | | | |
|--|---|--|--|--|
| 1. Introduction | 1 | | | |
| 1.1. Preamble | 1 | | | |
| 1.2. Terms of Reference | | | | |
| 1.3. Study Objectives – Interpretation of the ToR4 | | | | |
| 1.4. Structure of the Report | 5 | | | |
| 2. Theoretical Framework and Methodology6 | | | | |
| 2.1. Theoretical Framework | 5 | | | |
| 2.2. Methodology1 | 1 | | | |
| 2.3. Variables Measurements and Sources of Data1 | 5 | | | |
| 3. Structure of the Textile Industry19 | | | | |
| 3.1. Definition and Major Inputs and Products1 | 9 | | | |
| 3.2. Textiles Global Value Chain (GVC)20 |) | | | |
| 3.3. Structure of the Global Textile Industry | 1 | | | |
| 3.4. Structure of Nigerian Textile Industry | 5 | | | |
| 4. Policy Environment of Textile Industry | | | | |
| 4.1 Global Policy Environment | | | | |
| 4.2. Policy Environment in Developing Countries | | | | |
| 4.3. Policy Environment in Nigeria | | | | |
| 5. Performance of Textile Industry | 2 | | | |
| 5.1. Global Exports and Imports Performance42 | | | | |
| 5.2. Performance of Developing Countries44 | | | | |
| 5.3. Performance of Nigeria44 | | | | |
| 6. Analysis of the Operation of Textile Import Prohibition and Waivers | | | | |

| 6.1: Introduction | 48 |
|---|---------|
| 6.2: Context | 49 |
| 6.3: Operational Modalities | 50 |
| 6.4: Implementation Issues | 51 |
| 7. Comprehensive Quantification of the Total Economic Benefits and Costs of Textiles Industry Protection | 52 |
| 7.1: Introduction | 52 |
| 7.2: Economic Benefits | 53 |
| 7.3: Economic Costs | 56 |
| 7.4: Benefit and Cost Comparison: The Deadweight Loss from Protection | 57 |
| 8. Impact of Textiles Import Restrictions on the Value Chain: The Case of Cotton and Garments Subsectors | - 58 |
| 8.1: Introduction | 58 |
| 8.2: Impact of Textiles Price on Cotton Output | 59 |
| 8.3: Impact of Textiles Price on Garment Sector's Output and Employment | 60 |
| 9. Evaluation of the External Effects of Textiles Protection | 61 |
| 9.1 . Introduction | 61 |
| 9.2. Negative and Positive Externalities | 61 |
| 10. Comprehensive Quantification of the Value of Waivers Granted | 64 |
| 10.1. Introduction | 64 |
| 10.2. Quantification of Waivers | 65 |
| 11. Quantification of the Potential Benefits of Tariffication as an Alternative Measure to Import Prohibition | 66 |
| 12. Conclusion and Recommendations | 68 |
| 12.1 Introduction | 68 |
| 12.2 Conclusion | 68 |

| 12.3 Recommendations | 70 |
|----------------------|----|
| References | 72 |
| APPENDIX TABLES | 77 |

EXECUTIVE SUMMARY

I. Introduction

This study focuses on the determination of the impact of Nigeria's textiles import restriction. Specifically, the study describes the structure of the global and Nigeria's textile industries as well as the global value chain, and the policy environment surrounding the industry in a global and national perspective. The context, operation modalities and implementation issues of textiles import restriction policy were analysed. In addition, a comprehensive quantification of the total economic benefits and costs of protection was undertaken. Also, the impact of textiles import restrictions on cotton and garment sectors through price impact on output and employment was determined and analyzed. Finally, the study evaluated the external effects of protection, quantified the costs and benefits of the value of waivers and examined the issue of tariffication as an alternative measure to import prohibitions.

II. Findings

The following are the major findings:

a) Structure of the Textile Industry

- The Nigerian textile industry produces mostly cotton and synthetic fabrics which are a critical input for the garment sector.
- The textile industry is both capital and energy-intensive and it lends itself to significant economies of scale. The more important factors, however, are its disproportionate foreign ownership characteristics coupled with quota (MFA) induced evolutionary character, insufficient or lack of linkage to the global value chain networks, its long term protection from even moderate competition, and high levels of global intra-industry trade.

Inadequate understanding of the interactions of these factors could have contributed to the poor performance of the industry.

b) Policy Environment of the Textile Industry

- The evolution of the textile industry has been characterized by the use of various bilateral quotas, protectionist policies, and discriminatory tariffs by the developed world against the developing countries. These include the Multi Fibre Agreement (MFA), Agreement on Textile and Clothing (ATC) which highly distorted the structure of world trade in textiles and strongly influenced national development of clothing and textile industries and global flows of their products.
- The implication of the global policy environment for locational shift and structure is that over time, Asia rose to be a major producer especially with respect to fabrics, China's share of world market rose from about 10.0% in 1995 when ATC commenced to over 33.4% in 2011.
- The tariff on fabrics has been generally high in developing countries. Between 1995 and early 2000, Thailand, Nigeria, India China and Bangladesh all had high tariff placed on fabrics but these have declined in the last few years. There is significant tariff escalation in the countries as fabrics have greater tariff than cotton while higher tariffs are imposed on clothing compared to fabrics.
- Some countries such as Bangladesh, India and Pakistan provide production incentives for textile manufacturing ranging from cash incentives to encouragement of standards and monitoring of imports to guard against surges.

- Similar to the experience in cement, domestic production of textiles in Nigeria was encouraged within the context of the country's import-substitution-industrialization strategy.
- Textiles producers in Nigeria have benefitted from the grant of pioneer industry status which gives beneficiary firms a tax holiday of 3 to 5 years, subject to the magnitude of investment.
- Nigeria has a relatively high regime of corporate taxation similar to those of Brazil, India and South Africa. The pioneer scheme reduces the tax burden but it is still higher than those of other developing countries, especially China.
- Nigerian textile companies however have access to additional incentives especially those which relate to exporting. In December 2009, the federal government established a N100 billion bond-funded Cotton, Textiles and Garment Industry Revival Scheme (CTG), an intervention fund for the textile industry to increase the industry's capacity utilization.
- The structure of tariff in the textile industry between 1988 and 2009 shows a trend of very high tariffs on textile products in the last twenty years prior to the adoption of CET. Even the tariff rates charged on fabrics have been very high and remain high with the introduction of CET.
- Viewed in the context of the duration of high tariff policy on textiles and the diminishing fortune of the textile sector over the same period, it is evident that the high tariff regime neither promotes growth of the sector nor generates employment and exports.

Textiles are subjected especially to inconsistent and non-transparent import prohibition policy especially since 2004 when there have been reversals and counter reversals.
 Thus, the textile industry has been subject to two main types of trade policy: a longish period of high tariffs plus import prohibition and a short period of low tariffs combined with unstable import prohibition

c) Performance of the Textile Industry

- The developed countries had been the major exporters of fabrics expecially during the period of multi fiber policy but a surge occurred in the export of fabrics by the developing countries in the post MFA period as developing countries' export of fabrics increased faster than that of the developed countries.
- In the case of fabrics imports, although the imports of the developed countries have been declining consistently and that of the developing countries rising very fast, developed countries are still major buyers of fabrics products in the world.
- Developing nations accounted for a significant proportion of world's exports of fabrics, and China dominates export market (5-34%), followed by India (2-6%) and Pakistan (1.8-3.1%). In the same vein, China accounted for 3.1% of fabrics import in 1985 and 6.6% in 2011.
- Nigeria as a developing country is not a major participant in world fabrics trade, which confirms that the country is insignificantly linked with both the global value chain and the value chain in the developing region.

- Nigeria's textile industry has an installed capacity of about 1.7 billion metres of fabrics per annum. Capacity utilisation of the textiles industry has been unstable reaching 51% in the 1980s, 44% during 1990s and 47% in the 2000s.
- The inefficiency of the power sector affected all manufacturing activities including the textiles industry, though old machinery has been identified as another significant factor that severely contributed to textile industry decline.
- The import restriction in the textiles industry appeared quite effective in view of the trend of domestic production of fabrics in the country. Domestic production of cotton fabrics accounted for over 90% of total supply of cotton fabrics between 1981 and 2011. This result emanates from the fact that the industry has been subject to a somewhat permanent import prohibition and only officially recorded imports are used in computation.
- The domestic price of cotton fabrics always remained higher than the world price at almost double the latter except in 2011.

d) Operation of Textile Import Prohibition and Waivers

- The textile import prohibition regime did not follow established practice, behaviour carried over from the pre-Tariff Review Board period. However, the decision to revive the textile industry was taken in the context of consultations between the government and domestic manufacturers of textile products through their umbrella organization.
- The implementation of import prohibition and waiver regimes in Nigeria has been characterized by instability, inconsistency and selectivity.

e) Total Economic Benefits and Costs of Import Restrictions on Textiles

- Economic benefits accruing to cotton fabrics producers per annum increased from N5.4 billion in 1981-2008 to N13.4 billion during 2009-2011 even with lower tariffs but possibly more stringent import prohibition. For synthetic fabrics, the benefits were N24.93 billion and N4.63 billion per annum respectively.
- The annual direct consumer loss rose from ₦ 8.02 billion (1981-2008) to ₦ 17.43 billion (2009-2011) for cotton fabrics, and rose from ₦ 20.08 billion (1981-2008) to ₦ 6.57 billion (2009-2011) for synthetic fabrics.
- Deadweight loss generated by textile import restrictions increased from N 2.62 billion per annum in 1981-2008 to N4.02 billion during 2009-2011 for cotton fabrics and fell from N 8.8 billion per annum to N1.55 billion per annum for synthetic fabrics.
- Though local production of cotton increased between the two periods suggesting that import restrictions in the cotton fabrics sector induced an increase in locally produced cotton demand, there are significant output and employment losses in the garments sector throughout the period of study for both cotton and synthetic fabrics import restriction.

f) External Effects of Textile Production

• Textile production generates significant health hazard implication ranging from growth inhibition to consumable vegetables to rendering a water stream useless for domestic, agriculture and industrial uses. However, textile companies' corporate social responsibility (CSR) activities do not significantly relate to the environmental problems that they create in the communities while there appears to be no indication of government requiring them to do so despite established regulatory institution to perform this function.

Also, the share of textile companies' value added attributable to labour is insufficient to conclude that textile companies contribute to labour poverty reduction generally.

g) Quantification of Waivers

- On average, importers of cotton fabrics gained N1.6 billion per year since 1981 and N1.1billion for synthetic fabrics. A lower tariff only regime would have reduced this and transferred the rent to consumers.
- *h) Potential benefits of Tariffication as alternative measure*
 - The estimated tariff equivalent of import prohibition regime is 113% for cotton fabrics and 125% for synthetic fabrics. If this rate had been used for controlling textiles import instead of import prohibition, government's administrative costs would have been reduced, domestic textile price increases would have been moderated by imports, and wasteful lobbying and rent-seeking costs would have been reduced.

III. Recommendations

Based on the quantitative evidence generated by this report and summarized above, it is recommended that:

- Textile import policy should be designed and implemented with more understanding of the global value chain networks and its implications for Nigeria.
- Textile import policy should recognize that textile is an intermediate product and an input into garments production which is more labour intensive. Hence, textile import policy should support rather than discourage garment production which has greater employment creation potential. The standard tariff escalating structure should be applied where import tariff on cotton which is an input into textile should carry about 5%, textile 5-10% and

garments 10-20%. This suggestion also takes into consideration the role of clothing in poverty alleviation efforts of the government.

- Import policy in the textile industry should be more transparent and consistent with Nigeria's commitments at the WTO and in the context of the ECOWAS common external tariff (CET).
- Since the textile industry is characterized by a high influence of the global value chain networks and global trade policy environment, Nigeria should adopt a framework that links its trade policy to export orientation that is rooted in potential active performance in the global value chain.
- The temptation to use the textile import prohibition regime as a promotional policy instrument in the textile industry and other sectors should be reviewed in the light of the results of this study.

1. Introduction

1.1. Preamble

The textiles industry plays important roles to mankind and its major output, fabrics, has been established as a basic need. In addition to this, textile materials are used in furniture, coverings and blinds, interiors of vehicles and health gadget such as bandages and gloves. The textile industry is also known for its capacity to generate huge employment; hence, serving as a source of livelihood to many households. The Nigerian textile industry performed these roles as well, especially up to the 1980s. In this early period, the country's textile industry with its over 250 functional factories was rated third largest in Africa after Egypt and South Africa (Bello *et al*, 2013). The industry was also the second largest employer of labour providing an estimated direct employment to about 500,000 persons and indirectly to about 1,750,000. The industry further served as a major source of revenue to the government (Aguiyi *et al* 2011).

However, this industry has recently experienced a serious performance decline. For instance, the number of firms in the industry declined to about 42 in 2003, 25 in 2010 and 10 in 2011 with employment falling to 60,000 in 2002 and 24,000 in 2010. Smuggling is also common in the industry. This decline in the performances of the Nigerian textile industry occurs despite various policies designed in its support. It is notable that textile is a major item on the Nigerian import prohibition list. Firms in the industry also benefit from some incentives in the forms of pioneer status and subsidies.

Given the declining performance of the industry therefore, the Nigerian government seeks to implement further policies that may lead to its revival. The recent Nigerian Industrial Revolution Plan (NIRP) identifies the textile industry as one of the six major priority sectors in which the country is expected to have a comparative advantage. The NIRP aspires to make Nigeria the largest producer of textiles in Africa by giving various incentives to local producers, reducing smuggling and influx of imported textiles and sponsoring buy-made-in-Nigeria textiles campaigns.

Following the debates on the effectiveness of trade restrictions however, it is pertinent to carry out comprehensive analysis of the full costs and benefits of these measures in the textile industry. Therefore, this study seeks to provide a comprehensive analysis of the impact of the textile import restrictions on the Nigerian economy. It aims at enriching the policy debate on the issues by presenting an analysis and quantifying the comprehensive costs and benefits of the policy measure to inform key stakeholders and policymakers.

1.2. Terms of Reference

The key activities outlined below and which are categorized in terms of outputs form the nucleus of the Terms of Reference of the Team of consultants on the project.

A. Output 1 Activities

The main activities to be carried out to produce output 1 are as follows:

- 1. Desk review of available studies, data and research on the Nigerian textiles industry;
- 2. Consultations with identified stakeholders;
- 3. Conduct of key research and analysis, particularly focusing on:
 - Comprehensive analysis of the operation of the prohibitions, including full record of waivers granted if available
 - Comprehensive quantification of the total economic benefits, i.e. the value of the protection for the domestic textile industry, ideally separating the value accruing to

capital holders (owners) and the added value accruing to workers (including job creation/job security).

- Comprehensive quantification of the total economic costs to Nigeria's economy associated with the import restriction, including
 - Direct price gap losses to consumers
 - Effects on the domestic textile value chain, especially on domestic cotton production and activities in the clothing/Garment sub-industry.
 - Medium-/long-term inefficiencies
- Comprehensive evaluation of the social benefits and costs of the protection (including assessment of impact on employment and poverty).
- Comprehensive quantification of the value of waivers granted (costs and benefits).
- Quantification of the potential benefits of tariffication as an alternative measure to import prohibitions.
- **4.** Writing of draft final report.

B. Output 2 Activities

The main activities to be done to produce output 2 are as follows:

 Presentation of the draft final report to DFID Nigeria and other invited stakeholders in Abuja/Lagos (tbd). The presentation will include a summary of key findings, recommendations and possible follow-up actions for discussion.

C. Output 3 Activities

The main activities to be carried out to produce output 3 are as follows:

1. Revisions of the draft final report based on the feedback and comments from the external peer review, and from DFID, Saana as well as other key stakeholders.

2. Completion of final report based on feedback on draft report.

1.3. Study Objectives – Interpretation of the ToR

The main objective of the study is to analyse the impact of the import restriction imposed on Textiles by the Nigerian government on the key stakeholders in the economy. In specific terms, the study seeks to:

- i. Conduct a comprehensive analysis of the operation of import prohibition of textile, including full record of waivers granted, if available;
- Quantify in a comprehensive way the total economic benefits of import prohibition in the textile industry through the analysis of the value of the protection for the textile industry by type of stakeholders (producers, workers, consumers);
- iii. Perform a comprehensive quantification of the total economic costs of import prohibition in the textile industry to Nigeria's economy associated by analyzing the direct price gap losses to consumers, the impact on the producers of inputs for textile production (cotton producers) and Nigerian end-users such as the garment producing firms with particular emphasis on output of the industry and employment creation as well as induced medium to long-term inefficiencies;
- iv. Carry out a comprehensive evaluation of the social benefits and costs of the protection of the textile industry;
- v. Do a comprehensive quantification of the value of waivers granted in terms of their costs and benefits; and
- vi. Quantify the potential benefits of tariffication as an alternative measure to import prohibitions.

1.4. Structure of the Report

This Report contains twelve sections. Section 1 provides the introduction to the study in terms of its motivation and objectives, the Terms of Reference and report organization. The study's background is presented in three parts in sections 3, 4 and 5. In the first part, the global and Nigerian textiles industries are fully described in relation to the global value chain networks and performance in specific aspects of the value chain. The second part presents in detail, textiles industry's global policy environment as well as policies in developing countries and Nigeria covering trade policy trends in each case. In section 5, the performance of textile industry is analysed with particular focus on global textile trade and trade performance in developing countries and Nigeria. Section 6 provides a comprehensive analysis of the rationale of import prohibition policy in the textiles industry over time, the operation and implementation of import prohibition policy. A comprehensive quantification of the total economic benefits and costs of protection is undertaken in section 7. This includes the determination of the value of the protection for the textiles industry particularly the values accruing to textiles company owners and workers, including job creation.

Section 8 deals with impact of restrictions on the producers of inputs for textile production (cotton producers) and Nigeria end-users of textile products (the garment producing firms) through price impact on industry production and employment creation. In section 9, the study presents an evaluation of the external effects of protection of the textiles industry. The costs and benefits quantification of the value of waivers granted is carried out in section 10. The feasibility of tariffication as an alternative measure to import prohibitions is analyzed in section 11. Section 12 presents the study's conclusion and policy recommendations.

2. Theoretical Framework and Methodology

2.1. Theoretical Framework

2.1.1. Cost and Benefit of Restrictions

Import regulation, which can be in form of tariffs or non-tariff (e.g. quota and outright ban) is discussed using Figures 2.1, 2.2 and 2.3. Figure 2.1 compares the domestic market equilibrium for textiles in the presence of a complete import ban with free trade equilibrium. If textile imports are prohibited, the market clearing price is P^e and the quantity demanded and supplied by domestic producers is Q_e . In contrast, assuming that the import supply of textiles is perfectly elastic at a world market price $P_w < P^e$, the quantity produced domestically would be Q_s , the quantity demanded would be Q_d and the amount $Q_d - Q_s$ would have been imported if importation was allowed. Figure 2.2 compares the free trade equilibrium with the situation in the presence of a tariff on textile imports. When there is no tariff imposed, domestic market and world market prices are the same at the point of entry (P_w), assuming no transport cost.



In other words, the domestic price of textile is determined by the world market price, and in reality, only transaction costs such as the costs of transport account for any difference. However,

if a tariff is imposed on the importation of textile, the tariff has the effect of increasing domestic prices to $P_d = P_w+t$. This increase in domestic price of textile has consequences, first on quantity demanded and supplied and quantity imported, and second on consumers, producers and the government, as well as the economy as a whole.



Figure 2.2: Domestic Market for Textiles – Import with Tariff Model

First, the graph shows that at the free trade, world price of textile (P_w), the quantity of textile demanded by Nigerians is greater than the domestic quantity supplied by the amount Q_d - Q_s which is the amount of textile imported at the free trade price by Nigeria. The imposition of the tariff reduces quantity demanded to Q_d' from Q_d and increases domestic supply to Q_s' from Q_s . The import quantity of textile therefore shrinks to $Q_d'-Q_s'$.

Second, domestic producers of textile gain the area *a*, because the protection allows them to earn more per unit sold (the difference between the now increased domestic price and the world market price), and induces them to sell more units domestically (because at the higher price, additional production becomes profitable). This gain is referred to as the increase in "producer surplus."

Third, consumers of textile lose area a + b + c + d because (i) they now have to pay more per unit bought, (the difference between the now increased domestic price of a bag of textile and the world market price they would have paid otherwise); and (ii) they now consume less because they can afford less units of textile at the new price compared to the quantity they would have been able to afford at the lower world market price. This loss is referred to as a decrease in the "consumer surplus." Usually, the net loss in "consumer surplus" for domestic consumers is significantly higher that the gain in "producer surplus" accruing to domestic producers. That is, only a part of the additional money consumers pay will actually benefit the producers (and their workers).

Fourth, the government gains the revenue from the tariff on textile, i.e. area *c*, and this accounts for part of the difference between the loss in consumer surplus and gain in producer surplus. In case of a quota, this becomes a quota "rent" for the imported quantities which is collected by the quota holders. The government earns the tariff income, of course, only on those products that are actually imported. Since at the higher price, fewer products are consumed (domestically produced and imported combined), the combined benefit for producers (additional "producer surplus") and the government (tariff revenue) is still less than what consumers lose. Thus, there is an efficiency loss that is a net loss to the economy. This is almost always borne in largest part by the domestic economy of the importing country itself especially when the importing country is a small country relative to the world. This is the area *d*.

Another net loss is the difference between the additional price which consumers have to pay for the additional share of the domestic market of the product now captured by domestic producers, and the "producer surplus" that accrues to domestic producers for this part of their domestic sales. This is the area *b*. These two net losses b + d are, "deadweight" losses caused by the trade barrier and are not appropriated as a benefit by any economic agent in the economy. In other words, the net welfare of efficiency loss of distorting incentives to producers and consumers is consumer loss minus producer gain minus government gain (a+b+c+d) - a - c = b+d where "b" is "production distortion loss" and "d" is "consumption distortion loss". It is the net welfare loss of import restriction that is indeed borne by the importing country consumers including *business consumers, e.g.* clothing and garment companies in the case of textile, who require the product as input to their production dresses and other clothing and fabric products.

Figure 2.3 depicts the case of a quota instead of a tariff. In free trade, the import volume is Q_d - Q_s . In the case of the restriction on imports, Q_d' - Q_s' is imported and price increases to P_d with the difference between the world price and the domestic price now being referred to as "tariff equivalent quota rent". Quota rents constitute the difference between analysis in Figure 2.2 and 2.3 where instead for the government to earn revenue of the area "*c*", it is now earned by those who are licensed to import textile as "quota or economic rent". But if the government auctions the licence to import, then it earns the area "*c*".





2.1.2. Impact of textile prices on the clothing and garment industry

In order to examine the impact of increase in textile prices brought about by its restrictions on the clothing and garment industry, a production function is specified and estimated. The production function is a statement of the relationship between firm's scarce resources (i.e. its inputs) and the output that results from the use of these resources. In mathematical terms, this can be generally expressed as:

$$y = f(x) \tag{1}$$

Where

y = Quantity of output,

x = various inputs used in the production process

In the present case, the input variable set is made up of capital (K), labour (L) and textile (T). The flexibility of the functional form that these functions may take has also been given important consideration in the literature. Many empirical studies usually resort to the translog function which could be considered as a second-order Taylor's series approximation in logarithms to an arbitrary function (See Christensen et al., 1973). This functional form imposes no *a priori* restriction on the production structure and this makes it possible to test alternative production formulations (See Banda and Verdugo, 2007).

Therefore, a translog production function is adopted in this study and this is specified for the garment industry as:

$$\ln y = \alpha_0 + \sum_{i=1}^{M} \alpha_i \ln x_i + \frac{1}{2} \sum_{i=1}^{M} \sum_{j=1}^{M} \alpha_{ij} \ln x_i \ln x_j$$
(2)

The output elasticity of each input from the estimated translog function is also stated as equation (3) below:

$$\sigma_x = \frac{\partial \ln y}{\partial \ln x} \tag{3}$$

In estimating the price elasticity of demand for any of the inputs, it is assumed that price (P) equals marginal cost. Adding the assumption that garment establishments maximize their profit implies that their marginal cost will equal their marginal value of output or revenue (ρ) (i.e. P = MC = ρ). The price elasticity of demand for input *i* can then be computed as:

$$\gamma_i = \frac{\partial \ln x_i}{\partial \ln P_i} = \frac{\partial \ln x_i}{\partial \ln \rho_i} = \frac{\sigma_i}{\sigma_i - \sigma_i^2 - \alpha_{ii}}$$
(4)

Where $\rho_i = \sigma_i \cdot \frac{y}{x_i}$ and α_{ii} is the estimated coefficient from the translog function that correspond to the half the squared of the inputs whose price elasticity of demand is computed (Nahman and de Lange, 2012).

2.2. Methodology

The empirical measurement of the benefits and costs of protection basically involves the determination of the elasticities of demand and supply for the commodity of interest. These elasticities, alongside other variables, are then used to calibrate the relevant benefits and costs.

2.2.1. Computation of economic costs and benefits and associated demand and supply elasticities

Following Lopez and Pagoulatos (1994), Kohler (2005) and Obih et al (2008), the domestic demand and supply are respectively expressed as decreasing and increasing functions of price as given in equations (5) and (6) below;

$$Q^d = \alpha P^{-\varepsilon} \tag{5}$$

$$Q^s = \beta P^{\eta} \tag{6}$$

Where Q^d is the quantity of textile consumed domestically, Q^s is the quantity of textile produced domestically, P is the domestic manufacturers' price, α and β are constants while ε and η are the absolute values of the elasticities of demand and supply respectively. When the above demand and supply functions are linearised, they give equations (7) and (8) with the estimates of the elasticities obtained using econometric estimations (see Das, 2004; Obih et al, 2008):

$$logQ^d = loga + \varepsilon logP + e_t \tag{7}$$

$$logQ^{s} = log\beta + \eta logP + e_{t}$$
(8)

Given that P_w and P_d are the world and Nigerian prices of textile respectively, the ratio of these prices can be given as:

$$\theta = P_w / P_d = 1 / (1 + T) \tag{9}$$

Also, the expenditure on consumption of textile is expressed as:

$$E_c = VD + VM(l+T) \tag{10}$$

Where *T* stands for either or both of the ad valorem tariff rate (t^g) and the tariff equivalent of the corresponding non-tariff barrier, e.g. import quota (t^q). E_c is expenditure on textile, *VD* is the value of domestically produced textile and *VM* is the value of imported textile. Using equations (5) to (10), the costs and benefits of protection are derived and given as:

Consumer loss (area a+b+c+d)
$$CL = E_c (1-\theta) \frac{(\theta^{-\varepsilon} + 1)}{2}$$
(11)

Consumption distortion loss (area d)
$$CDL = \frac{CL(\theta^{-\varepsilon} - 1)}{(\theta^{-\varepsilon} + 1)}$$
 (12)

Production distortion loss (area b) $PDL = 0.5 \times VD \times T \times \theta (1 - \theta^{\eta})$ (13)

Producer gain (area a)
$$PG = (VD \ge T \ge \theta) - PDL$$
 (14)

Government gain/quota rents (area c)
$$GG = CL - (CDL + PDL + PG)$$
 (15)

2.2.2. Computation of the tariff equivalent of non-tariff barriers

It should be noted that it is easier to measure the benefits and costs of tariff protection than those of non-tariff protection. While information on tariff rate is readily available to compute the former, in the case of the later, one has to find the tariff equivalent of the non-tariff barriers (NTBs), that is, the level of tariff that has the same effect on imports as the enforcement of the non-tariff barriers. The common practice is to use the difference between the internal factory price and the CIF import price of the commodity (See Deardorff, 1997; Linkins and Arce, 2002 and Moshini and Meilke, 1991). Therefore, the implicit tariff present in a quota can be expressed as;

$$t^{q} = \frac{P_{d} - P_{w}}{P_{w}} - t^{g}$$

$$\tag{16}$$

Where t^q is the implicit tariff (tariff equivalent of NTBs), P_d is the domestic factory price of textile, P_w is the CIF calculated import price of textile and t^g is the usual level of tariff protection for textile in Nigeria. Equation (16) implies that the difference between domestic and international prices of textile is accounted for by the incidence of tariff and non-tariff barrier. Thus, t^q is a catch-all indicator for all other protection factors, apart from tariff, that may prevent the local price to equalise the world price of textile.

2.2.3. Estimation of the garment output functions

The main purpose for estimating the garment output function is to quantify the impact of increase in textile prices brought about by its restrictions on the clothing and garment industry. Therefore, equation (2) is explicitly specified in equation (17) below:

$$lny = \alpha_0 + \alpha_K \ln K + \alpha_L \ln L + \alpha_T \ln T + \alpha_{KK} \frac{1}{2} (\ln K)^2 + \alpha_{LL} \frac{1}{2} (\ln L)^2 + \alpha_{TT} \frac{1}{2} (\ln T)^2 + \alpha_{KL} \ln K \ln L + \alpha_{KT} \ln K \ln T + \alpha_{LT} \ln L \ln T + e$$
(17)

Where y is output; K, L and T represent capital, labour and textile respectively. The α 's are the estimated coefficient and *e* is the disturbance term. From equation (3), the elasticity of garment production with respect to textile is calculated as:

$$\sigma_T = \frac{\partial \ln y}{\partial \ln T} = \alpha_T + \alpha_{TT} \ln T + \alpha_{KT} \ln K + \alpha_{LT} \ln L$$
(18)

Equally from equation (4), the price elasticity of demand for textile is given in equation (19) as:

$$\gamma_T = \frac{\partial \ln T}{\partial \ln P_T} = \frac{\sigma_T}{\sigma_T - \sigma_T^2 - \alpha_{TT}}$$
(19)

The product of σ_T and γ_T represents the elasticity of garment output with respect to changes in textile prices; and its multiplication with a measure of benefit (value) loss from restriction is an indication of the value impact of restriction of garment output. This is shown in equation (20) below:

$$Garment \ output \ loss = \sigma_T x \ \gamma_T x \ BL \tag{20}$$

Where *BL* is benefit loss from restriction which is calculated as the product of price gap (difference between local and world price) and quantity of textile imported (in tonnes). The estimated garment output loss is also multiplied by the output-labour ratio in the garment industry to obtain an estimate of garment labour loss as a result of the restriction on textile input. All the elasticities and impacts are computed using the period means of the data set as well as the means of two different regimes of textile import restrictions.

2.3. Variables Measurements and Sources of Data

The computations with equations (11) to (15) above usually require few data which include; the value of domestically produced textile (*VD*), domestic factory prices of textile (*P_d*), value of imported textile (*VM*), average CIF calculated import price of textile (*P_w*), the *ad valorem* tariff level (t^g) and the tariff equivalent of non-tariff barriers (t^q). Also required are the estimates of the elasticities of demand (ε) and supply (η) of textile.

Data on value of domestically produced textile (*VD*) and prices are not readily available; but data are available on index of cotton textile production, index of synthetic fibre production, index of manufacturing production and manufacturing GDP at current producers' prices. Therefore, the ratio of each of cotton and synthetic textile indexes in the total manufacturing index is used to

obtain their respective outputs from the Manufacturing GDP at current producers' prices. In the case of domestic producers' prices of textile, background information from the annual report of a leading textile firm in Nigeria (UNITEX) is used to obtain the average producers' prices per kg of cotton textile in Nigeria. In addition, using other background information that producer prices of cotton textile are about one and a half time those of synthetic textiles, the producers' prices of the latter are equally computed.

The values of imported textiles (*VM*) are obtained from the UN COMTRADE and World Integrated Trade Solution databases. In these databases, data on Nigerian imports of fabrics are more available on the SITC than the HS code; hence, the use of the former. Four products are selected at the 4 digit level; namely, Cotton fabrics, woven, grey, not mercerized (6521), Cotton fabrics, woven, other than grey (6522), Fabrics, woven, of synthetic fibres (6535), Fabrics, woven, of regenerated fibres (6536). They correspond to what Nigeria also produces and exports; equally, their importations are substantial. The first 2 items are aggregated into 'cotton fabrics' and the last two into 'synthetic fabrics'. Data is available on the value and quantity imported for 21 years out of the 32 years between 1980 and 2011 and this determines the scope of the estimation period used in this study.

The average CIF calculated import price of textile (P_w) is obtained by dividing the value of textile imports into Nigeria by the quantity. It should be noted that using the domestic factory price corrects for the fact that market prices are already influenced by imported textile and other factors like trade margins and internal transportation expenses. This is important as imported and local textiles are assumed to be perfect substitutes as consumers do not distinguish between them

(Kohler, 2004 and Deardorff, 1997) ². Similarly, the use of CIF import prices corrects for the costs of transportation to the importing country (Deardorff, 1997 and Linkins and Arce, 2002).

The information about the tariff rate (t^g) is obtained from the Customs Tariff (Green) Books while that of the tariff equivalent of non-tariff barriers (t^q) is computed using equation (16). Finally, the estimates of the elasticities of demand (ε) and supply (η) of textile were taken from the OLS regression of equations (7) and (8). The elasticity estimates, shown in table 2.1 below, are consistent with those of other studies given in appendix B.

 Table 2.1: Elasticity estimates of textile demand and supply to own price

| | Cotton textile | Synthetic textile |
|--------|----------------|-------------------|
| Demand | -0.558 | -0.809 |
| Supply | 0.059 | 0.191 |

The variables that are required to quantify the impact of increase in textile prices on the clothing and garment industry are; total output of operation of the garment industry (y), capital (K), labour (L) and Textile (T). It should be emphasised that apart from capital, none of these variables is officially reported for the clothing and garment industry in Nigeria. Therefore, the available information of the trend and relative size of garment capital to the entire capital in the textile industry are used to decompose the initially-obtained textile output into 'fabric output' and 'garment output'. The decomposed fabric output is what is actually used in the computations

^{2.} This is a simplifying assumption of the basic "cost – of protection" model used for the quantitative analysis, rather than a factual empirical statement about Nigerian consumers.

in equation (11) to (15) while the decomposed fabric is what is used in the computations in equations (17) to (20).

Further, the employment in the garment industry is calculated using a series of outputlabour ratio computed in Bedi et al (2006) for the garment industry in India. Textile input in the garment industry is also computed as the addition of domestic output of textile (less export) and imports of textiles.

In addition to the above which measures the forward linkage and impact of textile import restrictions on the clothing and garment industry, this study also examines the backward linkage and impact of the policy; especially on the cotton industry. The more restrictions imposed on the textile sector, depending on appropriateness of technology with respect to the use of domestic cotton and yarn and on the quality of cotton, the more strengthened is the backward linkage with the cotton industry. Thus, the backward effect of the textile price changes (due to policy changes) on the cotton sub-sector and is analysed by examining the changes that occurred to local production of cotton, local prices of cotton and imported quantity of cotton during episodes of textile trade restrictions.

All analysis is carried out on the year-by-year basis and averages are computed based on two periods of restrictions (period of high tariff plus prohibition and period of low tariff plus prohibition). Different estimations are carried out for each of cotton textile and synthetic textile.

3. Structure of the Textile Industry

3.1. Definition and Major Inputs and Products

Textile is a flexible woven material formed by weaving, knitting, crocheting, knotting, or pressing fibres together. Though, fabric and cloth are often used as synonyms for textile, the concepts are somewhat distinct in term of specialized usage. Textiles are generally sourced from animal, plant, mineral and synthetic sources. Plant textiles are generally made from grass, rush, hemp, and sisal. Animal textiles are commonly made from hair, fur or skin. Mineral textiles are asbestos and basalt fibre used for vinyl tiles, sheeting, and adhesives, "transite" panels and siding, acoustical ceilings, stage curtains, and fire blankets. Every synthetic textile is relevant in clothing production. Fabric refers to any material made through weaving, knitting, spreading, crocheting, or bonding that may be used in production of further goods (e.g. garments). Cloth refers to a finished piece of fabric used for a specific purpose such as *table cloth* (Gereffi and Memedovic 2003).

Different forms of textile include fibre and yarns, threads, broad woven, narrow, nonwoven and knit fabrics, linen and uniform supplies, carpet and rugs, canvas mills, textile finishing etc that are useful in a number of applications (households and various industrial purposes are most common). In households, textiles are used for home furnishings such as curtains, carpets, cushions and covers, towels, bed sheets and so on while the industrial usage are technical in nature whose primary requirements are performance and function in specific industries. These include textile structures for automotive applications, medical textiles (e.g. implants), geotextiles (reinforcement of embankments), agrotextiles (textiles for crop protection), protective clothing (e.g. against heat and radiation for fire fighter clothing, against molten metal for welders, stab protection, and bullet proof vests).

3.2. Textiles Global Value Chain (GVC)

A collection of various activities in the process of design, production, sales, sending and supporting products of corporation are captured by a value chain (Zhou, 2005). Although, there are several operating activities, only those creating the real value are strategic in the value chain. Basically, two types of international economic networks have been established in GVC. One is *producer-driven* and the other *buyer-driven*. In producer-driven value chains, large, usually transnational, manufacturers play the central roles in coordinating production networks (including their backward and forward linkages). This is typical of capital- and technology-intensive industries such as automobiles, aircraft, computers, semiconductors and heavy machinery. Buyer-driven value chains are those in which large retailers, marketers and branded manufacturers play the pivotal roles in setting up decentralized production networks in a variety of exporting countries, typically located in developing countries. This pattern of trade-led industrialization has become common in labour-intensive, consumer-goods industries such as garments, footwear, toys, handicrafts and consumer electronics (Gereffi and Memedovic 2003).

The textile industry presents an ideal examination of the dynamics of buyer-driven value chains. The relative ease of setting up clothing companies, coupled with the prevalence of developed-country protectionism in this sector, has led to an unparalleled diversity of garment exporters in the third world (Gereffi 1999). Furthermore, the backward and forward linkages are extensive, and help to account for the large number of jobs associated with the industry. According to Gereffi and Memedovic (2003), the textile value chain can be organized around

five main parts, which are raw material supply (natural and synthetic fibres); provision of components (yarns and fabrics); production networks made up of garment factories, including their domestic and overseas subcontractors; export channels established by trade intermediaries; and marketing networks at the retail level.

The major inputs and outputs

Raw materials obtained from various sources (animal, plant, polymers etc) are curled together in the spinning process to form yarn. During weaving/knitting, the manufactured yarn is interwoven to form fabric or cloth. The fabric is further processed using various industrial methods to result in the production of textiles. However, there are different participants (nations) at different stages of the value chain. Farmers produce natural fibres (animal and plant such as cotton, wool, silk, etc.), while synthetic fibres are produced by a segment of operators of the oil and gas sector (figure 1). Both the natural fibres produced by farmers and the synthetic fibres produced by the petrochemical industry in the oil and gas sector are then fed into the activities of the textile manufacturing firms which produce yarn (spinning) and later turn it into fabric through weaving, knitting and finishing. The fabrics produced by the textile manufacturers are sold to either domestic garment factories or domestic and overseas sub-contractors for the purpose of further processing (designing, cutting, sewing, buttonholing and ironing) into garment. The garments are sold to retail outlets including brand name garment companies, overseas buying office and trading companies, which also export them abroad to departmental stores, specialty stores, mass merchandise and discount chains.



Globally, the *major activities* in the textile value chain include *planting* (in the case of plant sources), *rearing* (animal source) *mining* (mineral source) and *producing* (for synthetic fibres). In the past, all textiles were made from natural fibres, which include plant, animal, and mineral sources. However, in the 20th century, all these natural sources have been supplemented by artificial fibres made from petroleum. Cotton is not only the most important natural fibre in the world. Its global yield in 2007 was 25 million tons derived from 35 million hectares cultivated in more than 50 countries (Majeed 2009). Developed nations like USA, Australia and EU member countries are harvesting cotton mechanically but in developing countries it is still handpicked.

Spinning is part of the textile manufacturing process where three types of fibre are converted into yarn which involves twisting together of drawn out strands of fibres to form yarn. The types of spinning are ring-spinning, air-jet and open-end spinning (van der Sluijs and Gordon 2010). The *Weaving/Knitting* activity weaves the thread through the use of looms to do shedding, picking, and beating-up. The woven fabric segment of textiles is not limited to cotton fabrics alone. Gradually, a wide variety of different fibres have been artificially developed which can be blended with cotton in different proportions to give certain character to the cloth, depending upon its end use. Similarly a diverse range of synthetic and artificial filaments also contributes significantly in the global production of fabric. The *finishing* involves desizing, scouring, bleaching, mercerising, singeing, raising, calendering, shrinking (sanforizing), dyeing and printing to remove impurities. Over the years, there has been an increase in the volume of textile production across the globe owing to improved contemporary manufacturing techniques, which has led to the growth of this global industry.

3.3. Structure of the Global Textile Industry

This section presents the dominant location of each of these activities.

Globally, the *top countries which produce the raw materials which the textile companies use in* 2011 are China, India, Unites States, Pakistan, Brazil, Uzbekistan, Australia, Turkey, Turkmenistan and Greece. China also happens to be the leading yarn producing country which produced about 63 percent of the global cotton yarns in 2008, followed by India at 8.6 percent, Pakistan at 8.5 percent, Indonesia at 2.4 percent, United States at 2.5 percent, Mexico at 2.2, Turkey at 1.8 percent and Brazil at 1.5 percent. Other significant producing countries were Thailand, Vietnam, South Korea, Russia, Uzbekistan and Bangladesh (van der Sluijs and Gordon 2010). Developing countries namely China, Pakistan, India, Korea and Hong Kong lead the pack in the *Weaving/Knitting and finishing* aspects of the value chain due to the availability of the raw material and cheap labour. Products from these countries combined constitute more than 80 percent of the total fabric exports from Asia. Of this figure, China has the greatest share with 35 percent share followed by Pakistan with 15 percent and India with 13 percent share (van der Sluijs and Gordon 2010).

Unlike the production of garment or garments which is labour intensive, producing textiles requires large investments in expensive heavy machinery which accounts for why the important players in industrial textile production were traditionally the developed countries joined later by the newly industrialising countries of China, India, and Brazil among others. Table 3.1 confirms that China's share of woven fabrics production in the top ten countries is almost 30%. Products from China, Pakistan, India, Korea and Hong Kong combined together constitute more than 50 percent of the total fabric outputs from the top ten countries. This
indicates that the share of developed countries in woven fabric production has decreased while that of the developing nations increased tremendously; this rising concentration among the Asian countries is accounted for by the availability of raw materials and cheap labour.

| Rank | Country | Value | Percentage |
|------|----------------------|----------|------------|
| | | (Billion | share |
| | | Dollars) | |
| 1 | European Union (27) | 104.38 | 41.1 |
| 2 | China | 74.48 | 29.3 |
| 3 | United States | 12.5 | 4.9 |
| 4 | Hong Kong | 12.26 | 4.8 |
| 5 | Korea Republic | 10.37 | 4.1 |
| 6 | India | 10.27 | 4.0 |
| 7 | Turkey | 9.4 | 3.7 |
| 8 | Japan | 7.34 | 2.9 |
| 9 | Pakistan | 7.19 | 2.8 |
| 10 | United Arab Emirates | 5.75 | 2.3 |
| | | 253.94 | 100.0 |

Table 3.1: Top Ten Textile Producing Countries

Source: WTO International Trade Statistics, 2009

In the context of the GVC, China with its huge industrial base involving high manufacturing advantage has a small proportion of high value-added products, unlike the United States, Western Europe and Japan which are at the most high-end of the value chain as the companies in these developed nations hold market channels and the most sophisticated technology. The newly industrialized nations of Korea, Hong Kong and Taiwan control the service mechanism and focus on the development of raw materials while India, Pakistan, Indonesia are at the level of the GVC characterized by relatively low labour costs. This changing locational shift of production has been made possible by the production migrations which affected the global textile and garment industry since the 1950s, from North America and

Western Europe to Japan in the 1950s and early 1960s, and from Japan to Hong Kong, Taiwan Province of China and the Republic of Korea at later periods.

Textile companies are numerous in each of the leading textile producing countries with no obvious production concentration. For example, as at 2013, in China there are more than 2300 textile companies based in the Shengze town in Suzhou's Wujiang city alone which produce about 4billion meters of fabrics sold to over 100 countries while there are over 2000 textile companies in the UK spread across knitting/weaving and finishing activities.

3.4. Structure of Nigerian Textile Industry

This section discusses the clusters and key players/ market share and the linkage of the Nigerian textile industry with GVC as well as the implications of the degree of linkage with the global value chain (GVC).

The Nigerian textile industry was well-established in the pre-colonial era when (for many years), various textile processes including textile weaving, spinning and dyeing, ginning and carding; were being carried out with bare hands (Bello *et al*, 2013). At that time, the industry offered good support to the economy because the country had adequate raw materials for textile production. The modern industrial production of textile was pioneered by the Kaduna Textile Mills (the first textile firm) that was established in 1956 and followed by the establishment of Nigerian Textile Mills in 1960. Table 3.2 below shows the prominent textile firms in Nigeria in the 1960s by their locations as well as their years of establishment.

| | | Year of | Quoted | Delisted | Operational |
|--------------------|----------|---------------|--------|----------|---------------------------------|
| Company | Location | Establishment | Year | Year | Status |
| Aba | Aba | 1962 | 1993 | 2009 | Closed (2000) |
| Afprint Nigeria | Lagos | 1964 | 1979 | 2010 | Diverted to cars and edible oil |
| Arewa | Kaduna | 1965 | | | Closed (2002) |
| Asaba | Asaba | 1964 | 1995 | 2009 | Closed (2004) |
| Enpee | Lagos | 1968 | 1978 | 2008 | Divested to packaging (2004) |
| Kaduna | Kaduna | 1956 | | | Closed (2002) |
| Nigerian | Lagos | 1960 | 1971 | 2008 | Closed (2007) |
| United Nigeria | Kaduna | 1964 | 1971 | 2011 | Closed (2007) |

 Table 3.2: Players of the Nigerian Textile Industry in 1960s

Source: Bello *et al*, (2013)

In Nigeria, the structure of the textile industry producing fabrics was similar to the global structure whereby there were over 250 functional factories between 1970s and 1980. Textile companies were spread across the country in Lagos, Kaduna, Kano, Funtua, Gusau, Asaba, Aba and Port Harcourt. Lagos had the highest number of textile factories with mostly small and unintegrated single-process plants in contrast to the integrated factories in Kaduna in which the oldest integrated textile mills were located. Various government policies encouraged process integration of the textile industry. Some textile firms adopted full integration of operations which covers the entire processes of textile production (spinning, weaving, printing, dyeing, finishing and make-up) while others integrated backward into cotton farming. Currently, textile companies on the membership of NTMA are contained in Table 3.3. The range of products varies from yarn production to fabrics, among others.

| | Number of textile | Range of Number of |
|---------------|-------------------|--------------------|
| Location | Companies | Products |
| Aba | 1 | 2 |
| Kano | 10 | 1 to 4 |
| Kaduna | 1 | 3 |
| Lagos | 16 | 1 to 8 |
| Zaria | 1 | 1 |
| Funtua | 1 | 3 |
| Port Harcourt | 1 | 3 |
| Warri | 1 | 3 |

 Table 3.3: Location and Range of Products of Existing Textile Companies

Source: Appendix table 1

Presently, Nigeria's textile industry is oligopolistic in nature as the industry now comprises of few firms largely dominated by just three: United Nigerian Textiles Ltd (merged with NICHEMTEX Industries Ltd) and International Textile Industries (ITI) Nig. Ltd in the Lagos axis; as well as African Textile Manufacturers Ltd in the Kano axis. Potentially new entrants are discouraged more by massive smuggling even though unstable political situation, low purchasing power, high cost of production due to poor infrastructure, high exchange rate which is problematic because of import dependence for inputs, high interest rate, multiple taxes, and Dutch disease which also affected Nigeria's agriculture, are factors that most businesses face in Nigeria.

The Nigerian textile industry produces fabrics and where some exports are done, this activity is expected to feed into the garment manufacturers' part of the global value chain. In other words exports of Nigerian fabrics will provide materials to the garment factories in the global market. The extent of the exports by Nigerian firms is assessed by an examination of the exports of fabrics in global fabrics exports. Table 3.4 indicates that Nigeria's exports of fabrics to the world are quite insignificant. In value terms, the country is improving on its record of

exports of fabrics. However, the insignificance of the country's share suggests that it is not a player in that part of the global textile value chain which is currently dominated by China.

| | | MC111 | | 10 | | | | |
|------|------------|----------|-------------|-------------|---------|---------|---------|---------|
| | | Million | US Dollar | | | | | |
| | Year | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2011 |
| | | | | | | | | |
| | Bangladesh | 414.3 | 366.7 | 342.7 | 426.9 | 392.6 | 683.9 | 0.0 |
| | China | 0.0 | 2692.8 | 7201.6 | 13826.8 | 16080.5 | 40696.5 | 93844.8 |
| s | India | 1140.8 | 1032.5 | 2171.2 | 4353.5 | 5573.5 | 8225.8 | 15204.9 |
| port | Nigeria | 0.0 | 0.0 | 10.1 | 26.4 | 10.0 | 10.1 | 84.7 |
| ExJ | Pakistan | 876.4 | 969.6 | 2596.8 | 4150.8 | 4380.8 | 6849.9 | 8534.8 |
| | | Percenta | ge of World | d Total (%) | 1 | | | |
| | Year | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2011 |
| | | | | | | | | |
| | Bangladesh | 0.9 | 0.8 | 0.3 | 0.3 | 0.3 | 0.4 | 0.0 |
| | China | 0.0 | 5.6 | 7.1 | 9.6 | 10.9 | 20.8 | 33.4 |
| s | India | 2.4 | 2.2 | 2.1 | 3.0 | 3.8 | 4.2 | 5.4 |
| port | Nigeria | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ExI | Pakistan | 1.8 | 2.0 | 2.6 | 2.9 | 3.0 | 3.5 | 3.0 |

| Table 3.4: Textile Materials (Fabrics |) by Major Supplying Markets in the |
|--|-------------------------------------|
| Developing | Countries |

Source: World Integrated Trade Solution (WITS) Database

Profiles of major Textile companies in Nigeria

As earlier noted, United Nigerian Textiles, African Textile Manufacturers and International Textile Industries (ITI) are the major players in the Nigerian textile industry. These firms cater for both domestic and international markets and they are currently responsible for about 75 percent of the output of the industry. They are newly refurbished companies in the industry and their operations have so far been encouraging. The products of the companies have been well established in the market. Brief background information on the three companies is provided below.

African Textile Manufacturers (A.T.M.) Ltd, Kano

African Textile Manufacturers Ltd (A.T.M.), Kano was incorporated in January 1980, but the actual activities of the company commenced in January 1998 in Takudu, Kano, Nigeria. ATM engages in the production of indigenous textile products in Nigeria with its factories, premises and mills, occupying over 25 hectares of land, located in the Challawa industrial area of Kano.

With about 2,000 Nigerian workforce performing different roles as employees in addition to highly experienced and efficient team of techno-commercial experts of international standard manning various departments of the company, ATM Ltd currently has four large divisions for textile production with state-of-the art manufacturing and quality management facilities. It has installed capacity of 25,632 spindles of spinning, 160 looms at its weaving section and it processes 50,000 metres and 70,000 metres of its super and wax printing respectively per day. Its area of specialization is the production of the African and wax prints having brand names as Crowntex, Duniya, Queentex, FESTAC, WAZOBIA and Abada Real wax. These products are very popular for fashionable dress fabrics and have a consistent demand in the traditional African markets and in many other African countries. ATM has Head office and a factory in Kano while branch Offices in Lagos, Ibadan and even in Lome.

International Textile Industries (ITI) Nig. Ltd, Lagos

International Textile Industries (Nig) Ltd was incorporated in 1973 as a small textile unit to manufacture fabrics that will cater for the Nigerian market. It is situated at the popular Ikorodu Industrial Estate, Odogunyan-Ikorodu in Lagos, Nigeria. ITI is part of the well known industrial conglomerate Churchgate Group in Nigeria. Its products are fabrics made of Polyester/Viscose, Polyester/Cotton and 100 percent Polyester material ranging from uniforms for government

agencies, institutions such as security outfits/multinational companies/ schools, suiting, upholstery, bed spread, shirting and many other items. For better liveliness, drape and shape retention to the garments, the company produce polyester/viscose with Lycra. As a segment of a large and diversified group like Churchgate ITI has access to high quality management, financial, and technical backing. This also helps in global marketing of its products.

ITI can manufacture up to 500,000 meters of fabrics per month and have the capacity to process and finish more jobs. It also provides technical services to other companies around Lagos environs. It is the only company with capacity to engage in dyeing of Fibre, Yarn and Fabrics of all types with about 250 staff on its rolls ranging from semi-skilled workforce to highly qualified management staff. This is the only company with the technical know-how and capability to do Teflon finish on the fabrics, which adds special property that prevents uniforms from getting soaked with the touch of water particles (water repellant). It can also give hygroscopic finish to 100 percent polyester fabrics to give it a near cotton quality to make it more user-friendly in a tropical climate like Nigeria. In addition, it equally provides indirect employment to almost 1500 people as suppliers, contractors, consultants etc while the Churchgate group as a whole provides employment to almost 4000 staff and thousands of others in support services.

United Nigerian Textiles Ltd, Lagos

United Nigerian Textiles Ltd (UNTL) Lagos was incorporated in 1971 and commenced operation in 1972 with textile spinning and weaving plants. The company's Headquarters is located at Marina, Lagos while the mill is situated at Ikorodu, also in Lagos.

Between 1976 and 1978, the company undertook a large expansion by the establishment of a polyester staple fibre plant, and a dyeing and finishing plant. However in 1979, the polyester

fibre and polyester filament plant suffered a major setback resulting into huge losses, due to unfavourable government policies, which encouraged importation of yarn, rather than local production. UNTL later merged with NICHEMTEX Industries Ltd, to build a company with better prospects, taking cognizance of the difficulties the textile industry was facing that time.

The Production capacity of UNTL is about 5 million meters per month with total staff strength of about 2,242. The varieties of products in the package of UNTL are standard and premium wax, premium and standard fancy (ATL VIP, Excellence and Superb Fancy Prints), Dyed Goods, Drill (Drill and Poplin), Yarn and Grey Cloth.

4. Policy Environment of Textile Industry

4.1 Global Policy Environment

The evolution of the textile and clothing industry has been characterized by the use of various bilateral quotas, protectionist policies, and discriminatory tariffs by the developed world against the developing countries (Allwood et al, 2006). This has distorted the structure of world trade policy. Despite the fact that General Agreement on Tariffs and Trade (GATT) was established in 1947, the textile industry remained for long largely out of its liberalization agreements. These have strongly influenced national development of clothing and textile industries and global flows of products (Allwood et al, 2006). From 1970 to the present time, the world textile industry has witnessed several global trade policy regimes; prominent among which are: Multi Fibre Agreement (MFA), Agreement on Textile and Clothing (ATC) and African Growth and Opportunity Act (AGOA).

Multi Fibre Agreement (MFA)

The Multifiber Arrangement grew out of a series of voluntary export restraints imposed, initially, by the United States on Japanese textile exports in 1955. By the end up the 1950s, the United Kingdom also began to limit imports from Hong Kong, India and Pakistan (Spinanger 1999). Quotas on cotton, textiles and garment products were first institutionalized with the Short Term Arrangement in 1961, which was extended to two subsequent Long Term Arrangements throughout the 1960s and early 1970s. As the Asian economies' textile and garment production continued to grow, developed countries sought a more systematic mechanism to deal with "market disruptions" in other fiber markets. On January 1st, 1974, the arrangement regarding the international trade in textiles known as the MFA came into force. The agreement superseded all existing arrangements that had been governing trade in cotton textiles since 1961. The MFA replaced the short term and long term arrangements of the 1960 which are to protected United States textile producers from booming Japanese textile exports. The objective of the MFA are to achieve the expansion of trade, the reduction of barriers to trade and progressive liberalization of the World trade in textile products, while at the same time ensuring the orderly and equitable development of this trade and avoidance of destructive effects in individual's lines of production in both importing and exporting countries.

The first three extensions of the MFA, instead of liberalising the trade in textile and clothing, further intensified restrictions on imports, specifically affecting the developing country exporters of textile and clothing products. The increased usage of several MFA measures tended to further erode the trust which developing countries had originally placed in the MFA. Under the MFA, product coverage was extended to include textile and clothing made of wool and man-

made fibres (MMF) as well as cotton and blends thereof. With regard to applications of safeguard measures, import restrictions could be imposed unilaterally in a situation of actual market disruption in the absence of a mutual agreed situation.

The unsatisfactory experience with several protocols of the MFA, retention clauses, such as good will, exceptional cases and anti-surge and other trade related factors led the developing countries to press for the inclusion of the textile issue in the agenda of the GATT ministerial meeting. The eventual outcome of prolonged negotiations was the Agreement on Textile and Clothing. In summary, the MFA imposed quotas and amount of textile that developing countries could export to developed markets from 1974 through 1994.

Agreement on Textile and Clothing (ATC)

The Agreement on Textile and Clothing (ATC) called for a progressive phase-out of all the MFA restrictions and other discriminatory measures in a period of 10 years (Table 4.1). In contrast, to the MFA, the ATC is applicable to all members of the WTO.

| Steps | Period | Percentage of products to be brought under GATT (REMOVAL OF QUOTA) | How Fast remaining quota should open up, if 1994 rate was 6% |
|--------|-------------------------------|--|--|
| Step 1 | 1st Jan. 1995 – 31st Dec 1997 | 16 percent (minimum) | 6.96 percent annually |
| Step 2 | 1st Jan 1998 -31st Dec 2002 | 17 percent | 8.70 percent annually |
| Step 3 | 1st Jan 2002 -31st Dec 2004 | 18 percent | 11.05 percent annually |
| Step 4 | 1st Jan 1998 -31st Dec 2005 | 49 percent (maximum) | No quotas left |

Table 4.1: Four Steps over 10 Years

Source: (Mugambi, 2005)

The ATC as agreed during the Uruguay Round negotiations of the General Agreement on Tariffs and Trade (GATT) in 1995, aimed to encourage free trade and prepare for phasing out quotas on trade in clothing and textile. As agreed in the ATC, quotas were phased out by 1 January 2005, but unrestrained free trade is yet to occur.

African Growth and Opportunity Act (AGOA).

The African Growth and Opportunity Act (AGOA) was promulgated in the United States in 2000. This Act liberalises US imports from 38 designated Sub-Saharan African (SSA) countries, Nigeria inclusive. The Act originally covered an 8-year period from October 2000 to 2008, but amendment in July 2004 further extended AGOA to 2015. The Act played a critical role in assisting exports of textiles and garment goods which became dominant export category to US. With the advantage of AGOA, the number of manufacturing firms, the value of exports and number of employees increased (Mugambi, 2005).

However, the advantages to the African countries came under threat from 2005 due to a surge in textile imports from Asia following the end of the MFA. The removal of the quota restrictions under the MFA meant that African producers are no longer protected from stiff competition from Asian mass producers (Mugambi, 2005). Condon and Stern (2011) documented the various benefits of AGOA for Sub-Saharan African LDCs in order to arrive at a clear understanding of its effectiveness and impact.

- Exports from Sub-Saharan Africa to the US have increased substantially since 2000, with an increasing share of these exports utilising AGOA preferences.
- Garment is the only product grouping in which AGOA seems to have stimulated any significant increase in exports. Four studies empirically measure this effect and all find a strongly positive correlation between increased garment exports and AGOA. Exports from LDCs under AGOA are dominated by garment, largely from Lesotho, Malawi and Madagascar.

The implication of the global policy environment for locational shift and structure is that over time, Asia rose to be a major producer of cotton by displacing other major producers especially in the Europe, America and Africa. Of particular interest is that US continues to dominate cotton and clothing export markets (over 30-40%) and (15-35%) respectively, notwithstanding the changing global policy environment, while India displaced marginal exporters by 2011. With respect to fabrics, beginning from 1995 when ATC commenced, China's share of world market rose from about 10.0% to over 33.4% in 2011 (see Table 3.4).

4.2. Policy Environment in Developing Countries

This section assesses whether, how and the extent to which developing countries protect their textile industries..

The trade tariffs placed on the fabrics are shown on Table 4.2. The tariff on the fabrics sub-sector is quite high in all the countries. Between 1995 and early 2000, Thailand, Nigeria, India China and Bangladesh all have high tariff placed on fabrics. Also remarkable is the fact that the tariff rate of these counties declined in the last few years. There is significant tariff escalation in the countries as fabrics have greater tariff than cotton while higher tariffs are imposed on clothing compared to fabrics.

| Γa | ble | 4.2: | Simp | le A | verage | Tariff (| (Effectively | y A | ppl | lied |) on | Fabrics | 5 |
|----|-----|------|------|------|--------|----------|--------------|-----|-----|------|-------------|---------|---|
|----|-----|------|------|------|--------|----------|--------------|-----|-----|------|-------------|---------|---|

| - | | | | | | JII | , , , | | |
|---|------|------------|-------|-------|-----------|------|---------|----------|----------|
| | Year | Bangladesh | China | India | Indonesia | USA | Nigeria | Pakistan | Thailand |
| | 1995 | 34.2 | 30.1 | 49.4 | 11.9 | 10.6 | 38.7 | 9.2 | 51.3 |
| | 2000 | 31.1 | 25.3 | 30.1 | 9.1 | 8.2 | 38.7 | 9.2 | 51.3 |
| | 2005 | 21.2 | 9.7 | 26.5 | 7.4 | 6.9 | 35.4 | 11.7 | 10.8 |
| | 2011 | 21.2 | 9.9 | 9.2 | 6.4 | 6.5 | 14.5 | 11.5 | 11.5 |
| | | | | | | | | | |

Source: World Integrated Trade Solution (WITS) Database

Aside the global policy on textile trade, individual countries in the developing economies have at various times formulated and implemented policies to influence the composition, pattern' and direction of trade in textile products. Information from WTO Trade Policy Reviews reveals that several countries have used import prohibition to protect their textile industries. These include China, India, Mauritius, Pakistan and Bangladesh.

4.3. Policy Environment in Nigeria

Similar to the experience in cement, domestic production of textiles in Nigeria was encouraged within the context of the country's import-substitution-industrialization strategy. Government thus supported the establishment of textiles plants in Nigeria using both general and sector-specific fiscal incentives as well as trade policy measures to ensure that the objectives of industrialisation are realised. This section describes the two broad types of government policy measures to support the domestic textiles companies.

a) Fiscal Incentives

Fiscal incentive is a reduction in the tax *rate*, the tax *base* or the tax *liability*, which is granted to induce the targeted beneficiary to take a specific action or behave in a particular way. It includes all actions that confer special advantage on a selected group of stakeholders with a view to elicit a particular behaviour. Thus apart from tax, other elements may include subsidies and other forms of differential treatment. The primary justification for granting fiscal incentives is to compensate for externalities. In particular, if an activity is associated with a positive externality that cannot be internalized by the private economic agent involved, government could intervene by granting a subsidy (or fiscal incentive) to encourage the activity.

In Nigeria, there appears to be a strong association between fiscal incentives and industrial development policy regimes. When import substitution industrialisation strategy (ISI) was in place, non-tariff fiscal incentives were limited to a few general incentives mainly directed at inputs. However, the introduction of Structural Adjustment Programme (SAP) in 1986 and later the review/dismantle of indigenisation programme led to the introduction of an array of non-tariff fiscal incentives. The establishment of Nigerian Investment Promotion Commission (NIPC) and promulgation of the Company and Allied Matters Act of 1990 which replaces Company Act of 1968 sets the tone for the new regime. Various fiscal incentives are an integrated component of the reform. The implemented non-tariff fiscal incentives are available to textile companies in Nigeria. In particular, textiles producers in Nigeria have benefitted from the grant of pioneer industry status which gives beneficiary firms a tax holiday of 3 to 5 years, subject to the magnitude of investment. During the period of the grant, losses incurred can be offset against profit earned after the holiday. Similar to cement producers, textile companies also benefit from tax relief for research and development, capital invested, investment in infrastructure, in-plant training, re-investment allowance, use of local raw materials, local valueadded, and investment in economically disadvantaged areas.

For a specific consideration of the implementation of fiscal incentives in relation to textile industry, a comparison made between Nigeria's tax competitiveness (or tax burden on investments) and those of Brazil, Egypt, South Africa, China, India and Malaysia (see UNCTAD, 2009) shows that (i) Nigeria has a relatively high standard regime of corporate taxation similar to those of Brazil, India, China and South Africa, (ii) the pioneer scheme reduces the tax burden in Nigeria, but(iii) this has not made Nigeria as competitive as the other countries. Nigerian textile companies however have access to additional incentives especially those which

relate to exporting. In December 2009, the federal government established a N100 billion bondfunded Cotton, Textiles and Garment Industry Revival Scheme (CTG), an intervention fund for the textile industry to increase the industry's capacity utilization. This fund is administered by the Bank of Industry with elements directly related to textiles covering: (1) the strengthening of capacities of existing public and private sector technical support institutions and establish new ones for the industry that shall lead to the acquisition of national expertise in quality assurance and market competitiveness; (2) improvement of agricultural and primary cotton processing practices, enhancement of output quality, productivity, competitiveness and access to foreign markets for Nigerian cotton and textiles products. The fund is also meant to provide long term access to finance at reasonable interest rates. At least 38 textiles and related companies have had access to this fund to the tune of N60 billion as at January 2013 and as a result over 5000 new jobs were created.

b) Trade Policy Measures

Nigeria's main trade policy objective is directed towards the protection of infant industries including those in the textile sector on the one hand and generating revenue for the country on the other. The structure of tariff in the textile industry between 1988 and 2009 is as indicated in Table 4.3. It shows a trend of very high tariffs on textile products in the last twenty years prior to the adoption of CET. Even the tariff rates charged on fabrics represented by product codes 58 and 60 have been very high and remain high with the introduction of CET. Some textile firms regard high tariffs on fabrics as counterproductive in view of the encouragement that it provides to smugglers and the possibility of rent-seeking and collection that they afford Nigerian Customs officials. Viewed in the context of the duration of high tariff policy on textiles and the

diminishing fortune of the textile sector over the same period, it is evident that the high tariff regime neither promotes growth of the sector nor generates employment and exports.

| Product Code | Description | 1988-1994 | 1995-2001 | 2002-03 | 2009 |
|--------------|--|-----------|-----------|---------|------|
| 50 | Silk | 48.3 | 26.2 | 34.25 | 5 |
| 51 | wool, fine or coarse animal hair; horsehair yarn a | 46.0 | 25.6 | 34.1 | 5.5 |
| 52 | Cotton | 74.2 | 47.4 | 47 | 7.3 |
| 53 | other vegetable textile fibres; paper yarn and wov | 19.1 | 18.8 | 19.9 | 6.2 |
| 54 | man-made filaments; strip and the like of man-made | 73.0 | 38.5 | 35.9 | 12.8 |
| 55 | man-made staple fibres | 71.9 | 39.9 | 32.45 | 9.4 |
| 56 | wadding, felt and nonwovens; special yarns; twine, | 63.0 | 37.8 | 30.05 | 14.2 |
| 57 | carpets and other textile floor coverings | 45.4 | 37.7 | 45 | 20 |
| 58 | special woven fabrics; tufted textile fabrics; lac | 58.5 | 38.3 | 30.55 | 19.5 |
| 59 | impregnated, coated, covered or laminated textile | 25.5 | 21.3 | 23.5 | 14.1 |
| 60 | knitted or crocheted fabrics | 30.0 | 43.3 | 40 | 20 |
| 61 | articles of apparel and clothing accessories, knit | 85.7 | 53.3 | 50 | 20 |
| 62 | articles of apparel and clothing accessories, not | 85.7 | 53.3 | 50 | 20 |
| 63 | other made-up textile articles; sets; worn clothin | 69.7 | 44.6 | 42.15 | 16.4 |
| 64 | footwear, gaiters and the like; parts of such arti | 36.7 | 36.7 | 34.55 | 11.2 |

Table 4.4: Trends of Textile Tariff Rates 1988-2009

Source: a) Nigeria Customs Tariff Book; b) World Integrated Trade Solution Online Database https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx accessed on 7 July 2013

In September 2008, the Government of Nigeria announced a new tariff policy for the 2008 – 2012 period, subsequently extended to December 2013. This new tariff policy marked the government's second attempt at harmonizing its tariffs with its West African neighbours under the Economic Community of West African States (ECOWAS) Common External Tariff (CET). The new tariff policy places imports into one of five tariff bands, namely, zero duty on special medicines not produced locally, industrial machinery and equipment (industrial machineries and equipment only attract zero duty if imported during the first year of the company's operation); 5-percent duty on raw materials and other capital goods; 10-percent duty on intermediate goods;

20-percent duty on finished goods; and 35-percent duty on luxury goods and finished goods in infant industries that the government would like to protect. The new tariff policy reduces the number of prohibited imports from 44 items to 26 items. The full implementation of the regional CET from 2014 should eliminate prohibitions and special levies.

The foregoing indicates that Nigeria relied on high tariffs to protect its textile companies. The country also combined the use of quantitative import restriction, particularly import prohibition and import licensing to control textile imports. Nigeria's Customs legislation established an import prohibition list for trade items and an absolute import prohibition list for non-trade items. The absolute import prohibition list is based on security, health, and morality grounds, while the import prohibition list for trade items are to protect domestic industry though this list has been reduced steadily over the past few years. Based on this legislation, the government placed seventy-six broad groups of import items on the import prohibition list in 1978. The number of items placed under import prohibition increased further, particularly during 1982 to 1985. Various types of textile products have remained on the list since the early 1970s.

In 1989, for example, close to 96% of tariff lines for textile and clothing were subjected to an import prohibition regime, with similar coverage ratio for several other sectors. After a temporary period of reduction of number of items on the list, with effect from 2001 up till 2004, there was periodic upsurge in the number of items placed under import prohibition, textile was among the products to which these policies were targeted. The list of textile and fabrics on the prohibition list has changed intermittently in the last few years. For instance, the government in a circular (Trade) No. BD. 12237825/vol.285 of 6th the April,,2005 approved the removal of textile fabrics of all types and articles thereof and yarn under Chapters 50-63, including Africa

print, Lace fabrics and yarn) to address the concerns of the Garment and Furniture manufacturers. Also, government circular No BD 122371/S.403/Vol1/206 dated 19th November 2010 removed some textile items from the import prohibition list. Therefore it appears that textiles are subjected especially to inconsistent and non-transparent import prohibition policy. Notwithstanding the inconsistencies in the import prohibition list, the list of textile products that remained on the list in 2013 include textile fabrics especially African Print (Printed Fabrics) e.g. Nigeria wax, Ankara and similar fabrics and yarn.

5. Performance of Textile Industry

5.1. Global Exports and Imports Performance

The quota policy imposed on the exports of the developing countries in textile products in the last two to three decades and the subsequent liberalisation of the sector has caused dramatic changes in the trade pattern of the sector. The developed countries had been the major exporters of fabrics expecially during the period of multi fiber policy. A surge occurred in the export of fabrics by the developing countries in the post MFA period as developing countries' export of fabrics increased faster than that of the developed countries (Table 5.1).

| | | 1985 | 1995 | 2005 | 2011 |
|--------|--------------------|----------|----------|----------|----------|
| | World (Million \$) | 47895.07 | 144092.9 | 195387.8 | 280886.9 |
| | High-income | 72.9 | 61.0 | 56.6 | 43.9 |
| | Low and middle | 18.4 | 25.7 | 42.1 | 56.2 |
| | Least Developed | 0.2 | 0.4 | 0.3 | 0.3 |
| | Sub-Saharan Africa | 0.9 | 0.5 | 0.4 | 0.2 |
| | China | 5.6 | 9.6 | 20.8 | 33.4 |
| Export | United States | 4.9 | 4.9 | 6.0 | 4.6 |
| | | 1985 | 1995 | 2005 | 2011 |
| | World (Million \$) | 48294.17 | 139971 | 187947.9 | 239944.8 |
| | High-income | 69.0 | 60.9 | 61.2 | 57.9 |
| | Low and middle | 11.6 | 22.3 | 33.2 | 41.1 |
| | Least Developed | 1.2 | 1.3 | 1.5 | 1.7 |
| | Sub-Saharan Africa | 0.7 | 1.4 | 1.9 | 1.5 |
| | China | 3.1 | 7.7 | 6.8 | 6.6 |
| Import | United States | 10.3 | 7.3 | 11.9 | 10.4 |

Table 5.1: Share of World Exports and Imports of Fabrics (%)

source: World Integrated Trade Solution (WITS) Database

Precisely, while the share of developing countries in the world exports of fabrics is increasing, that of developed countries declined consistently. In the case of fabrics imports, although the imports of the developed countries have been declining consistently and that of the developing countries rising very fast, developed countries are still major buyers of fabrics products in the World. Indeed, the EU's share of top ten importers of textiles is about 59% despite being among the high income countries which export textiles, followed by the US with 12%, and China with 9% and the remaining distributed among Japan (4%), Vietnam, Turkey, Russia and Mexico (3%) each, and UAE and Canada with 2% imports (WTO, 2009). It is remarkable that the leading exporters of textile materials equally double as leading importers of textile material. United States is also a big importer of fabrics as its imports of fabrics did not only account for over 10% between 1985 and 2011, but also increased in monetary terms from \$2.54 billion in 1985 to \$25.03 billion.

5.2. Performance of Developing Countries

As indicated in Table 5.1, developing nations accounted for a significant proportion of world's exports of fabrics, China is the developing country that dominates export market (5-34%), followed by India (2-6%) and Pakistan (1.8-3.1%). Similarly, China accounted for 3.1% of fabrics import in 1985 and 6.6% in 2011. Nigeria as a developing country is not a major participant in world fabrics trade, which confirms that the country is insignificantly linked with both the global value chain and the value chain in the developing region.

5.3. Performance of Nigeria

The performance of Nigeria's textile industry can be assessed by focusing on the trend of output, prices, capacity utilisation and profitability of firms over time.

Nigeria's textile industry has an installed capacity of about 1.7 billion metres of fabrics per annum according to National Bureau of Statistics Data. Capacity utilisation of the textiles industry indicates an unstable trend with equal episodes of declining and rising capacity utilisation. The maximum utilisation was 60% before 1999 but this reached over 70% in 2008 though it fell back to less than 40% in 2010. This unstable trend is confirmed when the data on capacity utilisation are analysed on decade basis, as it was 51% in the 1980s, 44% during 1990s and 47% in the 2000s. The inefficiency of the power sector affected all manufacturing activities including the textiles industry, though old machinery has been identified as another significant factor that severely contributed to the observed instability in capacity utilisation and textile industry decline (Oyejide et al 2003). The import restriction in the textiles industry appeared quite effective in view of the trend of domestic production of fabrics in the country. Domestic production of cotton fabrics accounted for over 90% of total supply of cotton fabrics between 1981 and 2011. The import restriction policy therefore effectively shut out imports of cotton

fabrics from Nigeria. As a corollary, the domestic price of cotton fabrics always remained higher than the world price at almost double the latter except in 2011. (Table 5.2)

| Year | Domestic production (tonnes) | Imports (tonnes) | Total (tonnes) | Share of domestic production (%) | Share of Imports (%) | Domestic price- Pd/kg(N) | Worldprice- Pw/kg(N) |
|------|------------------------------------|---------------------|-------------------|--|-------------------------|-----------------------------|-------------------------|
| 1981 | 44,235.81 | 1,103.34 | 45,339.15 | 97.57 | 2.43 | 5.921 | 5.868 |
| 1991 | 26,404.13 | 1,016.26 | 27,420.38 | 96.29 | 3.71 | 54.263 | 25.298 |
| 2001 | 26,488.52 | 947.386 | 27,435.91 | 96.55 | 3.45 | 518.83 | 286.32 |
| 2011 | 65,863.86 | 4,704.06 | 70,567.92 | 93.33 | 6.67 | 576.737 | 558.067 |

Table 5.2: Cotton Fabrics Production and Prices in Nigeria

Source: Computed by Authors

Firm level analysis provides an insight into the impact of the import restrictions on the level of profitability. This is achieved by conducting a summary analysis of turnover, and exports of United Nigerian Textiles Plc during the time the company was on the Nigerian Stock Exchange from 1990 to 2009 (see Figure 5.1). The trend of turnover showed significant turning points in 1995 and 2003 which coincide with the institution of the Agreement on Textile and Clothing (ATC) at the global policy level in 1995 and almost the end of the ATC in 2003 when a liberal textile arrangement was already running very close. The trend of turnover before 2003 somewhat partly reflects the restrictive domestic trade policy of high tariffs combined with import prohibition. The trend of exports appears quite unstable and may have been influenced more by the availability of domestically instituted export expansion grant (EEG) the administration of which was considered compromised to the extent that an investigation committee, the Presidential Committee on the Review of Incentives, Waivers and Concessions, was set up in September 2007 to assess its performance.



Figure 5.1: Firm Level Performance Indicators

Source: Company Annual Reports

Therefore, from a peak of over N600million profit after tax in 1997, the company suffered a loss of almost the same magnitude in 2000 only to recover to a PAT level of over N1billion two years after. Since 2005, the PAT has recorded negative amounts which contributed to the delisting of the company from the Nigerian Stock Exchange.

At the aggregate industry level, the textile sector that accounted for about 25 percent of the manufacturing output with an annual growth rate of about 12.5 percent in the 1970s, which declined to about 7.5 percent in the 1980s had recently been contributing an about less than 1 percent of non-oil exports (Table 5.3).

| Year | Year Textile | | % Share in Total |
|------|--------------------------------------|--|--|
| 2007 | 996.29 | 199,257.94 | 0.5 |
| 2008 | 1,246.68 | 247,838.99 | 0.5 |
| 2009 | 2,024.07 | 289,152.57 | 0.7 |
| 2010 | 1,585.51 | 396,377.16 | 0.4 |
| | Year 2007 2008 2009 2010 | Year Textile 2007 996.29 2008 1,246.68 2009 2,024.07 2010 1,585.51 | Year Textile Total 2007 996.29 199,257.94 2008 1,246.68 247,838.99 2009 2,024.07 289,152.57 2010 1,585.51 396,377.16 |

Table 5.3: Non-Oil Exports by Products (Naira Million)

```
CBN Annual Report, 2011
Nigeria's export of fabrics was very low between 1980 and 2005. A substantial increase was
however, noted in 2011 when Nigeria exported $84.7 million worth of fabrics to the world
(Table 5.4). Out of this, the largest proportion went to the EU, followed by sub-Sahara Africa.
The amount of exports destined for the US was very small.
```

| Ta | ble 5.4: Nigeria's Expo | rts of 7 | [extile] | Produc | ts to the | e Worl | d (\$mil | lion) |
|--------|---------------------------|----------|-----------|--------|-----------|--------|----------|-------|
| | Partner Name | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2011 |
| | EU 27 members | 0.00 | 0.17 | 9.68 | 18.65 | 1.64 | 0.42 | 40.53 |
| | High-income | 0.16 | 7.12 | 7.94 | 15.78 | 2.29 | 0.88 | 41.08 |
| | Least Developed Countries | 0.00 | 2.03 | 14.01 | 9.89 | 6.94 | 7.46 | 5.25 |
| | Low and middle economies | 0.00 | 2.82 | 15.58 | 12.67 | 7.43 | 8.03 | 40.97 |
| abrics | Sub-Saharan Africa | 0.00 | 2.82 | 15.32 | 11.15 | 7.42 | 8.03 | 21.28 |
| | United States | 0.00 | 6.95 | 1.14 | 1.39 | 0.65 | 0.46 | 0.29 |
| Ë | World | 0.17 | 10.13 | 26.39 | 35.50 | 9.95 | 9.12 | 84.69 |

Source: World Integrated Trade Solution (WITS) Database

In the case of fabrics imports, although, Nigeria's import of fabrics declined from \$341.32 million in 1980 to \$27.61 million in 1995, a sustained increase was however recorded in between 1995 and 2011 (Table 5.5). As stated earlier, Nigeria is not a major participant in trade of any textile products among the developing countries, which implies that the country is insignificantly linked with both the global value chain and the value chain in the developing region. It should be stated that trends in production, consumption, export, import of Nigeria seem not to respond significantly to changing policy regimes.

| Table 5.5: Nigeria's Im | ports of Textile Products from | the World (\$mn) |
|-------------------------|--------------------------------|------------------|
| | | |

| | Partner Name | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2011 |
|------|---------------------------|--------|--------|-------|-------|-------|-------|--------|
| | EU 27 members | 115.98 | 47.15 | 16.35 | 8.55 | 11.95 | 15.16 | 141.82 |
| | High-income | 172.25 | 63.06 | 25.90 | 17.15 | 18.85 | 24.75 | 221.10 |
| | Least Developed Countries | 2.30 | 1.16 | 4.46 | 0.81 | 0.99 | 2.72 | 1.81 |
| | Low and middle economies | 114.77 | 21.83 | 10.36 | 6.46 | 12.25 | 15.16 | 305.95 |
| cs | Sub-Saharan Africa | 0.46 | 0.19 | 4.77 | 0.74 | 1.50 | 3.84 | 38.74 |
| abri | United States | 10.74 | 4.06 | 4.18 | 4.01 | 5.02 | 6.46 | 27.95 |
| Ë | World | 341.32 | 110.88 | 55.11 | 27.61 | 36.89 | 47.83 | 582.49 |

6. Analysis of the Operation of Textile Import Prohibition and Waivers

6.1: Introduction

In Nigeria, during 2000s, import prohibition has been a vital trade policy instrument, particularly for the textile industry. Generally, there are two forms of this trade policy instrument; absolute and ordinary. The absolute import prohibition is applied to disallow goods and services that are associated with dangers relating to health and security. In this type of import prohibition there is no room for waiver of the regulation. In the case of "ordinary" import prohibition, the regulation is applied to specific products whose local production government wishes to encourage. Hence, this type of import prohibition is, essentially a trade protection instrument. It provides opportunities for the granting of waivers which are intended to accommodate other considerations which may be adversely affected by the strict application of the import prohibition regulation.

In Nigeria, ordinary import prohibition regulation has been applied to textile products, particularly fabrics. The main rationale of the regulation is to promote more investment in the textile industry with a view to rapidly and sustainably increasing both the domestic installed capacity and output of textile by limiting the quantity of imported textile and raising the price of textile generally. In its specific version, the import prohibition regulation permits the granting of waivers so as to allow import of a certain quantity of textile.

As the standard practice, exemptions or waivers are granted to stakeholders in the concerned industry as a means of protecting them from the negative effects of import ban or prohibition. In the cases of goods imported by government and its agencies, such waivers are generally approved. In the vein, goods imported by international organizations, aid agencies and diplomatic missions are routinely exempted from the applicability of such import prohibition regulations. In the specific case of the textile industry, the waiver was designed to accommodate the interests of manufacturers of cotton and synthetic fabrics.

6.2: Context

The design, implementation and management of import prohibition regime are normally done in the context of an institution framework which consists of a number of component parts. Requests for particular importable products to be placed under import ban are normally made by domestic producers of the same or similar products, except in the cases of health and security related products. In such cases, requests generally emanate from the relevant government agencies. These requests are considered first by the Tariff Review Board which is based in the Federal Ministry of Finance and is composed of members representing various interests, including the government, manufacturers and labour unions. Such requests are subsequently referred to the Tariff Technical Committee for analysis in terms of the costs and benefits of granting such requests. The results of the analysis are further considered by the Tariff Review Board as part of the basis for its recommendation to the President for a final decision.

In the specific case of the textile import prohibition regime, it seems the process described above was not necessarily followed sequentially and completely. The decision to revive the textile industry was taken in the context of consultations between the government and domestic manufacturers of textile products through their umbrella organization, Manufacturers Association of Nigeria (MAN). This decision included the choice of import prohibition as the key implementation instrument.

6.3: Operational Modalities

Both the design of the import prohibition regime for textile fabrics and key elements of its operational modalities were parts of the results of the prevailing economic development strategy and consultative meetings between the government and manufacturers' Association of Nigeria (MAN) as a whole, or with the Nigerian Textile Manufacturers Association (NTMA) or a specific segment of the Association. This consultation process generated the following understanding:

- Given the primary objective of promoting the production of locally made goods, many locally produced goods are subject to import prohibition including Textile products except those that are not available locally. For instance, in 1989, almost 96 percent of the tariff lines for textile and clothing were placed under an import prohibition regime. (Oyejide, et al, 2003). Thus, import licenses would be issued only to companies that can show evidence of non-availability of a particular product or a group of products for local consumption or for production;
- Textile import licenses are to be issued on raw material for textile production that are not available locally;
- Textile items removed from prohibition list may be subject to import duty and levy;
- Waivers in terms of allowing imports of fabrics despite that import prohibition is in place are granted to specific textile products based on the complaints by the concerned manufacturers in the garment and furniture sectors. Sometimes, circulars are issued to waive certain fabrics such as Embroidery Lace through special concessions granted;
- The government circular usually specified that no importation of textile fabrics and articles thereof shall be permitted through land borders;

6.4: Implementation Issues

The implementation of import prohibition and waiver regimes in Nigeria has been characterized by various concerns and debates among different stakeholders with understandably different views. The instability or inconsistency in the implementation of the policy has been a source of worry to the manufacturers and other stakeholders in Nigeria. Further, the appropriateness of the import prohibition regime and abuse of waivers have been queried. For instance, with the Nigerian Customs circular No. 42/2004 dated 6th September 2004 which spelt out the ban on importation of yarn and exclusion of textile fabrics of all types and article thereof (Circular no.009/2004) of 5th March, 2004, the views of the stakeholders were mixed. Similarly, following the government circular No. BD 122371/S.403/Vol1/206 dated 19th November 2010 on removal of some textile items from the import prohibition list, there were mixed reactions from the stakeholders. While operators of the design industry were happy with the policy, the producers of textile were complaining about the effect of the policy on their performance. In general, the operators of the textile industry do not want their products removed from the import prohibition list. Some stakeholders in the textile industry are unhappy with the selective and discriminatory granting of waivers. In their opinion, the removal of textile products from the import prohibition list and the abuse of waivers will lead to the final collapse of the textile industry.

Thus, policy should be made by looking at its implications for the activities in the entire value chain and not a section of the value chain. World Trade Organization (WTO) through trade policy reviews of Nigeria has disputed the legality of the use of import prohibition. In the same vein, the World Bank through some studies conducted has argued that import prohibition is undesirable for the Nigerian economy as a whole, and hinders the welfare of the poor consumers

in particular. From the point of view of price escalation, Civil Society Organizations (including consumer groups) in Nigeria have argued against the use of import prohibition as a means of protecting domestic economic activities.

Some stakeholders in the Nigerian economy have debated the key elements of the operational modalities for import prohibition and waivers. Within the federal government itself, the Federal Ministry of Finance (through the Fiscal Department) appears to play the major role, while the Trade Department (Federal Ministry of Trade and Investment) is not as fully involved as would seem to be necessary. Within the private sector, the interests of other industrial stakeholders and consumers of textile products are not reflected in the policy of import prohibition. This non-inclusive consultative framework leads to the charge that the import waiver beneficiaries are self-selected giving support to the charge of opaqueness of the process.

7. Comprehensive Quantification of the Total Economic Benefits and Costs of Textiles Industry Protection

7.1: Introduction

Domestic production of textiles (both cotton and synthetic fabrics) received protection from foreign competition through import tariffs throughout the period of study 1981-2011 for which data are available. Textiles production also received protection by a combination of tariffs and import prohibition throughout the period. What divides the period is that the tariff regime can be grouped into a period of high tariffs (1980-2008) and another of low tariffs (2009-2011). Thus 1980-2008 is a period of high tariffs plus import prohibition and 2009-2011 is a period of low tariffs plus import prohibition. This section uses the analytical framework described in section 2 to quantify both the economic benefits and costs of the two dimensions of the protection regime. In what follows, section 7.2 focuses on economic benefits; section 7.3 discusses the economic costs; while section 7.4 examines the net economic costs/benefits. In each of these sub-sections, the distribution of these benefits and costs is also analysed. Full details of these summaries are presented in Appendix C and D which are made up of year-by-year analysis.

7.2: Economic Benefits

As explained in the theoretical framework section above, the imposition of an import tariff on a product reduces the quantity of the product which is imported, increases the quantity which is produced domestically, and raises the price per unit at which the product is sold. As a result, local producers receive economic benefits through the producers' surplus (area (a) in Figure 2.3), while the government gains through the receipt of associated tariff revenue (area (c) in Figure 2.3). These economic benefits are measured in terms of expenditure or amount of money spent on the quantity of the product purchased by consumers. These measures of economic benefits are presented in Table 7.1. It is important to recall from the theoretical discussion in section 2, that from an economy-wide perspective these gross benefits are merely a transfer of purchasing power from textile users to textile producers and the government.

As Table 7.1 shows, the size of economic benefits varies across the two import restriction regimes. In particular, under the high tariff plus import prohibition regime during 1981-2008, average annual expenditure on cotton fabrics consumption of \mathbb{N} 16.7 billion yielded total average annual economic benefits of \mathbb{N} 5.4 billion(or 32.2%), as much as \mathbb{N} 4.67billion (or 86.4%) of which accrued to producers. Under the low tariffs plus prohibition regime during 2009-2011, however, the total expenditure on cotton fabrics was \mathbb{N} 37.92 billion. This higher expenditure of consumers on fabrics led to higher total economic benefits derived in the form of producers'

surplus and government revenue of \mathbb{N} 13.4 billion (or 35.3%). The producers' surplus was \mathbb{N} 13.16 billion, while \mathbb{N} 0.25 billion accrued to government as revenue.

| | | Average Anr | nual Producer Surplus | Average Annual Government Gain | | |
|-----------------------------|----------------------|-------------|-----------------------|--------------------------------|------------------------|--|
| Cotton Fabrics | Expenditure (N'm) | (N'm) | % of Total benefits | (N'm) | % of Total benefits | |
| (a) Prohibition+high tariff | 16,717.42 | 4,661.68 | 86.4 | 734.25 | 13.6 | |
| (b) Prohibition+low tariff | 37,918.21 | 13,161.53 | 98.1 | 250.59 | 1.9 | |
| Synthetic Fabrics | | | | | | |
| (a) Prohibition+high tariff | 47,797.63 | 19,571.77 | 99.25 | 147.06 | 0.75 | |
| (b) Prohibition+low tariff | 24,088.23 | 4,638.27 | 92.50 | 373.90 | 7.50 | |

Table 7.1: Economic Benefits of Cotton and Synthetic Fabrics Imports

| | | Average Anr | ual Producer Surplus | Average Annual Government Gain | | |
|-----------------------------|----------------------|-------------|----------------------|--------------------------------|------------------------|--|
| Cotton Fabrics | Expenditure (N'm) | (N'm) | % of Total benefits | (N'm) | % of Total benefits | |
| (a) Prohibition+high tariff | 16,717.42 | 4,661.68 | 86.4 | 734.25 | 13.6 | |
| (b) Prohibition+low tariff | 37,918.21 | 13,161.53 | 98.1 | 250.59 | 1.9 | |
| Synthetic Fabrics | | | | | | |
| (a) Prohibition+high tariff | 47,797.63 | 24,760.21 | 99.3 | 174.96 | 0.70 | |
| (b) Prohibition+low tariff | 24,088.23 | 4,638.27 | 92.50 | 373.90 | 7.50 | |

Thus, about a third of the average annual expenditure on cotton fabrics under the high tariffs plus prohibition regime accrued to producers and government, with the share of producers being almost seven times as large as that of government. By comparison, under the low tariffs plus import prohibition regime, more than a third of average annual expenditure on cotton fabrics was captured in the form of producers' surplus and government revenue. In addition, almost 100% of these economic benefits accrued to producers.

Similarly, under the high tariff plus import prohibition regime of 1981- 2008, average annual expenditure on synthetic fabrics consumption of \mathbb{N} 47.79 billion yielded total average

annual economic benefits of \mathbb{N} 24.93 billion(or 52.2%), as much as \mathbb{N} 19.572 billion (or 99.25%) of which accrued to producers. Under the low tariffs plus prohibition regime of 2009 – 2011, however, the total expenditure on synthetic fabrics was \mathbb{N} 24.09 billion. The total economic benefits derived from this in the form of producers' surplus and government revenue were \mathbb{N} 5.01 billion (or 20.8%). The producers' surplus was \mathbb{N} 4.63 billion, while \mathbb{N} 0.37 billion accrued to government as revenue.

However, over one-third of the average annual expenditure on synthetic fabrics under the high tariffs plus prohibition regime accrued to producers and government, with the share of producers being over 99 percent. By comparison, under the low tariffs plus import prohibition regime, almost two-fifths of average annual expenditure on synthetic fabrics was captured in the form of producers' surplus and government revenue. In addition, over 90% of these economic benefits accrued to producers.

In addition to the share of government which accrues directly as import duty revenue, government also receives part of the share of producers through taxes. An analysis of the value added of a publicly quoted textile company shows that, during 1981-2008, workers received an annual average of \aleph 1.58 billion, government received an average of \aleph 0.94 billion in taxes, while cotton fabrics company owners received profits amounting to an annual average of \aleph 2.09 billion. By comparison, under the low tariffs plus prohibition regime during 2009-2011, labour's share averaged \aleph 7.23 billion per year. Similarly, government's share per annum averaged \aleph 1.12 billion, while that of the owners was \aleph 4.72 billion.

In the case of synthetic fabrics, during 1981-2008, workers received an annual average of \mathbb{N} 10.55 billion, government received an average of \mathbb{N} 6.28 billion in taxes, while synthetic fabrics company owners received profits amounting to an annual average of \mathbb{N} 14.04 billion. By

comparison, under the low tariffs plus prohibition regime during 2009-2011, labour's share averaged \clubsuit 5.61 billion per year. Similarly, government's share per annum averaged \clubsuit 0.87 billion, while that of the owners was \clubsuit 3.66 billion.

7.3: Economic Costs

Table 7.2 shows the direct consumer surplus losses (that is area (a)+(b)+(c)+(d) in Figure 2.3) generated by high tariffs plus import prohibition regime during 1981-2008 and the corresponding losses emanating from the low tariffs plus prohibition regime during 2009-2011 for cotton fabrics imports. In the case of the high tariffs plus import prohibition regime, the difference between domestic and foreign prices, induced by high tariff barrier plus import prohibition, accounted for a loss of \aleph 8.02 billion (48.0%) to cotton fabrics consumers on their total expenditure of \aleph 16.72 billion. By comparison, during 200 -2011 under the low tariff plus prohibition cotton fabrics import regime, consumers lost \aleph 17.43 billion (45.97%) on a total expenditure of \aleph 37.92 billion. In percentage terms, therefore, the low tariffs plus prohibition regime imposed on consumers a loss which was roughly double of that imposed under the high tariffs plus import prohibition regime.

In the case of the high tariffs plus import prohibition regime for synthetic fabrics, the difference between domestic and foreign prices, induced by high tariffs barrier plus import prohibition, accounted for a loss of \aleph 28521.44 billion (42.03%) to synthetic fabrics consumers on their total expenditure of \aleph 47.79 billion. By comparison, during 2009-2011 under the low tariff plus prohibition synthetic fabrics import regime, consumers lost \aleph 6.57 billion (26.05%) on a total expenditure of \aleph 24.08 billion. In percentage terms, the high tariffs plus prohibition regime imposed on consumers a loss which was roughly triple of that imposed under the low tariffs plus import prohibition regime.

| | Average Annual | Average Annual | Average Annual |
|----------------------------|----------------------|------------------------|-------------------------------------|
| Regimes type | Expenditure (N'm) | Consumer Loss (N'm) | Consumer Loss (% of Expenditure) |
| 1. Prohibition+high tariff | 16717.41 | 8024.84 | 48.00 |
| 2. Prohibition+low tariff | 37918.20 | 17431.41 | 45.97 |
| Synthetic Fabrics | | | |
| 1. Prohibition+high tariff | 47797.63 | 28521.44 | 42.03 |
| 2. Prohibition+low tariff | 24088.23 | 6567.35 | 26.05 |

Table 7.2: Direct Consumer Losses

Cotton Fabrics

7.4: Benefit and Cost Comparison: The Deadweight Loss from Protection

Both of the cotton and synthetic fabrics import regimes discussed above have associated costs and benefits. The addition of the benefits and costs generated under the high tariffs plus import prohibition regime in cotton fabrics produces an annual average of \aleph 5.4 billion of economic benefits and an annual average of \aleph 8.02 billion of economic costs, yielding a net welfare loss or deadweight burden of $-\aleph$ 2.62 billion per annum for the Nigerian economy. A similar exercise with respect to the low tariffs plus prohibition import regime produces a net welfare loss value of \aleph 4.02 billion per annum. This result indicates that even though the tariffs are lower in this period, the implementation of import prohibition was more stringent in this latter period as government traded off lowering tariffs with more enforcement of import prohibition. With respect to synthetic fabrics, the high tariffs plus import prohibition regime in produces a net welfare loss or deadweight burden of $-\aleph$ 8.8 billion per annum for the Nigerian economy. In the period of low tariffs plus prohibition import regime, the corresponding net welfare loss value is \aleph 1.55 billion per annum for synthetic fabrics.

It was shown in section 2 that this net welfare loss arises because trade barriers distort both consumption and production. This deadweight loss is the sum of the production distortion loss (area (b) in Figure 2.3) that arises because the trade barriers induce inefficient domestic high-cost production (i.e. domestic production at a resource cost higher than the cost of importing fabrics from abroad) and the consumption distortion loss (area (d) in Figure 2.3) that arises because the trade barriers reduce domestic fabrics consumption below the Pareto-optimal free-trade level. Table 7.3 shows the decomposition of the total dead-weight burden into these two components.

| Cotton Fabrics | | Averaç Consume L | ge Annual er Distortion .oss | Average Annual Production Distortion | | Aggregate Distortion Loss | |
|---|---|------------------------------------|--|---|---|------------------------------------|---|
| Regimes type 1 1. Prohibition +high tariff 2. Prohibition +low tariff | Average Expenditure (N'm) 16717.42 37918.21 | (N'm) 2477.24 3719.74 | (% of Expenditure) 14.82 9.81 | (N'm) 151.67 299.56 | (% of Expenditure) 0.91 0.79 | (N'm) 2628.91 4019.30 | (% of Expenditure) 15.73 10.60 |
| Synthetic Fabrics 1. Prohibition+high tariff 2. Prohibition+low tariff | 47,797.63 24,088.23 | 7,576.71 1,326.10 | 15.85 5.51 | 1,225.90 229.08 | 2.56 0.95 | 8,802.60 1,555.18 | 18.42 6.46 |

 Table 7.3: Dead-Weight Loss of Import Restrictions

This table shows that in both cases of cotton and synthetic fabrics, the consumer distortion loss element is much larger than the production distortion loss part.

8. Impact of Textiles Import Restrictions on the Value Chain: The Case of Cotton and Garments Sub-Sectors

8.1: Introduction

It is well known that textile (fabrics) is a major input in the garment industry while it receives inputs from the cotton subsector. Hence, economic theory suggests that when the price of fabrics increases due to import restrictions, the input costs in the garment subsector rises. This cost increase should lead to a reduction in the output of the garment subsector which could, in turn, result in reduced employment level in the industry. With respect to cotton output, increased domestic production of fabrics induced by restrictive import policy should cause increased demand for the input into fabrics production, hence, cotton output should be expected to increase.

These relationships are examined in this section. The theoretical framework and methodology presented in section 2 above lays out the procedure for this analysis. More specifically, a translog production function was estimated to derive the fabrics input elasticity of garment output. This elasticity is 0.42. It implies that a 100% increase in the input of fabrics causes a 42% increase in garment output. The elasticity of garment output to fabrics price was also computed which gives -1.79. Both of these elasticity estimates are used in the analysis of the impact of fabrics price increase on garments industry's output and employment. Analyses in this section are presented according to the two periods, namely; the high tariff plus import prohibition and low tariff plus prohibition regimes and by the two types of fabrics, cotton and synthetic fabrics.

8.2: Impact of Textiles Price on Cotton Output

The effect of fabrics import restriction is examined on cotton output in Table 8.1. The table shows the changes in the cotton import, local production and their prices between the two regimes. The fabrics sector appeared to have depended more on domestically produced cotton despite the reduction in the import price of cotton and the rise in the price of domestically produced cotton. Average annual local production of cotton increased between the two periods suggesting that import restrictions in the cotton fabrics sector induced an increase in locally produced cotton demand. There is no reliable data on the employment of the cotton subsector hence we cannot estimate the impact on its employment level.

| | | | Average of | Average of |
|-------------------------|--|---|------------------------------|--------------------------------|
| | Average of Cotton lint: Import Quantity | Average of Cotton lint: Local production | Cotton lint: import price | Cotton lint: Local producer |
| Regime | (tonnes) | (tonnes) | (\$'000) | price (\$'000) |
| Prohibition+high tariff | 10880.66 | 101830.07 | 2.07 | 2.43 |
| Prohibition+low tariff | 178.50 | 175000.00 | 0.82 | 2.75 |

Table 8.1: Impact of Fabrics Import Restriction on Cotton Production

8.3: Impact of Textiles Price on Garment Sector's Output and Employment

The elasticities obtained in the table 8.2, the price gap and the output labour ratio are used to compute the garment output and labour losses due to import restrictions on fabrics for the two distinct periods. Thus, in the high tariff plus import prohibition regime, the value of garment output loss for garment producers using cotton fabrics is estimated at N3.14million per annum with associated labour loss of 2,089 workers. These values increased to an annual average of N19.65million and 3,895 workers respectively in the low tariffs plus import prohibition regime. In the case of synthetic fabrics, garment output loss is computed at N22.06 million per year with associated labour loss of 14,697 workers in the high tariff plus import prohibition regime. These magnitudes however dropped during the low tariff plus import prohibition regime to an annual average of N18.68 million and 3,703 workers respectively. It is instructive to note that the employment creation ability of the fabrics industry cannot be compared to that of the garment industry due to the capital intensity of the former and the labour intensity of the latter. It would thus not be surprising to find that the employment created in the fabrics production industry is far less than the employment losses experienced in the garment industry.
| Cotton fabrics | а | b | Y/L (N) | Ave. price gap (N) | Ave. textile quantity (tones) | Benefit loss (Price gap x quantity-N) | Estimated garment output loss (N) | Garment labour loss |
|---------------------------|------|-------|------------|-----------------------|-------------------------------------|---|---|---------------------------|
| Prohibition + high tariff | 0.42 | -1.17 | 150,100 | 121.70 | 52,142.00 | 6,345,681.40 | -3,136,606.16 | -2,089.68 |
| Prohibition + low tariff | 0.83 | -1.79 | 504,500 | 149.84 | 88,424.10 | 13,249,467.14 | -19,654,681.30 | -3,895.87 |
| Synthetic fabrics | а | b | Y/L (N) | Ave. price gap | Ave. textile quantity | Benefit loss (Price gap x | Estimated garment outp | Garment ut labour loss |
| Prohibition + high tariff | 0.42 | -1.17 | 150,100 | 98.26 | 454,180.00 | 44,628,635.16 | -22,059,483 | .14 -14,696.52 |
| Prohibition + low tariff | 0.83 | -1.79 | 504,500 | 76.11 | 165,446.00 | 12,591,929.61 | -18,679,269 | .20 -3,702.53 |

Table 8.2: Impact of Fabrics Prices on Garment Industry Output and Employment

Note: 'a' is the Garment production elasticity with respect to textile and 'b' is the price elasticity of textile demand in the garment industry

9. Evaluation of the External Effects of Textiles Protection

9.1. Introduction

The framework as well as the results of this study shows that import protection engenders higher local production of fabrics in the country. The external effects of this higher production are expected to raise employment in the industry, generate more environmental impacts and increase efforts to ameliorate these impacts. Therefore, this section presents an evaluation of the environmental impact of textile production as well as efforts by a typical textile firm to ameliorate these impacts. Also examined is the employment impact of this protection.

9.2. Negative and Positive Externalities

The production of textile is accompanied by a very high tendency of environmental pollution. This industry uses a lot of water and chemicals; and their combinations in wastewaters are dangerous to human and aquatic lives. Many of the released chemicals have also been found to be carcinogenic and trigger allergic reactions in people as they are emitted into the air. For

instance, the processes of bleaching and dyeing of textiles make use of large volume of water which is later released as effluent into rivers with much chemical contents. This has been found to lead to unsuitability of water for drinking, fishery and other agricultural purposes (Jayanth, et al, 2011).

Yusuff and Sonibare (2004) characterise the effluents from five major textile companies in Kaduna, Nigeria and document that many parameters exceed their recommended limits. Specifically, they found that colour intensity exceeds the recommended limit by about 350 folds; other physico-chemical characteristics like Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Ammonia (NH₃) and Biochemical Oxygen Demand (BOD) exceed their limits by 24, 13, 8 and 7 respectively. The concentration of heavy metals, especially Copper, is also above the stipulated limit. They also show that these effluents affect a large number of population that depend on a major river which serves both the cities in which the factories are located and other distant cities.

Odjegba and Bamgbose (2012) also assess the toxicity effect of effluents from a textile company in Lagos, Nigeria on a popular leafy vegetable consumed largely by the neighbouring residents. They document that the effluent caused 41% growth inhibition in the plant and reduced the total chlorophyll by 59.87%. The situation is further worsened as residents in the area depend on the stream in which this effluent goes for farming, drinking and other domestic purposes. In a related study, Awomeso et al (2010) quantify the impact of industrial discharges by a textile company on water bodies around Lagos, Nigeria. It is found that most water parameters were higher than international permissible standards and this renders a stream useless for domestic, agriculture and industrial uses.

However, textile companies can deal with these environmental problems and reactions to them by being socially responsible through their Corporate Social Responsibility (CSR) activities (Yperen, 2006). Table 9.1 below shows the CSR expenditure of a major textile company in Nigeria. It is observed that the company spent an average annual value of N471,320 in the period of prohibition plus high tariff (1980-2008) which amounted to 0.03% of the company's turnover in the period. CSR expenditure increased to N5,159,810 in the period of prohibition plus low tariff (2009-2011) and this was 0.08% of the company's turnover.

In terms of the distribution of the company's CSR expenditure, it is observed that donations to various organizations (not health- or textile-related) dominated the company's CSR. Interest in health/environment issue was relatively higher (19.93%) during the first period (1980-2008) than during the second period (2008-2011) when it fell to 3.36% of total CSR expenditure. In the second period however, donation to textile-related organizations became relatively more pronounced.

| | Total CSR | CSR in | | | Distributions | by segment of the | e society Textile- | | |
|--|------------------------|-----------------|---------------------------------|-----------|------------------------|------------------------|-------------------------|----------------|--------|
| Regime | expenditure (N'000) | Turnover (%) | Asssociations /Organisations | Education | Health/ Environment | Staff/ compensation | related organisation | Infrastructure | Others |
| Prohibition +high tariff (1980- 2008) | 471.32 | 0.03 | 56.91 | 23.08 | 19.93 | - | - | - | 15.82 |
| Prohibition + low tariff (2009- 2011) | 5159.81 | 0.08 | 70.66 | 6.98 | 3.36 | 0.83 | 14.26 | 20.01 | 7.62 |
| Average Total | 3987.68 | 0.07 | 67.22 | 12.35 | 7.51 | 0.83 | 14.26 | 20.01 | 9.67 |

 Table 9.1: Average annual CSR Expenditure and Distribution by United

 Nigerian Textile (%)

According to table 9.2, the case study company increased its average annual employment from 6,763 in 1980-2008 to 9,095 in 2009-2011 (an increase of about 35%) while it raised the share of value added that went to labour from 33.84% to 54.94% (an increase of about 21%) during the same period.

| Regime | Employment | Labour value added (%) |
|--|------------|---------------------------|
| 1.Prohibition+high tariff (1980-2008) | 6763 | 33.84 |
| 1.Prohibition+low tariff | 9095 | 54.94 |
| (2009-2011) | | |
| Average Total | 8604 | 49.97 |

Table 9.2: Employment and Share of Value added to Labour

The foregoing therefore shows that increased textile production in Nigeria generates much environmental impact and this affects human, agricultural and aquatic lives. The corporate social activities of a major textile firm in Nigeria shows that a very small amount is allocated to being socially responsible and expenditure on environmental and health activities is not given a priority. It is also documented that when the firm employs more labour, the percentage of increase in employment is far above that of increase in a measure of labour welfare (share of company's value added attributable to labour).

10. Comprehensive Quantification of the Value of Waivers Granted

10.1. Introduction

This section presents the quantification of the value of waivers granted during the period of study. Given that import prohibition exists throughout this period, all officially-recorded imports are taken as waivers. Background information also shows that waivers are not formally paid for by their beneficiaries; hence, efforts in this section are mainly on the benefits that accrue to both the bearers in terms of rent and government in terms of tariff revenue. The latter is because beneficiaries of waivers still have to pay tariff on what they import.

In the quantification presented therefore, the value of waivers is calculated as the difference in value between what an importer pays for imported fabrics and what he/she would have paid in case the fabrics are purchased from a local firm. Both the values that accrue to importers and government are expressed as the percentage of consumer expenditure on fabrics and annual average values are presented for each of cotton fabric and synthetic fabric.

10.2. Quantification of Waivers

1. Prohibition+high tariff

Table 10.1 presents the value of waivers on cotton fabrics. It is shown that the difference between the annual average domestic price of cotton fabrics and that of import price increased from N121.70/kg in the period of prohibition plus high tariff to N149.84 in the period of prohibition plus low tariff. Importations of cotton fabrics therefore led to average annual tariff income of N6.2 million for the government in the first regime and N0.04 million in the second regime. Equally, importers of cotton fabrics gained N1,102.22 million per year in the prohibition plus high tariff period and N504.70 in the period of prohibition plus low tariff. These gains respectively translated to 3.51% and 1.38% of consumers' expenditure on cotton fabrics.

| Table 10.13 | : Annual Average | e value (| of warvers | on Cotton | radrics |
|-------------|------------------|-----------|-------------|-----------|-----------------|
| | Domestic | | Tariff | | Importers |
| | and world | | income in | Importers | gain less |
| | price | Tariff | total | gain less | tariff in total |
| | difference | income | expenditure | tariff | expenditure |
| Regime | (N/kg) | (N'm) | (%) | (N'm) | (%) |

Table 10.1: Annual Average Value of Waivers on Cotton Fabrics

6.20

0.1330

1102.22

3.51

121.70

| Grand Total | 125.72 | 5.32 | 0.1140 | 1016.86 | 3.21 | |
|---------------------------|--------|------|--------|---------|------|--|
| 2. Prohibition+low tariff | 149.84 | 0.04 | 0.0001 | 504.70 | 1.38 | |

In addition, table 10.2 shows the result for the case of synthetic fabrics. The table depicts that the annual average price gap (N88.1) was also higher during the period of prohibition plus high tariff than during prohibition plus low tariff (N76.11). The annual average values that accrued to the government in these periods were N3.66 million and N1.52 million respectively. Importers of synthetic fabrics gained annual average values of N501.23 million and N626.72 million during the prohibition plus high tariff and prohibition plus low tariff respectively. These gains represented 0.85% and 2.47% of consumers' expenditure on synthetic fabrics respectively.

 Table 10.2: Annual Average Value of Waivers on Synthetic Fabrics

| Regime | Domestic and world price difference (N/kg) | Tariff income (N'm) | Tariff income in total expenditure (%) | Importers gain less tariff (N'm) | Importers gain less tariff in total expenditure (%) |
|----------------------------|---|---------------------------|---|--|---|
| 1. Prohibition+high tariff | 88.1 | 3.66 | 0.015 | 501.23 | 0.85 |
| 2. Prohibition+low tariff | 76.11 | 1.52 | 0.006 | 626.72 | 2.47 |
| Average Total | 87.00 | 3.35 | 0.013 | 519.15 | 1.08 |

11. Quantification of the Potential Benefits of Tariffication as an Alternative Measure to Import Prohibition

The process through which non-tariff barriers (NTBs) is converted into bound tariffs is called tariffication. This is done as a means of eliminating the known problems associated with the use of non-tariff barriers such as instability, lack of transparency and unpredictable changes. From the economic point of view NTBs are, in many instances, create avoidable inefficiencies. They limit the operation of markets much more than tariffs and, therefore, adversely affect the efficiency of a competitive price system (Anderson, 1988; Mochini, 1991). While NTBs insulate

markets, tariffs provide an explicit link that allows the transmission of price signals across national markets that are geographically separated. Hence, using only tariffs instead of NTBs should result in more efficient and stable markets. Tariffs provide a more transparent mode of protection whose level is easy to assess and negotiate.

Several approaches have been developed to tariffy NTBs and address associated challenges. As further elaborated in the theoretical framework and methodology in section 2 above, the tariff equivalent of the import restriction dealt with in this study is estimated as the difference between the market of price fabrics and its hypothetical market price that would have prevailed in the absence of the import restriction.

The estimated average tariff equivalence of the fabrics import prohibition regime is calculated for the 1981 – 2011 period. During this period, average nominal applied tariff rate was 58.9%, local fabrics price per kilogramme averaged \aleph 329.24, while the corresponding world price averaged \aleph 203.52. The estimated tariff equivalent is 113% for cotton fabric and 125% for synthetic fabric (Table 11.1). It is worth noting that the tariff equivalent is even much lower in the second regime for both cotton fabrics and synthetic fabrics.

| | Cotton Fabrics | Synthetic Fabrics |
|----------------------------|----------------|-------------------|
| Regime type 1 | (%) | (%) |
| 1. Prohibition+high tariff | 118 | 144 |
| 2. Prohibition+low tariff | 81 | 14 |
| Average Total | 113 | 125 |

 Table 11.1: Tariff Equivalent of Import Prohibition 1981-2011

If this tariff equivalent rate had been applied instead of the import prohibition regime, the same level of protection would have been imposed by the government and enjoyed by domestic fabrics producers. But the cost to the economy would have been lower for, at least, three reasons. First, the administrative cost involved in managing the import prohibition regime would have been avoided. Second, the availability of imported fabrics (or even the threat of it) could have moderated the tendency for high prices. Third, the wasteful lobbying and rent-seeking costs typically associated with the import prohibition regime could have been significantly reduced, if not eliminated.

12. Conclusion and Recommendations

12.1 Introduction

This section contains the main conclusions derived from this study and offers a number of key policy recommendations that are based, in turn, on the conclusion.

12.2 Conclusion

The development of Nigerian's textiles industry has been shaped partly by government policy but also by the nature of the global textile industry policy which affected it. Therefore, its future development will be determined by domestic policies which take account of the global policy environment and which reflects a full understanding of what relevant policies will more effectively assist the future development of the industry.

The textile industry produces both cotton and synthetic fabrics which are a critical input for the garment sector whose efficiency and expansion are, in turn, important for the overall growth and development of the economy in the context of being more labour intensive thus helping a labour abundant country, and reducing unemployment.

The textile industry is also both capital and energy-intensive and thus it lends itself to significant economies of scale. The more important factors, however, are its disproportionate foreign ownership characteristics coupled with quota (MFA) induced evolutionary character, insufficient or lack of linkage to the global value chain networks, its long term protection from even moderate competition, and high global intra-industry trade. When these factors are considered together, the poor performance of the industry is not surprising. Government attempts to "promote" domestic production of textiles through stringent import restrictions and import substitution have been both costly, in terms of the negative impact on the economy through its negative effect on the garment sector and largely ineffective. The protection has been designed and implemented without adequate understanding of the global value chain characteristics of the textile and clothing industry. In addition, economic theory suggests that when government uses import prohibition to promote domestic production and import substitution, the negative impact on the economy is likely to be magnified.

This study provides quantitative evidence in this respect. In particular, the economic net benefit of the application of import prohibition has been negative and significant, in welfare terms, during 1981-2008 when the policy of high tariff plus import prohibition was in full swing and the later (2009-2011) period when low tariffs were combined with import prohibition to protect the textile industry. High fabrics prices generated large output and employment losses in the garment sector. Despite these policies domestic production suffered negatively from global policy shifts which led to relocation of foreign owners of Nigeria' textiles companies to competitive environments to the detriment of erstwhile thriving Nigeria's textiles industry. Thus, employment created in the industry due to import protection was displaced and destroyed, and this was worsened by further output and employment losses in the garment sector. Perceived arbitrariness of certain policy decisions appeared to have inflicted high costs on some producers of fabrics and users of the products, the former manifest in the failed state of the industry, and the latter in the high output, employment and consumer losses suffered.

12.3 Recommendations

In view of the fact that the textile industry is a producer of a critical input to the garment sector whose growth is important for overall economic performance and poverty alleviation, the necessary government support to the industry need not only be effective but also need not inflict negative consequences on the garment industry. Direct and targeted assistance to replace old machinery and adopt modern textile technology combined with exposure to moderate import competition are required. These preclude high-levels of tariff protection and import prohibition.

In any case, the ECOWAS common external tariff (CET) which Nigeria has adopted prescribes a moderate protective tariff of 20% on textiles. Also the country's obligations under the World Trade Organization preclude the use of import prohibition. Hence, a continuation of the use of the policy instruments which underpin stringent protection cannot be sustained without violating these statutory international commitments.

Because of the importance of the global value chain networks in the textile and clothing industry, the special features of a combination of monopolistic and oligopolistic structures upstream and downstream respectively implies that the promotion of Nigeria's textile industry must necessarily target playing an important role in the GVC, and hence be export oriented. Countries that have embarked on this path use a combination of moderate protection with providing access to inputs at world market prices to remain competitive. The importance of the textile industry in Nigeria with respect to industrial growth and poverty alleviation suggests that the country may wish to explore this channel. Finally, evidence-based policy-making in the context of a consultative and transparent process tends to promote policy efficiency and effectiveness as well as stability of policy. The current policy of import prohibition and government contemplation to replicate it in other sectors need to be critically assessed so that useful lessons can be learnt from the experience in textiles and other sector which have developed through this policy.

References

- Aguiyi G., Ukaoha K. Onyegbulam L., Nwankwo O. (2011), The Comatose Nigerian Textile Sector, Impact on Food Security and Livelihoods, *National Association of Nigerian Traders (NANTS)*, Abuja
- Allwood et al (2006), "Well Dressed?. The Present and Future Sustainability of Clothing and Textile in the United Kingdom", University of Cambridge, Institute for Manufacturing.
- Awomeso, J.A., Taiwo, A.M., Gbadebo, A.M. and Adenowo, J.A (2010), "Studies on the pollution of water-body by textile industry effluents in Lagos, Nigeria", *Journal of Applied Sciences in Environmental Sanitation*, 5 (4): 353-359. http://w.w.w.trisanita.org
- Banda, H.S. and Verdugo, L.E.B., (2007). "Translog Cost Functions: An Application for Mexican Manufacturing", *Banco de M'exico Working Papers*, N_ 2007-08. April.
- Bedi, J., Biswas, P., Verma, R., Kumar, S., Rajkumar., Kapoor, M. and Gupta, R. (2006). Assessing the prospects for India's textile and clothing sector", *National Council of Applied Economic Research*
- Bello, O., A. Inyinbor, A. Dada and A. Oluyori (2013), Impact of Nigerian Textile Industry on Economy and Environment: a Review, *International Journal of Basic & Applied Sciences* (IJBAS-IJENS) Vol:13 No:01
- Bryant, W.K and Wang, Y. (1990), "America Consumption Pattern and the Price of Time: A Time-Series Analysis", *Journal of Consumer Affairs*, 24(2): 280-306.
- Busari D. T. and C. O. Imoke, (2008) Monetary Policy and Macroeconomic Stabilization Under Alternative Exchange Rate Regime: Evidence from Nigeria. Economic and Financial Review (CBN), Vo. 37 No.1: 21-35: March
- Chaudhary, M.A., Khan, M.A. and Naqvi, K.H., (1998). "Estimates of farm output supply and input demand elasticities: the translog profit function approach:, *The Pakistan Development Review* 37.4:1031-1050.
- Christensen, L.R., D. W Jorgenson, and L. J. Lau, (1971). "Conjugate duality and the transcendental logarithmic production function. *Econometrica* 39: 255-256.
- Christensen, L.R., D. W Jorgenson, and L. J. Lau, (1973). "Transcendental Logarithmic Production Frontiers", *Review of Economics and Statistics* 55(1): 25-45.

- Das, S.P., (2004). "Welfare costs of import protection: some selected estimates", *Economic and Political Weekly* 39, 20: 2055-2060.
- de Melo, J. and Tarr, D. (1988). "Welfare Cost of U.S Quotas on Textiles, Steel, and Autos" *Policy*, *Planning, and research Working Paper, WPS 83* September.
- Deardorff, A. V. and Stern, R. M. (1997). "Measurement of non-tariff barriers", *OECD Economics Department Working Papers, No. 179*, http://miranda.sourceoecd.org/.
- Devaraja T. (2011), Indian Textile and Garment Industry An Overview, Indian Council of Social Science Research, New Delhi
- Dicken, P. (2003), Global shift: Reshaping the global economic map in the 21st century, (4th ed.) New York: The Guilford Press.
- Diewert, W.E., (1974). "Application of Duality theory", in M.D. Intrilligator and D.A. Kentric (eds.), *Frontiers of Quantitative Economics*, Vol. II, Amsterdam: North-Holland.
- Fan, J.X., Lee, J. and Hanna, S, (1998), "Are Apparel Trade Restriction Regressive?", Journal of Consumer Affairs, vol. 26, No.2
- Fan, J.X., Lee, L. and Hanna, S, (1996), "An approach to Adding Price Information to the Consumer Expenditure Survey", in Consumer Interest Annual: Proceeding of the American Council on Consumer Interest, Irene Leech (ed.), Columbia, MO: American Council on Consumer Interests, 42: 173-180.
- Gado N. and Nmadu T (2011), The Performance of Textile Companies in the North West Zone of Nigeria: the Role of Infrastructure as a Resource, *International Journal of Human Resource Studies*, Vol. 2, No. 1
- Gereffi G. and Memedovic O. (2003), The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries, United Nations Industrial Development Organization (UNIDO) Sectoral Studies Series, Vienna
- Gereffi, G. (1999), International trade and industrial upgrading in the apparel commodity chain, *Journal of International Economics* 48, 1, pp. 37-70
- Gherzi Institute (2003), Sector-Wide Assessment to Develop a "Blue Print" for the *improvement of the Textile and Garment industry in Nigeria: Executive Summary*, United Nations Industrial Development (UNIDO) and Gherzi Study Group, Gherzi

- Houthakker, H.S. (1965), "New Evidence on Demand Elasticities, Econometrica 33(2), p. 280. in the Indian Punjab. American Journal of Agricultural Economics.
- Jayanth, S.N., Karthik, R. Logesh, S., Srinivas, R.K. and Vijayanand, K. (2011), "Environmental issues and its impacts associated with the textile processing unit in Tiruppur, Tamilnadu", *International Conference on Environmental science and Development*. IPCBEE vol. 4
- Keat, P. G. and Young, P. K. Y. (2006). Managerial Economics, 5th Edition, Pearson Prentice Hall, New Jersey.
- Khanna S. (1993), Structural changes in Asian textiles and clothing industries: the second migration of production", *Textile Outlook International*, 49 pp. 11-32
- Kohler, P., (2004). "The welfare cost of tariff protection in the Balkan countries", *The Wiiw Balkan Observatory Working papers*, 057, October.
- Latta, G.S. and Adams, D.M., (2000). "An econometric analysis of output supply and input demand in the Canadian softwood lumber industry", *Canadian Journal for Resources*, 30:1419-1428.
- Linkins, L.A. and Arce, H.M. (2002). Estimating tariff equivalents of non-tariff barriers. *Office of Economics, US International Trade Commission Working Paper No. 94-06-A(r).*
- Lopez, R.A. and Pagoulatos, E. (1994). Rent seeking and the welfare cost of trade barriers. *Public Choice* 79.1/2:149-160.
- Majeed, A (2009), Cotton and textiles the challenges ahead, *Dawn-the Internet edition*, Accessed 19/07/2013
- Manufacturing today. (2013), The Textile Industry, Still a long walk ...But responding to market pressures. Accessed from http:// manufacturingtoday.com.ng/index.php/analysis/93-sectorial-analysis/The-Textile-Industry,-Still-a-long-walk-...
- Mokhtari, M.R. (1992), "An Alternative Model of U.S. Clothing Expenditure: Application of Cointegration Techniques", *Journal of Consumer Affairs*, 26: 305-323.
- Moschini, G. and Meilke, K.D. (1991). Tariffication with supply management: the case of the US-Canadian chicken trade. *GATT research paper 90-GATT2*, July.
- Muhammad M. (2011), Globalization Crisis and National Security: A Reflection on Nigeria Textile Industry, JORIND (9) 1 Available at www.transcampus.org./journals, www.ajol.info/journals/jorind

- Nadiri, M.I. (1993). Infrastructure capital and productivity analysis cost- and profit-function approaches. Department of Economics, New York University and NBER Paper, September.
- Nahman, A. and de Lange, W. (2012), "Valuing water for South African industries: A production function approach", CSIR Natural Resources and the Environment (NRE). Working Project No. K5/2103//3
- National Economic Management Team-NEMT (2005). "Report of the Presidential Committee
- NIPC (2005) Pioneer Status Granted To Companies During 2002 2005, Nigerian Investment Promotion Commission, July, 2006
- Njoku U (2004), Marketability of Made in Nigeria Textile Materials, *Unpublished Ph.D Thesis*, St. Clements University, British West Indies.
- Nordås, H. (2004), The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing, Discussion Paper No 5, World Trade Organization (WTO), Geneva
- Obih, U., Emenyonu, S.C., Onyemauwa, M.A., Odii, C.A. and Okafor, R.M. (2008). Welfare effects of shifting from tariff to ban on rice import policies in Nigeria. *The Social Sciences* 3.4: 309-321.
- Odjegba, V.J. and Bamgbose, N.M. (2012). "Toxicity assessment of treated effluents from a textile industry in Lagos, Nigeria", African Journal of Environmental Science and Technology Vol. 6(11), pp. 438-445.
- Ogunkola, E. O. (2009). Import Prohibition as a Trade Policy Instrument for Promoting Economic Development in Nigeria: Scoring an own-goal?, 16th Faculty Lecture, Faculty of the Social Sciences, University of Ibadan, February.
- Ogunkola, E. O. and Bankole, A. S. (2005). "Effective Integration of Nigeria into Multilateral Trading System through Export Promotion". Chapter 7 in Ogunkola, E. O. and A. S. Bankole (eds.), *Nigeria's Imperatives in the New World Trade Order*: Ibadan: AERC and TPRTP.

on the Review of Incentives, Waivers and Concessions"

Organization.

Oyejide, T. A. Ogunkola, E. O. and Bankole, A. S. (2005). "Import Prohibition as a Trade Policy Instrument: The Nigerian Experience", in: WTO Secretariat, Managing the Challenges of WTO Participation – Case Studies (Geneva 2005). Case Study 32, available at www.wto.org/english/res_e/booksp_e/casestudies_e/case32_e.htm (retrieved, 7th July 2013) Oyejide, T. A. (1975), Tariff Policy and Industrialization in Nigeria, Ibadan: Ibadan University Press

- Phillips, A. O., (1967), "Nigerian Industrial Tax Incentives: Import Duties Relief and the Approved User Scheme", *The Nigerian Journal of Economic and Social Studies*, Volume 9 Number 3 pp 315-327.
- Scheffer M. (1994), The Changing Map of European Textiles: Production and Sourcing Strategies of Textile and Clothing Firms, Brussels: OETH Publication.
- Shephard, R.W. (1970). Theory of cost and production functions. Princeton University Press.
- Sindhu, S. and Baanannte, C.A. (1981). Farm level fertiliser demand for Mexican wheat varieties
- Spinanger, D. and Zietz, J. (1985). "Managing trade but mangling the consumer: Reflections on the EEC's and West Germany's experience with the MFA" *Kiel Working Paper No. 245*
- Tangboonritruthai S., Cassill N. and Oxenham W. (2007), Global Dynamics Impacting Yarn Production and Consumption, *Journal of Textile and Apparel, Technology and Management*, Vol. 5, Issue 4, Fall.
- UNCTAD (2009), Investment Policy: Nigeria, Investment Advisory Series, Series A, No. 4, UN, New York and Geneva.
- U.S. International Trade Commission, (2009), Sub-Saharan African Textile and Apparel Inputs: Potential for Competitive Production, Investigation No. 332-502, USITC Publication 4078, Washington, DC 20436.
- van der Sluijs M. and Gordon S. (2010), The cotton spinning industry, *The Australian Cottongrower*, 33 36
- World Trade Organization-WTO (2011). Trade Policy Review Nigeria. Geneva: World Trade
- Yang T. He M. and Zhang A. (2008), Analysis of the Restrictive Elements of China's Textile Industry in Upgrading Based on "Value Chain", *International Journal of Business and Management*, Vol. 5, No. 6
- Yperen, M. V (2006), "Corporate social responsibility in the textile industry" *IVAM research and consultancy on sustainability*.
- Yusuff, R.O. and Sonibare, J.A. (2004), "Characterization of textile industries' effluents in Kaduna, Nigeria and pollution implications" *Global Nest: the international journal*. Vol. 6, No.3, pp212-221.
- Zhou Xi (2009), Overview of Value Chain Theory of Global, Economist, 2009, 6:33-34

APPENDIX A

| Appendix rapie 1. List of existing textile compan | Appendix | Table 1: | List of | existing | textile | compani |
|---|----------|----------|---------|----------|---------|---------|
|---|----------|----------|---------|----------|---------|---------|

| S/N | Company | Location | Number of Products |
|-----|---|-----------------------------|-----------------------|
| 1 | Adhama Text. & Garment Ind. Ltd. | Kano | 1 |
| 2 | African Textile Mfrs. Ltd | Kano, Lagos, Lome | 6 |
| 3 | Alkem Nigeria Ltd. | Lagos | 1 |
| 4 | Angel Spinning & Dyeing Ltd | Kano | 3 |
| 5 | Chellco Industries Ltd. | Kaduna | 3 |
| 6 | Crown Natures Nig. Ltd. | Lagos | 2 |
| 7 | Dangote Agrosacks Ltd. | Lagos | 1 |
| 8 | Femro 3 Nigeria Ltd. | Lagos | 3 |
| 9 | Funtua Textiles Ltd | Funtua | 3 |
| 10 | Haffar Industrial Co. Ltd | Lagos | 4 |
| 11 | Holborn (Nigeria) Ltd | Kano | 4 |
| 12 | International Textile Industries (ITI) Nig. Ltd | Lagos | 4 |
| 13 | Lakhi Textile Industries Ltd | Kano | 2 |
| 14 | Leaders Textile Milels Ltd | Kano | 2 |
| 15 | Lucky Fabres Nig. Ltd. | Lagos | 4 |
| 16 | Marklint Medical Complex Ltd. | Not Available | Not Available |
| 17 | MDV (Nig) Ltd. | Lagos | 1 |
| 18 | Nigerian Bag Mfg. Co. PLC. | Lagos | 1 |
| 19 | Nigerian Ropes PLC | Lagos, Port Harcourt, Warri | 3 |
| 20 | Nigerian Spinners & Dryers Ltd. | Kano | 4 |
| 21 | Northern Bag Mfg. Ltd. | Kano | 1 |
| 22 | Rosies Textile Mills Ltd | Aba | 2 |
| 23 | Ruhtstar Ltd | Lagos | 2 |
| 24 | Spintex Mills (Nig) Ltd. | Lagos | 3 |
| 25 | Stallion Textile Industries Ltd | Lagos | 1 |
| 26 | Sunglag Nigeria Ltd. | Lagos | 6 |
| 27 | Terytex (Nig) Ltd | Kano | 1 |
| 28 | Tofa Textiles Ltd | Kano | 2 |
| 29 | United Nigerian Textiles PLC | Lagos | 8 |
| 30 | Woollen & Synthetic Industries Ltd | Lagos | 5 |
| 31 | Zaria Industries Ltd | Zaria | 1 |

Source: NTMA, 2013

APPENDIX B:

| SN | Author(s) | Country | Price elasticity | Price elasticity | Price elasticity of |
|----|--------------------------------------|---------|------------------|------------------|---------------------|
| | | | of demand | of supply | import demand |
| 1 | Mokhtari (1992) | USA | -1.0 | | |
| 2 | Bryant and Wang (1990) | USA | -1.0 | | |
| 3 | Fan, Lee and Hanna (1996) | USA | -1.65 | | |
| 4 | Fan, Lee and Hanna (1998) – | USA | -1.03 to -2.15 | | |
| | Households in lowest income quartile | | | | |
| 6 | Spinanger and Zietz (1985) | Germany | -0.9 | 0.32 | -1.1 |
| 7 | Houthakker (1965), | USA | -0.282 | | |
| 8 | de Melo and Tarr (1988) | | 0.4 | 3.0 | 3.9 |

| Table: E | stimates of | elasticity fr | rom previous | studies on text | tile and apparel |
|-----------|-------------|---------------|--------------|-----------------|------------------|
| I doit. D | stinutes of | crusticity fr | one previous | studies on text | ne ana apparer |

Source: Authors' compilation from previous literature

APPENDIX C: COTTON TEXTILE

| Year (COTTON | Expenditure (N'm) | CL (N'm) | CDL (N'm) | PDL (N'm) | Harberger loss(N'm) | PG (N'm) | GG (N'm) |
|-----------------|----------------------|----------|--------------|--------------|------------------------|----------|----------|
| TEXTILE) | | | | | | | |
| 1981 | 268.40 | 2.41 | 0.01 | 0.00 | 0.01 | 2.34 | 0.06 |
| 1983 | 239.86 | 136.34 | 23.83 | 2.05 | 25.88 | 109.53 | 0.93 |
| 1984 | 173.24 | 93.30 | 15.40 | 1.32 | 16.73 | 75.18 | 1.39 |
| 1985 | 206.58 | 14.87 | 0.30 | 0.03 | 0.33 | 14.36 | 0.17 |
| 1986 | 86.65 | 22.97 | 1.79 | 0.17 | 1.96 | 20.21 | 0.80 |
| 1987 | 236.10 | 341.72 | 149.53 | 9.05 | 158.58 | 182.58 | 0.55 |
| 1991 | 1458.48 | 985.13 | 206.63 | 16.83 | 223.46 | 747.95 | 13.72 |
| 1996 | 10416.33 | 13013.06 | 5020.18 | 329.43 | 5349.61 | 7662.87 | 0.58 |
| 1997 | 12070.53 | 26772.69 | 15771.34 | 710.64 | 16481.98 | 9955.35 | 335.36 |
| 1998 | 10696.69 | 15911.96 | 7119.63 | 422.58 | 7542.21 | 8307.58 | 62.16 |
| 1999 | 10776.58 | 10842.30 | 3414.97 | 244.27 | 3659.24 | 7088.23 | 94.83 |
| 2000 | 11987.41 | 9837.34 | 2525.97 | 195.22 | 2721.20 | 7031.52 | 84.62 |
| 2001 | 14014.29 | 7515.58 | 1235.20 | 106.13 | 1341.33 | 6052.69 | 121.56 |
| 2002 | 15660.66 | 12730.57 | 3237.27 | 247.78 | 3485.05 | 9015.64 | 229.89 |
| 2003 | 17925.65 | 3275.11 | 173.44 | 16.42 | 189.86 | 2930.27 | 154.97 |
| 2006 | 32961.51 | 22617.46 | 4822.97 | 397.58 | 5220.55 | 17365.61 | 31.30 |
| 2007 | 46740.93 | 1938.94 | 22.64 | 1.78 | 24.42 | 1440.99 | 473.52 |
| 2008 | 114993.66 | 18395.42 | 849.13 | 28.85 | 877.98 | 5907.35 | 11610.09 |
| 2009 | 35933.88 | 22617.61 | 4404.18 | 362.66 | 4766.84 | 17392.04 | 458.73 |
| 2010 | 37209.45 | 28349.84 | 6742.86 | 534.83 | 7277.68 | 20864.10 | 208.06 |
| 2011 | 40611.29 | 1326.80 | 12.18 | 1.19 | 13.37 | 1228.45 | 84.98 |

Table: Welfare loss and gain from restriction (Year-by-year values)

Table: Welfare loss and gain from prohibitions (Year-by-year percentages)

| Year | CL (% of | CDL (% of | PDL (% of | Harberger | PG (% of | GG (% of |
|----------|--------------|--------------|--------------|--------------|--------------|--------------|
| (COTTON | Expenditure) | Expenditure) | Expenditure) | loss (% of | Expenditure) | Expenditure) |
| TEXTILE) | | | | Expenditure) | | |
| 1981 | 0.898 | 0.002 | 0.000 | 0.002 | 0.873 | 0.022 |
| 1983 | 56.841 | 9.937 | 0.853 | 10.789 | 45.665 | 0.386 |
| 1984 | 53.856 | 8.891 | 0.764 | 9.656 | 43.398 | 0.802 |
| 1985 | 7.196 | 0.147 | 0.015 | 0.162 | 6.953 | 0.082 |
| 1986 | 26.507 | 2.068 | 0.193 | 2.261 | 23.328 | 0.918 |
| 1987 | 144.731 | 63.333 | 3.834 | 67.167 | 77.332 | 0.232 |
| 1991 | 67.545 | 14.167 | 1.154 | 15.322 | 51.283 | 0.941 |
| 1996 | 124.929 | 48.195 | 3.163 | 51.358 | 73.566 | 0.006 |
| 1997 | 221.802 | 130.660 | 5.887 | 136.547 | 82.477 | 2.778 |
| 1998 | 148.756 | 66.559 | 3.951 | 70.510 | 77.665 | 0.581 |
| 1999 | 100.610 | 31.689 | 2.267 | 33.955 | 65.774 | 0.880 |
| 2000 | 82.064 | 21.072 | 1.629 | 22.700 | 58.658 | 0.706 |
| 2001 | 53.628 | 8.814 | 0.757 | 9.571 | 43.189 | 0.867 |
| 2002 | 81.290 | 20.671 | 1.582 | 22.254 | 57.569 | 1.468 |
| 2003 | 18.271 | 0.968 | 0.092 | 1.059 | 16.347 | 0.865 |
| 2006 | 68.618 | 14.632 | 1.206 | 15.838 | 52.685 | 0.095 |
| 2007 | 4.148 | 0.048 | 0.004 | 0.052 | 3.083 | 1.013 |
| 2008 | 15.997 | 0.738 | 0.025 | 0.764 | 5.137 | 10.096 |
| 2009 | 62.942 | 12.256 | 1.009 | 13.266 | 48.400 | 1.277 |
| 2010 | 76.190 | 18.121 | 1.437 | 19.559 | 56.072 | 0.559 |
| 2011 | 3.267 | 0.030 | 0.003 | 0.033 | 3.025 | 0.209 |

VALUE OF WAIVERS

| | Difference | | | | Importers | | |
|----------|------------|-----------|--------|-----------|-------------|-------------|-----------------|
| | between | | | | gain from | Tariff | Importers |
| | domestic | Importers | | Importers | imports in | income in | gain less |
| Year | and world | gain from | Tariff | gain less | total | total | tariff in total |
| (COTTON | price | imports | income | tariff | expenditure | expenditure | expenditure |
| TEXTILE) | (N/kg) | (N'm) | (N'm) | (N'm) | (%) | (%) | (%) |
| 1981 | 0.05 | 0.06 | 0.99 | -0.93 | 0.02 | 0.3700 | -0.35 |
| 1983 | 2.35 | 1.75 | 0.67 | 1.08 | 0.73 | 0.2783 | 0.45 |
| 1984 | 2.28 | 2.53 | 1.00 | 1.53 | 1.46 | 0.5763 | 0.88 |
| 1985 | 0.58 | 0.18 | 0.28 | -0.10 | 0.09 | 0.1366 | -0.05 |
| 1986 | 1.85 | 1.05 | 0.51 | 0.54 | 1.22 | 0.5911 | 0.62 |
| 1987 | 9.10 | 2.94 | 0.29 | 2.65 | 1.25 | 0.1233 | 1.12 |
| 1991 | 28.97 | 29.44 | 0.91 | 28.52 | 2.02 | 0.0627 | 1.96 |
| 1996 | 74.70 | 2.48 | 0.02 | 2.46 | 0.02 | 0.0002 | 0.02 |
| 1997 | 127.99 | 3786.03 | 16.27 | 3769.76 | 31.37 | 0.1348 | 31.23 |
| 1998 | 150.84 | 349.15 | 1.27 | 347.88 | 3.26 | 0.0119 | 3.25 |
| 1999 | 219.88 | 305.12 | 0.76 | 304.36 | 2.83 | 0.0071 | 2.82 |
| 2000 | 201.10 | 216.94 | 0.59 | 216.34 | 1.81 | 0.0049 | 1.80 |
| 2001 | 232.51 | 220.28 | 0.52 | 219.76 | 1.57 | 0.0037 | 1.57 |
| 2002 | 477.48 | 583.74 | 0.67 | 583.07 | 3.73 | 0.0043 | 3.72 |
| 2003 | 140.78 | 187.39 | 0.73 | 186.66 | 1.05 | 0.0041 | 1.04 |
| 2006 | 386.64 | 68.02 | 0.10 | 67.92 | 0.21 | 0.0003 | 0.21 |
| 2007 | 37.84 | 493.77 | 7.18 | 486.59 | 1.06 | 0.0154 | 1.04 |
| 2008 | 95.63 | 13700.66 | 78.80 | 13621.86 | 11.91 | 0.0685 | 11.85 |
| 2009 | 167.47 | 930.21 | 0.06 | 930.16 | 2.59 | 0.0002 | 2.59 |
| 2010 | 263.38 | 496.18 | 0.02 | 496.16 | 1.33 | 0.0001 | 1.33 |
| 2011 | 18.67 | 87.82 | 0.05 | 87.78 | 0.22 | 0.0001 | 0.22 |

APPENDIX D: SYNTHETIC TEXTILE

| Year (SYNTHETIC TEXTUE) | Expenditure (N'm) | CL (N'm) | CDL (N'm) | PDL (N'm) | Harberger loss(N'm) | PG (N'm) | GG (N'm) |
|-------------------------------|----------------------|-----------|-----------|-----------|------------------------|----------|----------|
| 1981 | 1270.53 | 210.75 | 14.29 | 3.09 | 17.38 | 193.04 | 0.33 |
| 1983 | 2076.07 | 275.47 | 14.92 | 3.28 | 18.20 | 257.11 | 0.16 |
| 1984 | 1047.67 | 153.29 | 9.16 | 2.00 | 11.16 | 142.05 | 0.08 |
| 1985 | 633.45 | 109.79 | 7.78 | 1.67 | 9.45 | 100.02 | 0.32 |
| 1986 | 1266.17 | -137.52 | 5.96 | 1.48 | 7.44 | -144.69 | -0.28 |
| 1987 | 4418.39 | 1104.23 | 113.00 | 23.41 | 136.42 | 967.66 | 0.16 |
| 1991 | 18672.76 | 8955.77 | 1744.44 | 319.93 | 2064.38 | 6886.84 | 4.55 |
| 1996 | 83338.11 | 42524.38 | 8790.43 | 1585.34 | 10375.78 | 32105.95 | 42.65 |
| 1997 | 85180.28 | 44498.95 | 9407.47 | 1681.22 | 11088.69 | 33270.45 | 139.81 |
| 1998 | 79950.07 | 42287.50 | 9046.05 | 1610.85 | 10656.90 | 31492.80 | 137.79 |
| 1999 | 82263.20 | 73438.26 | 25171.84 | 3706.75 | 28878.58 | 44143.59 | 416.08 |
| 2000 | 93904.99 | 64274.73 | 17474.96 | 2864.06 | 20339.02 | 43647.10 | 288.60 |
| 2001 | 98438.25 | 16567.44 | 1139.84 | 244.43 | 1384.26 | 15055.55 | 127.63 |
| 2002 | 111933.17 | 75007.84 | 20004.50 | 3301.85 | 23306.35 | 51344.35 | 357.15 |
| 2003 | 132523.89 | 112228.38 | 36795.14 | 5569.34 | 42364.48 | 69581.41 | 282.50 |
| 2006 | 18745.70 | 8069.33 | 1415.41 | 259.90 | 1675.31 | 6227.01 | 167.01 |
| 2007 | 21394.25 | 13145.15 | 3237.17 | 528.27 | 3765.45 | 8927.54 | 452.17 |
| 2008 | 23300.40 | 10672.21 | 1988.32 | 359.28 | 2347.60 | 8094.15 | 230.46 |
| 2009 | 22640.25 | -1835.77 | 59.64 | 13.54 | 73.18 | -1767.99 | -140.96 |
| 2010 | 23915.27 | 8464.41 | 1225.05 | 226.23 | 1451.28 | 6589.94 | 423.19 |
| 2011 | 25709.17 | 13073.40 | 2693.60 | 447.48 | 3141.07 | 9092.87 | 839.45 |

| Year | CL (% of | CDL (% of | PDL (% of | Harberger | PG (% of | GG (% of |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| (SYNTHETIC | Expenditure) | Expenditure) | Expenditure) | loss (% of | Expenditure) | Expenditure) |
| TEXTILE) | | | | Expenditure) | | |
| 1981 | 16.587 | 1.125 | 0.243 | 1.368 | 15.194 | 0.026 |
| 1983 | 13.269 | 0.719 | 0.158 | 0.877 | 12.384 | 0.008 |
| 1984 | 14.631 | 0.874 | 0.191 | 1.065 | 13.558 | 0.007 |
| 1985 | 17.332 | 1.228 | 0.264 | 1.492 | 15.790 | 0.050 |
| 1986 | -10.861 | 0.471 | 0.117 | 0.588 | -11.427 | -0.022 |
| 1987 | 24.992 | 2.558 | 0.530 | 3.087 | 21.901 | 0.004 |
| 1991 | 47.962 | 9.342 | 1.713 | 11.056 | 36.882 | 0.024 |
| 1996 | 51.026 | 10.548 | 1.902 | 12.450 | 38.525 | 0.051 |
| 1997 | 52.241 | 11.044 | 1.974 | 13.018 | 39.059 | 0.164 |
| 1998 | 52.892 | 11.315 | 2.015 | 13.329 | 39.391 | 0.172 |
| 1999 | 89.272 | 30.599 | 4.506 | 35.105 | 53.661 | 0.506 |
| 2000 | 68.447 | 18.609 | 3.050 | 21.659 | 46.480 | 0.307 |
| 2001 | 16.830 | 1.158 | 0.248 | 1.406 | 15.294 | 0.130 |
| 2002 | 67.011 | 17.872 | 2.950 | 20.822 | 45.871 | 0.319 |
| 2003 | 84.685 | 27.765 | 4.203 | 31.967 | 52.505 | 0.213 |
| 2006 | 43.046 | 7.551 | 1.386 | 8.937 | 33.218 | 0.891 |
| 2007 | 61.442 | 15.131 | 2.469 | 17.600 | 41.729 | 2.113 |
| 2008 | 45.803 | 8.533 | 1.542 | 10.075 | 34.738 | 0.989 |
| 2009 | -8.108 | 0.263 | 0.060 | 0.323 | -7.809 | -0.623 |
| 2010 | 35.393 | 5.122 | 0.946 | 6.068 | 27.555 | 1.770 |
| 2011 | 50.851 | 10.477 | 1.741 | 12.218 | 35.368 | 3.265 |

Table: Welfare loss and gain from prohibitions (Year-by-year percentages)

VALUE OF WAIVERS

| Year (SVNTHETIC | Difference | Importers gain from | Tariff | Importers | Importers gain | Tariff | Importers gain |
|------------------------|--------------|------------------------|--------|--------------|--|-------------|--|
| (STRILETIC TEXTILE) | domestic and | imports | (N'm) | tariff (N'm) | total | total | total |
| TEXTILE) | world price | (N'm) | (1111) | | expenditure (%) | expenditure | expenditure (%) |
| | (N/kg) | () | | | ···· ··· · · · · · · · · · · · · · · · | (%) | ···· ··· · · · · · · · · · · · · · · · |
| 1981 | 0.61 | 0.39 | 0.58 | -0.19 | 0.03 | 0.05 | -0.01 |
| 1983 | 0.42 | 0.18 | 0.40 | -0.21 | 0.01 | 0.02 | -0.01 |
| 1984 | 0.46 | 0.09 | 0.17 | -0.08 | 0.01 | 0.02 | -0.01 |
| 1985 | 0.88 | 0.38 | 0.39 | -0.01 | 0.06 | 0.06 | 0.00 |
| 1986 | -0.57 | -0.25 | 0.39 | -0.64 | -0.02 | 0.03 | -0.05 |
| 1987 | 1.67 | 0.20 | 0.11 | 0.09 | 0.00 | 0.00 | 0.00 |
| 1991 | 13.97 | 7.42 | 0.48 | 6.94 | 0.04 | 0.00 | 0.04 |
| 1996 | 26.27 | 217.28 | 4.14 | 213.14 | 0.26 | 0.00 | 0.26 |
| 1997 | 38.57 | 2426.37 | 31.46 | 2394.92 | 2.85 | 0.04 | 2.81 |
| 1998 | 50.87 | 1092.49 | 10.74 | 1081.75 | 1.37 | 0.01 | 1.35 |
| 1999 | 124.79 | 1790.26 | 7.17 | 1783.09 | 2.18 | 0.01 | 2.17 |
| 2000 | 109.55 | 575.33 | 2.63 | 572.71 | 0.61 | 0.00 | 0.61 |
| 2001 | 54.21 | 151.35 | 1.40 | 149.95 | 0.15 | 0.00 | 0.15 |
| 2002 | 258.04 | 702.21 | 1.36 | 700.85 | 0.63 | 0.00 | 0.63 |
| 2003 | 308.74 | 655.76 | 1.06 | 654.70 | 0.49 | 0.00 | 0.49 |
| 2006 | 169.48 | 258.91 | 0.76 | 258.15 | 1.38 | 0.00 | 1.38 |
| 2007 | 284.98 | 842.20 | 1.48 | 840.72 | 3.94 | 0.01 | 3.93 |
| 2008 | 155.72 | 367.39 | 1.18 | 366.21 | 1.58 | 0.01 | 1.57 |
| 2009 | -18.44 | -130.07 | 1.41 | -131.48 | -0.57 | 0.01 | -0.58 |
| 2010 | 91.53 | 606.91 | 1.33 | 605.58 | 2.54 | 0.01 | 2.53 |
| 2011 | 155.23 | 1407.86 | 1.81 | 1406.05 | 5.48 | 0.01 | 5.47 |

APPENDIX E:

LIST OF STAKEHOLDERS CONSULTED DURING FIELDWORK

LIST OF STAKEHOLDERS CONSULTED IN LAGOS

- Nigerian Textile Manufacturers Association
- Woollen & Synthetic Industries Ltd
- Sunflag Nigeria Ltd.

LIST OF STAKEHOLDERS CONSULTED IN ABUJA

- Ministry of Industry, Trade and Investment
- Agro-allied Department of the Ministry of Agriculture
- Nigeria Customs Service
- Ministry of Finance

APPENDIX F:

INTERVIEW QUESTIONS ON THE STUDY OF IMPACT OF NIGERIA'S TEXTILES IMPORT RESTRICTIONS

(1) Analysis of the operation of the Textiles import restrictions, including full record of waivers granted if any

Questions for Public Sector Stakeholders (Government)

- What is the / are the rationale/s for Textiles import restrictions?
- What is the/are the rationale/s for the granting of waivers and concessions on importation of Textiles (to few firms)?
- How are restrictions on Textiles importation determined?
- How is ban on importation of Textiles imposed and administered?
- What criteria inform the ban on Textiles? Who decides? Are all relevant stakeholders involved, or is crucial input missing?
- To what extent have policy decisions been taken to transform, strengthen or phase out current import restrictions?
- Which role does import substitution play in government policy thinking today, as contrasted to broader industrial/agricultural policy design?
- Does the government envisage a gradual transition, or rather a more radical move to eliminate restrictions/ban on Textiles importation?

- To what extent have import restrictions on Textiles been effective and necessary in the past?
- To which extent are ban on imported Textiles effective/needed?
- To what extent are alternative measures, such as tariffs, subsidies or more indirect measures, being considered?
- Is there a standardised policy on how waivers and concessions are granted on importation of Textiles? Why is the outcome of granting waivers and concessions not usually made public?
- Is there a standardised way of measuring or determining import quotas? If not why? Or do you rely completely on private sector information?
- Can you make available the records on prohibition/waivers on Textiles and is public access to these being considered?

Questions for Private Sector Stakeholders (Firms)

- What is the / are the rationale/s for ban on imported Textiles?
- Do you agree with the rationale/s? Explain why?
- How can private sector input into decision-making be optimized?
- To what extent has the ban on imported Textiles been effective? What has been the impact of the removal/addition of ban on Textiles importation on production and sales?
- Is the ban on imported Textiles desirable in the future from a business perspective?
- What alternatives could work for Nigerian businesses? e.g. tariff
- What impact does the granting of waivers and concessions on importation of Textiles (to few firms) have on businesses?

Questions for Civil Society Stakeholders (Individuals)

- What is the / are the rationale/s for ban on Textiles importation?
- Do you agree with the rationale/s?
- How can civil society input into decision-making be optimized?
- To what extent are consumers negatively affected by the ban/restrictions (in whatever form) on imported Textiles?
- To what extent are other areas of public concern affected (e.g. supply shortages of inputs, higher prices or both)?
- What impact does the granting of waivers and concessions on importation of Textiles (to few firms) have on consumers?
- (2) Comprehensive quantification of the total economic benefits, i.e. the value of the protection for the Textiles industry, ideally separating the value accruing to capital holders (owners) and the added value accruing to workers (including job creation/job security).

Questions for Public Sector Stakeholders (Government)

- To what extent have import restrictions on Textiles affected government revenue? Has this impacted on the provision of social amenities?
- What are the actual (or estimated) benefits of the import restrictions on Textiles industry?
- To what extent have import restrictions on Textiles impacted on government ability to provide social services? What of employment?

Questions for Private Sector Stakeholders (Firms)

- To what extent have import restrictions on Textiles impacted on firms' productivity and profitability?
- Have the import restrictions on Textiles increased the number of people employed in the industry?
- What are the actual (or estimated) benefits of the import restrictions on Textiles industry?
- Is there any other potential benefit that protection can yield (e.g. job security, increased expertise, corporate social responsibility etc)? Provide some indication from your records/experience?

Questions for Civil Society Stakeholders (Individuals)

- To what extent have the import restrictions on Textiles yielded additional employment?
- Is there any other potential benefit that protection can yield to consumers (e.g. job security, increased expertise, corporate social responsibility etc)?
- To what extent have the import restrictions on Textiles impacted on product quality?
- (3) Comprehensive quantification of the total economic costs to Nigeria's economy associated with the import restriction, including:
 - Direct price gap losses to consumers
 - Impact of restriction on the Nigeria fast food industry including costs, growth of the industry and employment created by the industry.
 - Medium-/long-term inefficiencies

Questions for Public Sector Stakeholders (Government)

- To what extent have the import restrictions on Textiles impacted on the government expenditure on construction? What of provision of social services?
- How have the import restrictions affected the quality of Textiles? What of government programmes (e.g. poverty alleviation or housing for all etc)?
- What impacts do import restrictions have on the environment?
- What other medium/long term inefficiencies do you think import restrictions on Textiles can have?

Questions for Private Sector Stakeholders (Firms)

- To what extent have the import restrictions on Textiles impacted on the cost of production in the fast food industry? What of the growth of the industry?
- How have the imports restrictions on Textiles affected the employment created by the fast food industry?
- How have the import restrictions affected the quality of Textiles? What of market/business expansion?
- What impacts do import restrictions have on the environment?
- What other medium/long term inefficiencies do you think import restrictions on Textiles can have on the fast food industry?

Questions for Civil Society Stakeholders (Individuals)

- To what extent are consumers affected by the ban on imported Textiles?
- To what extent are other areas of public concern affected (e.g. supply shortages of inputs, higher pTextiless or both)?
- How have the import restrictions affected the quality of Textiles?
- What other medium/long term inefficiencies do you think import restrictions on Textiles can have on the consumers?

(4) Comprehensive evaluation of the social benefits and costs of the protection. *Questions for Public Sector Stakeholders (Government)*

- What specific impacts do import restrictions on Textiles have on social amenities?
- What specific impacts do import restrictions on Textiles have on employment generation?
- What specific impacts do import restrictions on Textiles have on government revenue?
- How have import restrictions on Textiles affected government corporate social responsibility (e.g. expenditure on community development, education, health etc.)?
- What impacts do import restrictions have on the environment?

Questions for Private Sector Stakeholders (Firms)

- What specific impacts do import restrictions on Textiles have on social amenities?
- What specific impacts do import restrictions on Textiles have on employment generation?
- What specific impacts do import restrictions on Textiles have on government revenue?
- How have import restrictions on Textiles affected corporate social responsibility (e.g. expenditure on community development, education, health etc.)?
- What impacts do import restrictions have on the environment?

Questions for Civil Society Stakeholders (Individuals)

• What specific impacts do import restrictions on Textiles have on social amenities?

- What specific impacts do import restrictions on Textiles have on employment generation?
- What specific impacts do import restrictions on Textiles have on government revenue?
- How have import restrictions on Textiles affected government corporate social responsibility (e.g. expenditure on community development, education, health etc.)?
- What impacts do import restrictions have on the environment?

(5) Comprehensive quantification of the value of waivers granted (costs and benefits). *Questions for Public Sector Stakeholders (Government)*

- What is the/are the rationale/s for the granting of waivers and concessions on importation of Textiles?
- How are quotas on Textiles importation determined?
- How are waivers and concessions on imported Textiles granted and administered?
- What criteria inform the granting of waivers and concessions on imported Textiles? Who decides? Are all relevant stakeholders involved or carried along?
- What values are available (or estimated) for import waivers and concessions granted on importation of Textiles from 1980-2012?
- What values are available (or estimated) for Textiles import quotas granted from 1980-2012?
- How much did firms pay for import licences (waivers and concessions)? Why not consider bidding for import licenses? When licences are cancelled, does government return the fees paid to firms?
- Can import quotas be carried over to other years?

Questions for Private Sector Stakeholders (Firms)

- What values are available (or estimated) for import waivers and concessions granted on importation of Textiles from 1980-2012?
- What values are available (or estimated) for Textiles import quotas granted from 1980-2012?
- How much did your firm pay for Import licences (waivers and concessions)? When licences are cancelled, are the fees paid refunded?

Questions for Civil Society Stakeholders (Individuals)

- What impact does the granting of waivers and concessions on importation of Textiles (to few firms) have on consumers?
- What impact does the granting of quotas on importation of Textiles have on consumers?

(6) Quantification of the potential benefits of tariffication as an alternative measure to import prohibitions.

Questions for Public Sector Stakeholders (Government)

- What are tariff rates on importation of Textiles since 1980s to date?
- What government policies informed the major changes in tariff rates?

- Are there any potential benefits that tariffication can yield instead of import prohibitions?
- Given the current policies (both domestic and international), is there any feasibility of implementing full tariffication?

Questions for Private Sector Stakeholders (Firms)

- What criteria do firms follow in getting waivers and concessions on imported Textiles? Are all relevant stakeholders involved or carried along?
- Are there any potential benefits that tariffication can yield instead of import prohibitions?
- What are tariff rates paid on the importation of Textiles since 1980s to date?
- Are there any other potential benefits that tariffication can yield to firms?

Questions for Civil Society Stakeholders (Individuals)

- How can individual be better off with tariffication as against import prohibitions?
- Are there any other potential benefits that tariffication can yield?