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UNIVERSITY OF THE WITWATERSRAND

(FACULTY OF COMMERCE, LAW AND MANAGEMENT: SCHOOL OF PUBLIC AND DEVELOPMENT MANAGEMENT)

THE IMPACT OF CHINA IMPORTS ON EMPLOYMENT IN THE SOUTH AFRICAN TEXTILE INDUSTRY

A mini-dissertation in partial fulfillment of the requirements for the Masters of Management degree in Public and Development Management

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Abstract

This research report provides some empirical perspective on the impact of Chinese imports on employment levels in the South African textile industry. South African imports data, employment data and exchange rate (South African Rand per Chinese Yuan) for the period 1993 to 2011 is used to analyse the relationship between high level of imports from China and employment levels in the industry. The research report concludes that an increase in the value of textile imports from China will cause a decline in employment levels in the South African textile industry. A weak rand also has a negative impact on the level of employment although an appreciation in the rand does not necessarily improve employment levels. While the data analysed provides evidence of the negative and significant relationship between the variables being studied, the literature reviewed also provide evidence that imposing quantitative import restrictions such as import quotas as well as high labour rates also indirectly have a negative impact on employment levels as import quotas, as confirmed in the study by Van Eeden (2009) can lead to an increase in the value of imports thereby reducing employment levels, while high labour costs can reduce productivity of domestic products which leads to a high demand in imported goods, consequently reducing employment levels. Trade liberalisation has also been blamed for causing employment crisis in the textile sector since it promotes an influx of imports. The research report recommends that South Africa must focus on reducing the labour costs, investing on skills development, managing the imposition of tariffs, banning import quotas, attracting Foreign Direct Investments, specialising in highly competitive textile products and putting in place a long-term strategy for the industry.

DECLARATION OF PLAGIARISM

I **Edzisani Ellen Netshiozwi** Student Number: 599496, a registered student for the Masters in Management in the area of Public and Development Management (MM-PDM) hereby declare the following:

- I confirm that the research report for the partial fulfilment of a Masters of Management degree in Public and Development Management is my own unaided work. I have followed the required conventions in referencing the thoughts and ideas of others.
- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong. I understand that the University of Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to correctly acknowledge the source of the ideas or words in my writing.

Signature:

Date:

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Table of Contents

DECLARATION OF PLAGIARISM 3
LIST OF ACRONYMS 8
CHAPTER 1: INTRODUCTION 9
1.1. Structure of the South African textile industry 10
1.2. The problem statement 10
1.3. The purpose statement 11
1.4. Research questions 12
1.5. Significance of the study 12
1.6. Limitations to the study 12
1.7. Organisation of the report 13
1.8. Conclusion 14
CHAPTER 2: LITERATURE REVIEW 15
2.1. Theories on trade 16
2.1.1. Mercantilism Theory 16
2.1.2. Theories of Absolute and Comparative Advantage 17
2.2. Would the South African Textile Industry benefit from any of the trade theories outlined above? 19
2.2.1. Exchange rate and imports 20
2.2.2. Labour as a major factor of production in the textile industry 20
2.2.3. Can quantitative restrictions reduce the level of imports? - based on empirical evidence of the South African context 21
2.3. Empirical evidence on the impact of imports on U.S textile industries (Downsizing, Layoffs and Plant Closure) 23
2.4. Trade liberalisation and Employment 24
2.5. Reasons for the huge influx of Chinese imports in South Africa 25
2.6. Conclusion of the literature review 27
CHAPTER 3: RESEARCH METHODOLOGY 29
3.1. Introduction 29
3.2. Research Paradigm 29
3.3. Research design 30
3.4. Data type and data sources 31
3.5. Data collection method 32
3.6. Method of data analysis 32
3.7. Data validation 33
3.8. Hypothesis 33

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION 34
4.1 Introduction 34
4.2. Presentation of data 34
4.3. Frequency tables 36
4.4. Running correlations 38
4.5 Statistical tables 41
4.6. Conclusion 45
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS 47
5.1. Introduction 47
5.1.1 Summary of results 47
5.1.2 Research findings 48
5.1.3. Recommendations 49
5.1.4 Final conclusions 54
CHAPTER 6: REFERENCES 55

Table of figures

Figure 1: Domestic Demand of textile products in South Africa 21
Figure 2: South Africa's imports of clothing and textile 22
Figure 3: Summary of research methodology 30
Figure 4: South African textile industry employment data 35
Figure 5: South African textile imports from China 35
Figure 6: Average Annual Exchange Rates (SA cent per Yuan) 35
Figure 7: Scatter plotting for Employment and Import levels 39
Figure 8: Scatter plotting for Employment and Exchange rates 40
Figure 9: Graphical presentation of the relationship between imports and employment 44
Figure 10: Graphical presentation of the relationship between exchange rates and employment 44

List of tables

Table 1: Frequency table for Employment levels in the textile sector 36

Table 2: Frequency table for Imports 37

Table 3: Frequency table for exchange rates 38

Table 4: Correlations – Employment and Imports 40

Table 5: Correlations – Employment and Exchange Rates 41

Table 6: Descriptive Statistics 41

Table 7: Model Summary 42

Table 8: ANOVA[a] 42

Table 9: Coefficients[a] 43

LIST OF ACRONYMS

DA	: Democratic Alliance
DTI	: Department of Trade and Industry
FDI	: Foreign Direct Investment
IDC	: Industrial Development Corporation
SARB	: South Africa Reserve Bank
SPSS	: Statistical Package for Social Sciences
US	: United States
WTO	: World Trade Organisation

CHAPTER 1: INTRODUCTION

The textile industry in South Africa has undergone many changes over the years. The industry comes from an era where there were high levels of jobs and tariff protection and this industry has played a major role in the growth of the South African economy. Until 2007, the textile industry was rated as the sixth largest employer in the manufacturing sector of the country. Employment in this industry decreased drastically since 2008, although the situation in the industry is now improving due to support by the Government.

The South African textile industry currently face enormous challenges such as currency fluctuations, cheaper legal and illegal import substitutes, especially from the East Asian countries which were made cheaper by the reduction of import tariffs. Like most countries, the South African textile industry was built up under a Protectionist structure of tariffs and quantitative restrictions, and it received a lot of support for investment from the Industrial Development Corporation (IDC). The industry has historically benefited from industrialisation by import substitution which protected the industry through tariff and non-tariff barriers from foreign competition. Production in this industry was therefore determined by domestic demand due to the restrictions while exports contributed less than 7% of domestic production during the 1970s (Wolmarans, 2011).

However, the removal of protection as well as globalisation which was assisted by development in information and communication technologies has highly impacted on the pace and level of economic interaction between countries and influenced the movement of trade which contributed to the crisis in the South African textile industry. Global restructuring in the textile industry has been associated with the restructuring of firms, job losses and the casualisation of labour. Although integration into global markets offers potential for more rapid economic growth and poverty reduction, barriers to key developing country markets (exports) have made it difficult for developing countries such as South Africa to take full advantage of this opportunity (Biyase and Bonga-Bonga, 2007).

1.1. Structure of the South African textile industry

According to Vlok (2006), the South African textile industry has been considered the most important as it is one of the largest employers in the manufacturing sector. Its production capacity has been increasingly high before joining the World Trade Organisation which has increasingly been lost as a result of the rapid surge in imports seen in recent years. The industry is concentrated particularly in provinces like the Western Cape, KwaZulu-Natal, the Free State and Gauteng and cities like Cape Town, Durban and Johannesburg as well as certain rural areas (such as industrial towns in the former homelands).

The industry has been identified as a very significant employer of women which means that job losses in the industry have an unbalanced impact on women and women-headed households. Furthermore, the majority of workers in the industry are weekly-paid and their wages are very low. As at 1 May 2005, legally prescribed minimum wage in "non-metropolitan" areas (the industrial towns) was R217.10 per week which translates to R868.40 per month. There is also a growing number of informal sector textile workers who are spread throughout the country, but mainly in the areas in and around the greater metropolitan areas of Cape Town, Johannesburg and Durban (Vlok, 2006).

1.2. The problem statement

The future of textile companies in South Africa is under extreme pressure due to globalisation, deregulation, enforced tariff reductions and other trade liberalisation initiatives laid down by the World Trade Agreement, organised labour, currency fluctuations, product specialisation, manufacturing principles and cheap imports.

There has been a growth in cheaper textile imports, predominantly from Asia which South Africa experienced since 1994 after joining the World Trade Organisation (WTO) and committing to significant cuts in industrial tariffs which caused market disruption and injury to the domestic markets in South Africa (Woolfrey, 2009). As imports of cheap textile products increases, owners of textile factories continue to experience a huge loss of profits since the demand of local produced goods drops.

According to Textile federation (2007), employment in the South African textile industry declined from 70 500 in 2003 to just below 50 500 in 2006 which was due to loss of profits

caused by high imports of cheap textile related products. Since the textile industry has contributed materially to the overall economy and the critical provision of employment, this problem has to be addressed. Much work has been done to determine how the future of the South African textile industry should be and what support should be given to the industry, but there is still no clear answer as to what South Africa should do to reduce the level of textile imports from China.

According to Woolfrey (2009), the South African clothing and textile industry is highly uncompetitive by international standards. Recent experience of increasing textile imports from China, followed by rising imports from other countries in response to the restrictions levied on Chinese imports during 2007, clearly demonstrates that local manufacturers cannot easily compete with low-cost producers from South and East Asia which then result in local firms going out of business, with this in turn leading to significant job losses.

High cost of labour has been identified as one of the determinant that causes the South African textile industry to be unable to compete with imports. Manufacturing of textiles is highly labour-intensive and only countries that have low wages can have a distinct comparative advantage in the production of these goods. A crisis in this industry can lead to poverty which can consequently lead to more people depending on the Government for support (Woolfey, 2009).

1.3. The purpose statement

The primary purpose of this study is to evaluate how an increase in the level of cheap textile imports from China impacts employment in the South African textile industry. The secondary purpose is to evaluate the impact of exchange rates in employment levels of the South African textile industry.

The specific objectives of this study are:

1. To determine the relationship between high level of imports and growth of domestic textile industry (measured in terms of employment and production);
2. To determine the role/impact of exchange rates to the South African textile industry (measured in terms of employment); and
3. To determine what the underlying causes of high levels of imports from China are.

1.4. Research questions

1. How does high level of imported cheap textile goods affect employment in the South African textile industry?
2. What is the impact of exchange rates in employment levels of the South African textile industry?
3. What are the important variables and factors of production that impact on the level of imports?

1.5. Significance of the study

Since the South African textile industry has contributed materially to the overall economy and the critical provision of employment, it is important that the employment crisis is addressed. The aim of the study will be to propose better mechanisms or models to assist the government in developing trade policies that will support the domestic industries. The study will contribute to the development of knowledge in understanding when and how trade benefits the country. The development of knowledge is important in order to ensure that those who are involved in trade understand the implications of making certain decisions.

It is critical that trade officials encourage imports that do not compete with high employment domestic industries where workers cannot easily transition to more productive employment. This study will be made public (Internet and University Library) upon finalisation to ensure that it can be accessible by all who are interested in trade related research.

1.6. Limitations to the study

There are no observed limitations in the study although it was challenging to obtain historical data for employment in the textile industry. Most of the available historical data is a total for the clothing and textile industries which makes it difficult to observe a trend over the years.

1.7. Organisation of the report

This report will be presented in six chapters as follows:

- **Chapter one: Introduction**

  Chapter one provides an overview, introduction and background to the research report. The background outlines the history of the South African textile industry including the research problem and the purpose statement.

- **Chapter two: Literature Review**

  The focus of chapter two will be related to the review of literature and the conceptual framework of the study. The chapter will present the different views of researchers in the field of textile imports as well as theories of trade. The review of literature will assist the researcher in identifying possible gaps and similarities in the study.

- **Chapter three: Research methodology**

  The research design and methodology to be used in the research is presented in chapter three. This chapter will provide the philosophical position of the researcher in relation to the process of scientific enquiry and the approach followed in the research.

- **Chapter four: Data Analysis and Interpretation**

  The chapter presents the analysis and interpretation of data that the study utilises. The study will use the SPSS (statistical software) which has a set of tools for influencing time series data. In this chapter, a series of tests will be conducted to measure the relationship between the level of imports and employment in textile industries.

- **Chapter five: Conclusion and Recommendation**

  The chapter will start with a brief synopsis of the findings from chapter four in order to remind the readers of the research report about the critical lessons of the research. The conclusion and recommendations will be presented and a summary of the whole research report will also be outlined.

  Furthermore, the chapter will conclude on the empirical analysis of the impact of imports on employment in the textile industry. All findings and results will be captured in this chapter. The chapter will be divided into four sections which are:

- The summary of results;
- The research findings;
- Recommendations; and
- Final Conclusions for the research.

- **Chapter six: References**

  This chapter will provide references of materials used in the compilation on the research report. This is to ensure that authors who contributed in the field of textile imports and international trade that provided a basis for this study are acknowledged.

1.8. Conclusion

The history and background provided in this chapter suggests that the textile industry is important in economic and social terms, as it provides income, jobs as well as giving the country an opportunity for sustained economic development. The potential of the textile industry to contribute to long-term growth and development will depend on the quality and effectiveness of government policies and institutions to build on investment which calls for more research to be conducted on which policies and strategies can be best suitable in managing and developing the industry (Keane and te Velde, 2008).

Based on the history and background of the South African textile industry provided in this chapter, it is critical that there is intervention to ensure improvement and hence research should be conducted in determining and recommending what kind of intervention is needed (Keane et al, 2008).

CHAPTER 2: LITERATURE REVIEW

Although Adam Smith recognised the advantage of foreign trade which states that "*if a foreign country can supply another country with a commodity cheaper than the country can make it locally, the country can better buy it from them with some part of its own industry, employed in a way in which it has the advantage*", recent literature however indicates that when foreign firms dump their merchandise in the domestic market or receive subsidies from their government, there will be, significant job losses and output reductions in import sensitive industries (Schumacher, 2012).

As argued by Sun and Heshmati (2010), there are positive effects of foreign trade as it improves economic growth of a country by facilitating amongst others capital accumulation, industrial structure upgrading, technological progress and institutional advancement. An increase in imports of capital and intermediate products, which are not available in the domestic market of an importing country, may lead to the rise in productivity of manufacturing while more active participation in the international market by promoting exports leads to more powerful competition and improvement in terms of productivity. This is however changing based on the trade policies that trading countries are using and development in the trading environment due to globalisation and other factors.

This chapter attempts to provide information from secondary sources focusing on the following factors which will be embedded within the theories presented:

- Imports of textiles in South Africa
- Tariff and control structure
- Labour
- Demand
- Currency fluctuations

The above factors have an indirect but significant contribution to the success of the textile industry, which can be positive or negative depending on how they are managed.

2.1. Theories on trade

The theories on trade emphasis is on answering the main questions associated with trade, which will therefore, assist the researcher in answering the question of how a high level of cheap imports from China impacts employment in the South African textile industry. The theories are explained under sub-theories that represent different beliefs of what trade is all about and their implications in the well-being of countries' economies.

The world trade has moved from the traditional trade theories to classical and then the new theories of international trade. The evolution of today's standard theory of international trade goes back to the years between 1776 and 1826. Adam Smith's Wealth of Nations (1776) marked the evolution followed by David Ricardo's principles of economics (1951) and then the new trade theories (Sen, 2010).

2.1.1. Mercantilism Theory

In determining what leads to an increase in imports, it is important to first look at the Mercantilism theory which encouraged exports while discouraging import of goods and services. Although mercantilism belief was that a nation's wealth is based on the national holding of Gold and Silver, it is critical to look at their theory as to whether it could impact on a country's growth and development positively or not for any kind of products (i.e. textiles, agriculture, etc).

According to the mercantilism theory, exports were viewed as good and imports where seen as bad, which led to the imposition of taxes and protections which were specifically designed to limit imports in many countries while exports were highly subsidised and encouraged.

During the time of Mercantilism, when exports were highly subsidised, domestic producers in many countries (including South Africa), benefited a lot and various industries grew as a result. This included amongst others, the textile industry. To date, other countries such as India are still subsidising their exports of textile products despite the WTO call for countries to phase them out as set out in the "Actionable subsidies" agreement. According to Flatters and Stern (2007), the South African textile industry also benefited from a temporary (ten year) export subsidy program which commenced in 1990.

According to Pugel and Lindert (1996), the Mercantilism thinking is still relevant especially in relation to employment. In many industries, high level of exports leads to job creation while a high level of imports leads to job losses. In the South African textile industry, an increase in textile imports from China created a crisis in the firms which led to income loss and hence job losses due to firms' closure. This raises questions on whether protections that were removed on imports must be brought back and export subsidies must be encouraged in ensuring that there is growth in the industry. Mercantilists advocates for Government intervention in ensuring that there is surplus in the balance of trade of a country.

2.1.2. Theories of Absolute and Comparative Advantage

Based on the fact that the mercantilism theory encourages more exports than imports, which is said to undermine social priorities, Adam Smith and other economists after him expressed a belief that national well-being is based on the ability to consume goods now and in the future which can be complemented by imports. Based on this belief, Adam Smith came up with a theory of absolute Advantage.

The theory of Absolute Advantage was based on the principle that if a country is absolutely more efficient at producing a good than another country can do, then it has an absolute advantage in the production of that good. This theory created free trade since a country will trade a good or service which it produces more efficiently for another good which it is not too much efficient on. Thus, countries would gain by trading and by specialising in goods which they have an absolute advantage in. This theory promotes that trade should not be restricted by tariffs but allowed to flow freely according to the market demand. In this theory, the objective is that people in the country must have a higher standard of living by being able to obtain goods and services more cheaply and in greater abundance. Nation's wealth is therefore measured on the standard of living of the people in the country.

David Ricardo, following the principles laid by Adam Smith, formulated the theory of Comparative Advantage which suggest that trade is beneficial. The theory of comparative advantage refers to the ability of a country to produce a particular good or service at a lower marginal cost and opportunity cost than another country can do. This theory describes how

trade can create value for both countries even when one can produce all goods with fewer resources than the other.

With the wave for trade liberalisation, which has affected the developing world in the globalisation process, certain tools were created for policymakers to justify the move for deregulation in the global economy. Trade barriers under the import-substituting regime were sought to be recognised as "social costs of protection" which were measured by "effective rate of protection, that also tested the cost efficiency of domestic industries in comparison to international standards. The concept was used to categorise the goods and services which have the potential to be exported by developing countries which led to a change from import substitution to export promotion (Sen, 2010).

Economists over the years focused more on the theory of comparative advantage which placed emphasis on physical and natural influences over competitiveness, technological and human factors. The continuity of the theoretical development from the comparative advantage theory was revealed via Mill and Marshall to Heckscher, Ohlin and Samuelson model which explains the international division of labour in terms of different endowments of different countries with two factors of production (i.e. labour and capital). The two essential premises of the standard Heckscher-Ohlin model are that factors of production are immobile between countries and that these factors are used in different combinations to produce different goods (Goldin, 1990).

As Pugel et al (1996) argue for and against protectionist, they indicate that under free trade, there were no incentive distortions, which are gaps between the private and social benefits or costs of any activity. There are usually trade policy debates which come up with reasons for giving special encouragement to the domestic production of goods that are currently being imported. The main outcome that the arguments gives attention to, are the social benefits to domestic production in an import competing industry that cannot be captured by such industry unless protected.

Import competition can also lead to dying domestic industries. It is argued that protection can either way help save the dying industry although it cannot be the only solution. What matters more according to Pugel et al (1996), is the gains that the country obtains from trade. They argue that there are some other policies that can work better to save the dying industries than

import barriers which require a thorough diagnosis of the problem before coming up with an intervention.

There are also cases of dumping where countries sell their products at a very low price that cannot compete with the prices of an importing country. Dumping benefits buyers in the short term although it has long term impacts as it creates monopoly in the markets. Governments of importing countries have often levied antidumping tariffs which could either raise or lower the net national welfare of the importing country depending on the tariff size. This implies that the antidumping tariff can be good or bad based on how it is managed (Pugel et al, 1996).

2.2. Would the South African Textile Industry benefit from any of the trade theories outlined above?

Drawing from the above three theories of trade, it is important to determine how the South African textile industry finds expression into the trade theories outlined above. According to the DTI (2007), the South African textile industry is amongst the most labour-intensive industries employing approximately 11% of total manufacturing employment while contributing around 0.6% to the country's GDP. As it has been evident from different studies conducted on the South African textile industry, the industry has been experiencing challenges that are mostly caused by the influx in cheap imports especially from china, it is critical to understand the underlying causes which are linked to the trade theories based on empirical evidence.

According to Reed and Morris (2008), underinvestment in both human and physical capital in the South African textiles industry has worsened the crisis which was mainly triggered by globalisation and a weak currency as well as the incapability of the industry in dealing with the rising imports penetration. They further argue that the Government policy that was designed to address the effects of liberalisation in the industry has largely been regressive and reinforced the perception of global trade as a threat rather than an opportunity which supported the Mercantilist view on trade.

2.2.1. Exchange rate and imports

The major acceleration of imports of textiles products to South Africa started in 2002. Imports of textile products more than doubled from R6,645 million in 2001 to R14,370 million in 2006 (DTI, 2011). The dynamics governing this rise of imports is tied to the large and sophisticated domestic market and a reaction by the retailers that dominate the market.

The strengthening of the rand post 2003 [hovering between 1$ = R6 – R7 (SARB, 2005)] created easier access to the domestic market as well as hindering export opportunities into the global market. The appreciating exchange rate and the economic boom afforded retailers greater buying power in international markets which led to an increased level of imports. This also coincided with the indirect impact of global Chinese textile exports. A weak rand which South Africa experienced in 2009 [hovering between 1$ = R9 – R10 (SARB, 2014)], however did not necessarily reduce the value of imported textile products as the value of textile imports from China increased from R7 billion in 2008 to R8 billion in 2009 (DTI, 2011).

2.2.2. Labour as a major factor of production in the textile industry

South African labour costs are high compared to the labour costs of other countries. When importing countries spend less on the production of certain goods, they will obviously export them at a lower price which can cause the demand to exceed that of domestic products. Although economic theory suggests that countries should pursue liberal trade policies and exchange goods and services on the basis of their comparative advantage, in practice most nations actively intervene in international trade to save their dying industries. The textile industry is more labour-intensive which requires relatively low technology inputs, leading to the production of textiles being an activity in which many developing countries have a comparative advantage on (Reed et al, 2008).

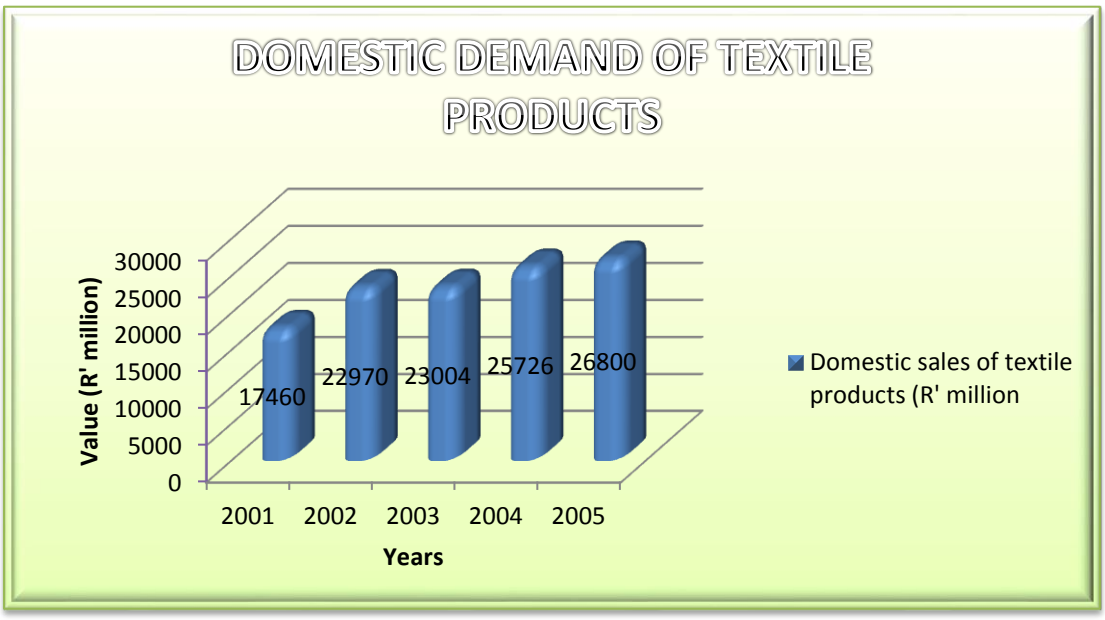
According to Reed et al (2008), high wage rates and total labour costs, relatively few hours worked per week, high level of absenteeism and inefficient workers leads to high unit labour costs and low levels of productivity. High rates of absenteeism impact on production time foregone and can reduce quality resulting in higher unit costs and therefore lower productivity. They argue that even if the sector is capital-intensive, flexibility (ability to work for 24 hours) is critical since textiles firms incur huge costs each time a machine needs to be

started at the beginning of a new shift. Countries like China has greater labour market flexibility which enables textile firms to move to full capacity operating for 365 days, 24 hours a day which make them to be more competitive. Furthermore, investing in more sophiscated machinery in the textile industry will reduce unit labour costs which will consequently raise productivity. In more labour-intensive firms, it is critical to invest in human resources to ensure that there is an improvement in the skills level of workers which can also increase efficiency levels and productivity.

2.2.3. Can quantitative restrictions reduce the level of imports? - based on empirical evidence of the South African context

The domestic market for textile products in South Africa grew substantially in 2002. In 2005 the South African market for clothing and textile products combined was R45,634 million, up 34,5% increase from R29,887 million in 2001 which textiles constituted 59% of the total. The value of textiles grew from R17,460 million in 2001 to R28,800 million in 2005, which illustrates an improvement (DTI, 2007). However, the situation changed over the years when domestic demand decreased which led to a crisis in the industry as indicated in figure 1 below (Reed et al, 2008).

Figure 1: Domestic Demand of textile products in South Africa



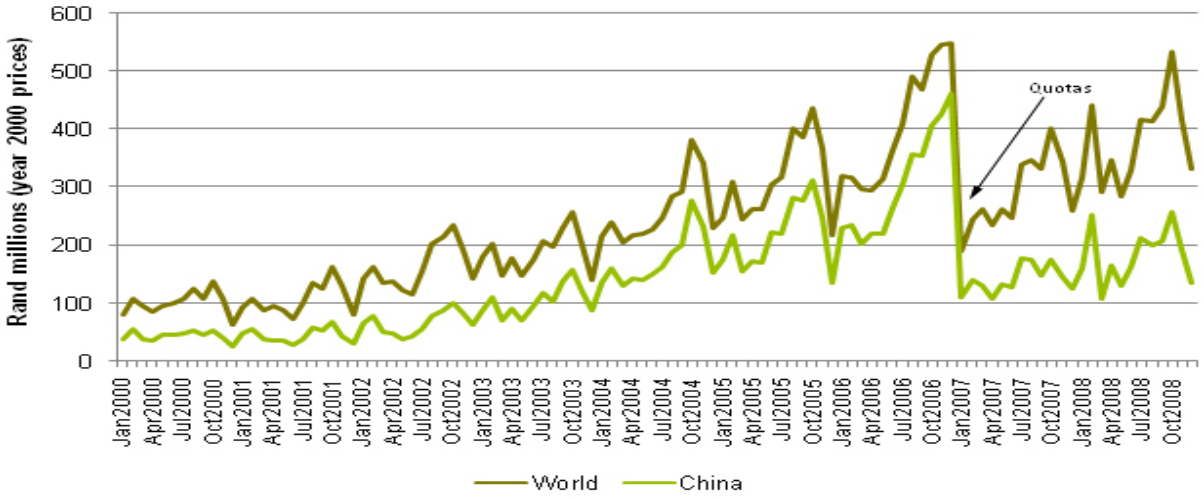
Source: DTI - Using SIC codes 311, 312 for textiles

During 2006, South Africa imposed quantitative restrictions on certain textile lines from China, although implementation was delayed until the beginning of 2007. The quotas were aimed at limiting the increase of textile imports from China, in trying to improve the market of domestic products (Woolfrey, 2009).

In an analysis conducted on the first 18 months of the quota period, there was evidence of a significant decrease in imports from China. After this initial drop, the targeted imports appeared to stabilise and resume their cyclical trends, but at levels slightly lower than before the quotas were introduced. However, imposing quotas on one country does not really reduce the overall level of imports since other countries might view that as an opportunity for them to benefit, and increase their imports during the quota period. (Woolfrey, 2009).

In a study conducted by Van Eeden (2009), it became evident that, during the quota period, the value of Chinese imports of the targeted lines were 6% lower than in the earlier period, which represented a decline of R281 million. However, the value of overall imports of the lines which were targeted by the quotas was 33% higher during the quota period. It was proved that imports from a number of other countries such as Bangladesh, Vietnam and Malaysia were significantly higher during the quota period. Figure 2 below illustrate South Africa's imports of Clothing and Textiles in Quota Lines from China and the World from 2000 to 2008 (monthly).

Figure 2: South Africa's imports of clothing and textile



Source: Van Eeden (2009)

The above figure clearly illustrates that while quotas are identified to be an effective way of limiting imports of the targeted goods, as the Mercantilists argue, they can also be ineffective at limiting imports depending on which countries they are imposed to. If the labour costs and productivity levels are lower, it would appear that instead of turning to local manufacturers, South African retailers would simply source their goods from other low-cost producers of clothing and textiles such as Malaysia and Bangladesh which suggests that Chinese imports are not the only problem facing the local industry in South Africa (Van Eeden, 2009).

According to Woolfery (2009), South African producers are at a competitive disadvantage not just with China, but with many other producers of textiles. He further postulates that the situation can only change if local producers can compete with their international counterparts in terms of prices, reliability and quality.

Reed et al (2008) in further supporting Van Eeden's findings, argued that quotas did not only fail to achieve the intended aim of improving output, employment and investment in the local industry, but also resulted in a negative overall effect, since it also damage vital relations between local producers and retailers which are critical for the survival of the industry.

2.3. Empirical evidence on the impact of imports on U.S textile industries (Downsizing, Layoffs and Plant Closure)

Conway (2006), conducted a study on the impact of imports on U.S textile industries in 2006. In his study he provides a theoretical and empirical analysis that illustrates the sources of downsizing, layoffs, plant closure and the implications for production and employment in the textiles industry.

In his study, Conway (2006) provided evidence that competition from imports is one of the determinants of downsizing, layoffs and plant closure. His estimation and simulation indicates that increased layoffs are in equilibrium more closely associated with technological progress, while increased plant closure and downsizing are more closely associated with increased import competition.

Revenga (1992) examined the impact of import competition on US manufacturing employment and wages. Utilising data for 38 industries over the 1977-1987 period, representing 72% of total imports in 1985, she concluded that, other things being equal, a 10% reduction in the price of the imported good is associated with a drop of 2.5 to 4 % in employment of the importing country industries. This effect was statistically significant, though it is dependent upon the maintained hypothesis that demand shifters and relative import price enter the reduced-form equation for each industry with the same parameter.

Bernard, Jensen and Schott (2006) also conducted the same study to examine the evidence of reduced growth in US manufacturing plants due to competition from low-wage countries between 1977 and 1997 using the plant-level data of the US Bureau of the Census. Their study concluded that output growth is a function of plant-level characteristics (i.e. employment, age of plant, wage of non-productive labour, wage of productive labour, total factor productivity), the capital/labour ratio of the plant, plant-level fixed effects and a number of measures of the degree of import competition from low-wage countries.

According to Bernard et al (2006), these measures of import competition are associated with significant downsizing (reductions in output) and layoffs among those firms that survive, and with a significantly greater propensity for a firm facing higher import competition to close.

2.4. Trade liberalisation and Employment

According to Lee (2005), trade liberalisation which can be defined as a move towards free trade through the reduction of tariff and other barriers, is generally perceived as the major driving force behind globalisation. There has been increasing flows of goods and services across national borders which have been the most visible aspect of the increasing integration of the global economy in recent years. Many criticise trade liberalisation and blame it for causing problems such as rising unemployment and wage inequality, increased exploitation of workers in developing countries, poor employment conditions and labour standards, de-industrialisation and marginalisation of low-income countries, poverty and global inequality as well as degradation of the environment. These however does not mean that free trade does not have advantages in terms of improved allocation of resources and consequent gains in productive efficiency and economic growth which are a basic principles of mainstream economic analysis.

Lee (2005), further argues that the impact of trade liberalisation on employment is significant as the level of employment is a key determinant of overall economic welfare, especially in developing countries like South Africa where systems of social protection is not that strong. The impact of trade liberalisation on the level and structure of employment determines, to a large extent, its impact on the quality of life measured by poverty, wage and income distribution as well as the quality of employment.

Trade itself, is usually associated with growth in the economy, which does not necessarily mean that trade liberalisation can improve growth. Trade liberalisation if pursued without due consideration to the strategic context of a given economy, can have a negative impact on growth itself (Rahman, Bin Shadat and Raihan, 2007).

According to Chinembiri (2010), South Africa is one of the countries that changed from inward looking trade policy characterised by high tariffs, quota restrictions and import substitution policies towards a liberalised export focused trade strategy. This increased openness did not provide expected rapid employment growth,but seems to have led to formal sector employment declines.

2.5. Reasons for the huge influx of Chinese imports in South Africa

- **China's Labour cost advantages**

The low wages and undervalued currency can both result in low Chinese labour costs when expressed in competitors' currencies. These provide some light on why China has become a major textiles exporter and they have a comparative advantage in the production of these goods (Ceglowski, 2005).

The textile industries for developed countries tend to be more skills intensive than for developing countries although there are similarities between China and developing countries in terms of production techniques. In 1998, the hourly cost of labour for textiles in South Africa was 2.05 US dollars while China's cost was 0.62 US dollars (Biyase et al, 2007). This shows a huge gap which might mean that China will end up producing more than what South Africa can produce at a higher labour cost (Biyase et al, 2007).

- **The implications of the WTO principles in South Africa.**

The World Trade Organisation (WTO) is defined as "*the legal and institutional foundation of the multi-lateral trading system*". The WTO has the membership of about 153 countries which includes South Africa. By being a member of the WTO, a country must follow the fundamental principles that guide the working of the WTO which are a foundation of the multilateral trading system.

Ever since South Africa joined the WTO, China has been the largest trading partner of South Africa with the trade volume of approximately 19.4 % of the total trade volume between China and Africa (DTI, 2011). Many have questioned China's relations with South Africa as there seem to be trade imbalances which are more in China's favour. Large-scale dumping of cheap manufactured products has impacted negatively on local industries.

The important question is, what could have caused this trade imbalance and dumping? According to Biyase et al (2007), the WTO required that its members gradually reduce quotas on textile imports. All quotas were indeed removed by 1 January 2005 under this agreement. However, South Africa's tariff liberalisation programme, went far further and was significantly quicker than required by the GATT agreement and WTO regulations which consequently gave the domestic industry a riskily short time to adjust.

By being a member of the WTO, it will not be easy for South Africa to re-adjust its tariffs as it has to comply with the fundamental principles of the WTO. Because of this, South Africa may find it difficult to impose any type of restriction on the increase of imported goods, which only leaves it with a choice to empirically assess the effect that such an increase of imports would have in the long term in their growth as well as in the sectoral and total employment in the country (Biyase et al, 2007).

The fundamental principles of the WTO are meant to ensure that there is a good trade relation between trading countries; however, based on how they are implemented and managed, they can create or destroy good trade relations. The free trade principle for instance, which encourages world trade by lowering trade barriers, can harm good trade relations with countries that are highly competitive. The production level of China is highly uncompetitive as compared to South Africa due to the costs of production that are very low in China as argued in the literature presented in this report. For South Africa to succeed as a member of

the WTO, it is important that the trade environment is developed domestically to allow the country to compete with other member countries.

2.6. Conclusion of the literature review

Although there are different views about the trade theories presented in this literature review, the impact of such theories can either be negative or positive based on the way in which they are managed in a country. Trade is said to be beneficial to all countries as postulated in the basic theory of international trade. As Pugel et al (1996), suggested in their infant Government argument, trade policies may or may not benefit a country depending on the size of the nation. Countries with low living standards may benefit from the imposition of tariffs on imports while a well-developed country might not necessarily benefit. Import tariffs may be identified as the main source of income for emerging economies which can be associated with large social benefits.

Supply and Demand conditions differ between countries since production conditions and tastes differ. In the context of this study, the main question to be asked based on the theories presented herein can be: who is benefiting between China and South Africa on the imports of cheap textile products? Pugel et al (1996) argues that an importing country will experience a fall in production of an imported good while consumption of such good increases. The way in which countries manages and implements their trade policies determines whether the country will gain or lose. The trade theories presented in this chapter will help the researcher to understand what the underlying situation of the problem statement is as they clearly provide answers to the basic questions raised on trade which are:

- Why do countries trade?
- How does trade affect production and consumption in each country?
- How does trade affect the economic wellbeing of each country?
- How does trade affect the distribution of economic well-being or income among various groups within the country?

As the literature seeks to provide answers to the above questions, it will assist the researcher to understand what the root cause of the problem statement is, while providing some answers to the main questions of the study.

The South African textile industry is highly impacted by the way in which theories of trade are perceived and how they inform trade policies of the country. Empirical evidence presented in this chapter will assist the researcher in interpreting the research findings and providing recommendations.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

A research methodology and design is an essential part of the research that tells the readers of the research report about all the steps that were followed to conduct the research. This section of the research report presents the methodology that will be used to assess the impact of an increase in China's imports of cheap textile products to the South African textile industry.

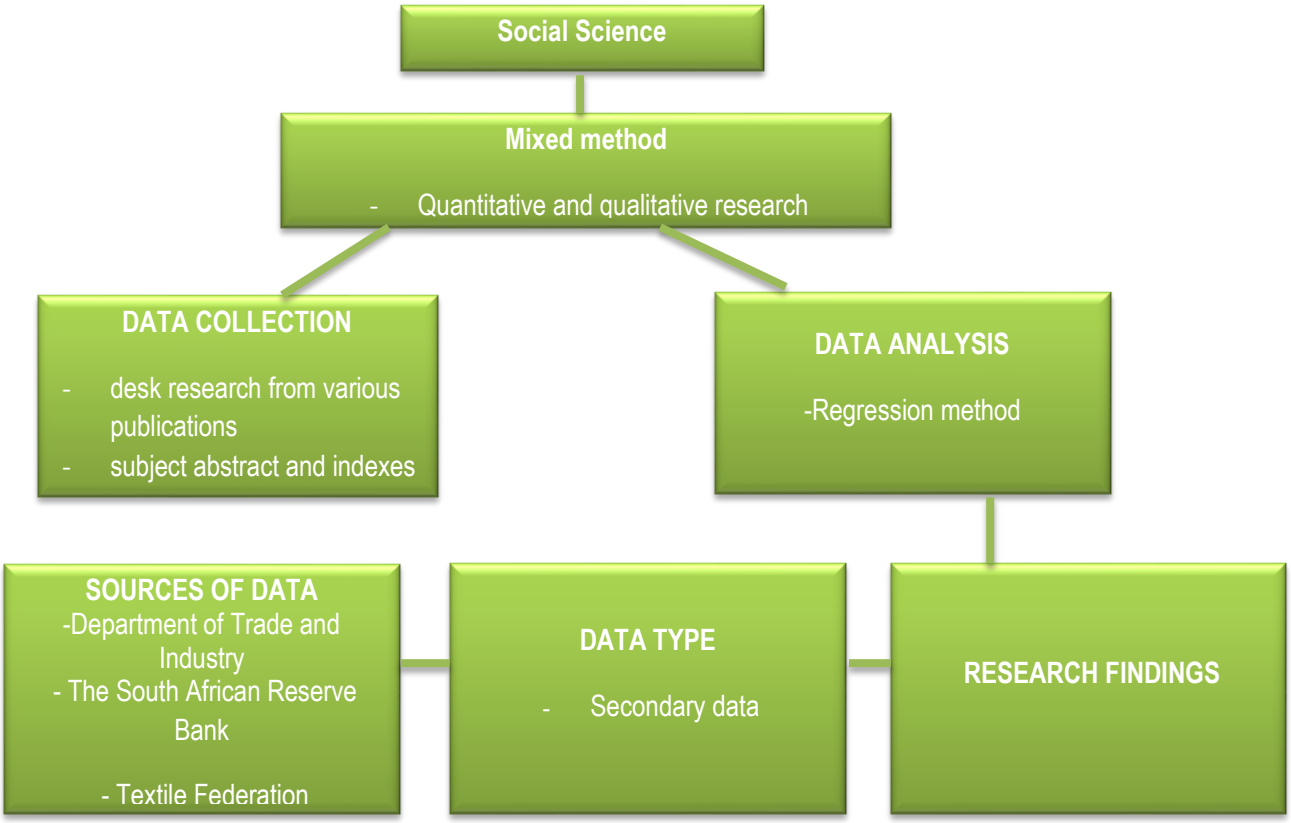
This chapter further provide details on the research paradigm, the design of the research, the method of data collection, the data type to be utilised, the method of data analysis and data validation. This Chapter assist readers of the research report to understand the background of data utilised and why certain variables were selected in determining the impact of China's imports to South Africa's textile industry.

Regression equation that will be utilised in analysing the data and interpreting the results as well as explaining each variable that forms the equation will also be provided in this Chapter. This will assist readers in understanding what the dependent and independent variables for the study are.

3.2. Research Paradigm

A research paradigm is essentially a framework of beliefs, values and methods within which the research will take place. The research paradigm that will be used for this study is a quantitative and qualitative research method. Quantitative data that will be utilised to analyse what the impact of cheap imports from China is on the South African textile industry will assist in providing the trend of how textile industries have been performing at different levels of imports per year. The quantitative data will also provide the baseline on both imports and the textile industry in South Africa from the selected base year of the study while the literature review provides qualitative findings for the research report (Bryman, 2012).

Figure 3: Summary of research methodology



Source: Hlakudi (2012)

3.3. Research design

A research design involves the manner in which data on variables are collected and analysed. It focuses on the unit of analysis and time dimension. Time dimension refers to data that may be stretched over long period while the unit of analysis involves a person or object from whom data is collected (Bryman, 2012).

The research will analyse longitudinal secondary data of imports of textile products entering South Africa, employment levels in the textile industry and exchange rate levels that will ensure that the impact is assessed. Utilisation of secondary data will allow for access of historical data that has been audited by the sources (e.g. employment levels will be acquired from the Textile Federation, the exchange rates for the required data points will be acquired from the South African Reserve Bank while the data for import levels will be acquired from the Department of Trade and Industry).

3.4. Data type and data sources

The study will use the following multiple regression equation:

$$\mathbf{X = \alpha + \beta_1 I + \beta_2 e + \mu}$$

Where X – is the dependent variable

α, β_1, & β_2 – are the constant variables

I & e – are independent variables

μ– is the error term which is assumed to be normally distributed and independent. The error residual consists of 3 components which are:

- Random error;
- Measured error; and
- Effect of all other factors which are excluded from the model.

The dependent variable X is explained by a component that varies systematically with the independent variables I and e and by the random error term μ, which represents all other factors affecting X.

The dependent variable X, for the study represents the employment levels within the textile industries in South Africa and the independent variables are:

I – Imports in value (Special woven fabrics, tufted textile fabrics; lace tapestries; trimmings and embroidery in rand); and

e – Exchange rate (South African cents to the Chinese Yuan).$\beta_1 < 0$ and $\beta_2 < 0$

$\beta_1 < 0$: There is a negative relationship between imports and domestic industry's employment levels because an increase in the level of imports will reduce the demand of domestically produced textile goods which causes job losses.

$B_2 < 0$: There is a negative relationship between exchange rate and domestic industries employment because a strong rand will make imported goods to be cheap,

increasing their demand and resulting to a fall in production capacity of domestic industries and thereby increasing job losses.

The study will utilise time series data that will be collected over years. Data will include annual levels of employment in the textile industry, the value of imports from China and exchange rate levels (South African Rand per Chinese Yuan). There will be 19 data points or observations that will be analysed annually and the time frame of the study is from 1st January 1993 to 31st December 2011. The main sources of data in this study are the Department of Trade and Industry (DTI), The Textile Federation and the South African Reserve Bank (SARB). The data is made public in the DTI and SARB websites which is open for everyone to access and is available on request from the Textile Federation.

3.5. Data collection method

The data collection method will include desk research from the DTI, Textile Federation and SARB websites. Where there were limitations in collecting data from the organisations, relevant branches within the organisations were contacted for assistance.

3.6. Method of data analysis

To analyse the impact of a high level of textile imports from China on employment levels in the South African textile industries, regression method will be used. Regression analysis is a collective name for techniques for the modeling and analysis of numerical data consisting of values of a dependent variable (also called response variable or measurement) and of one or more independent variables (also known as explanatory variables or predictors). The parameters are estimated so as to give a "best fit" of the data. Most commonly the best fit is evaluated by using the least squares method, but other criteria have also been used.

Variables that will be utilised in this study are non-stationary time series. The econometric consequences of non-stationary data can be quite severe, leading to least squares estimators, test statistics and predictors that are unreliable. A stochastic process is the economic model generating the time series variable which is an economic variable that is observed over time. A stochastic process (time series) is stationary if its mean and variance are constant over time and the covariance between two values from the series depends only on the length of time separating the two values and not on the actual times at which the variables are observed.

3.7. Data validation

The current literature and theory on the impact of imports on employment provides hypotheses of what the impact is. The findings of the research will be generalised since the impact of imports on employment can be measured by different variables or indicators such as increase or decline in productivity and job losses (Bryman, 2012)

3.8. Hypothesis

Hypothesis established for this study are:

1. High level of cheap textile imports is associated with a decline in domestic industries productivity, measured in employment levels;
2. A strong rand is associated with high levels of imports, thereby indirectly reducing employment levels within the textile industry.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

The chapter represents the analysis and interpretation of data that the study utilises as well as outlining the approach followed in analysing the data which include presenting the data utilised to analyse the impact of imports on South African textile industry and running correlations.

The study uses a Statistical Package for Social Sciences (SPSS) software which is a Windows based programme that is used to perform data entry and analysis as well as creating tables and graphs. In this chapter, a series of tests are conducted to measure the relationship between the exchange rate, the level of textile imports from China and employment in the South African textile industries.

The SPSS software will be utilised to run frequencies, calculate Descriptive Statistics, compare Means, conduct Cross-Tabulations, conduct T-Tests, conduct ANOVAs as well as running various types of regressions that will assist in analysing the impact of imports from China on employment in the South African textile industry. Excel package will also be utilised to create graphs that will clearly illustrate the relationship between the variables being analysed.

The analysis of data and interpretation will assist the researcher in proving recommendations for the industry to develop. The results of this analysis will also assist the researcher in determining whether the aim of the research was achieved or not.

4.2. Presentation of data

Figures 4, 5 and 6 below provide the data collected from secondary sources for the employment levels in the South African textile industry, South African imports of textile products from China (in value) and exchange rates (SA cent per China Yuan Middle rate). The data was collected from the Department of Trade and Industry (Imports), the Textile Federation (Employment levels) and the South African Reserve bank (exchange rates). The figures shows how import levels, employment levels and exchange rates have changed over the years (1993 to 2011).

Figure 4: South African textile industry employment data

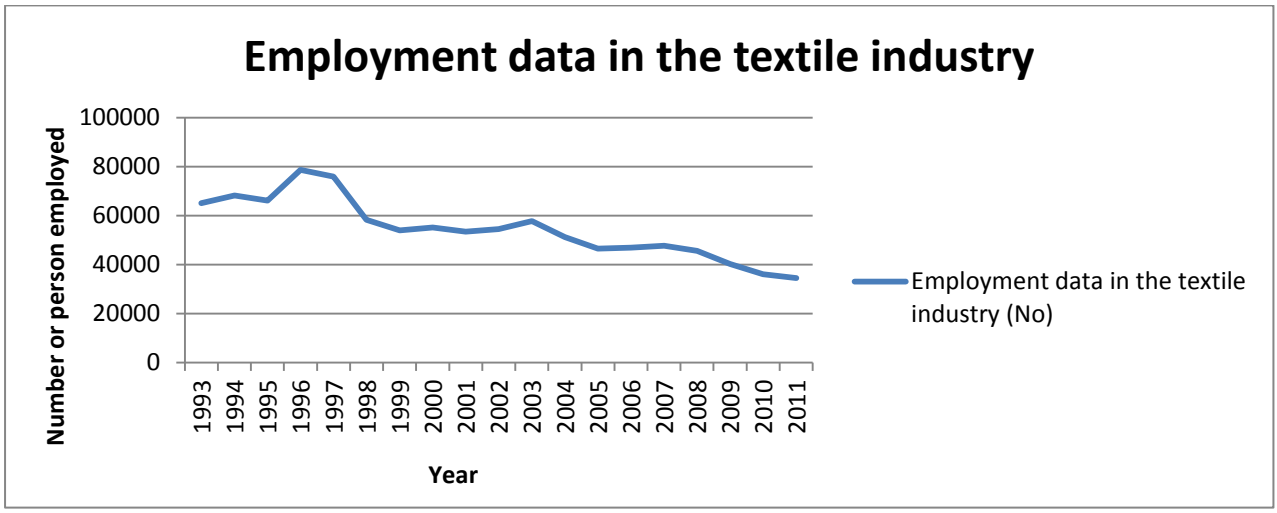


Figure 5: South African textile imports from China

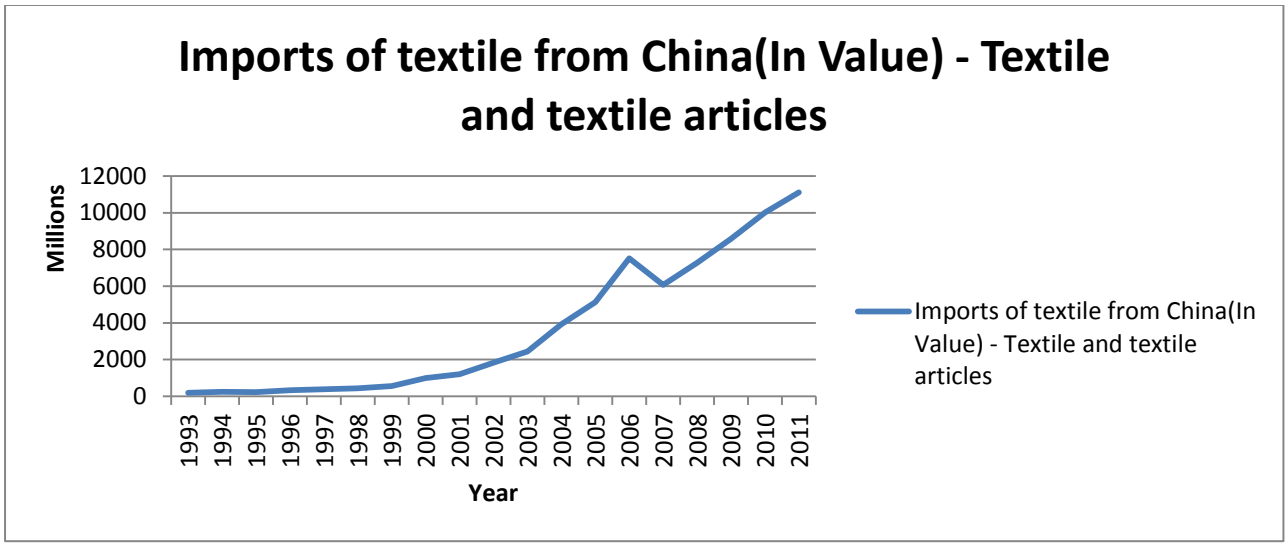
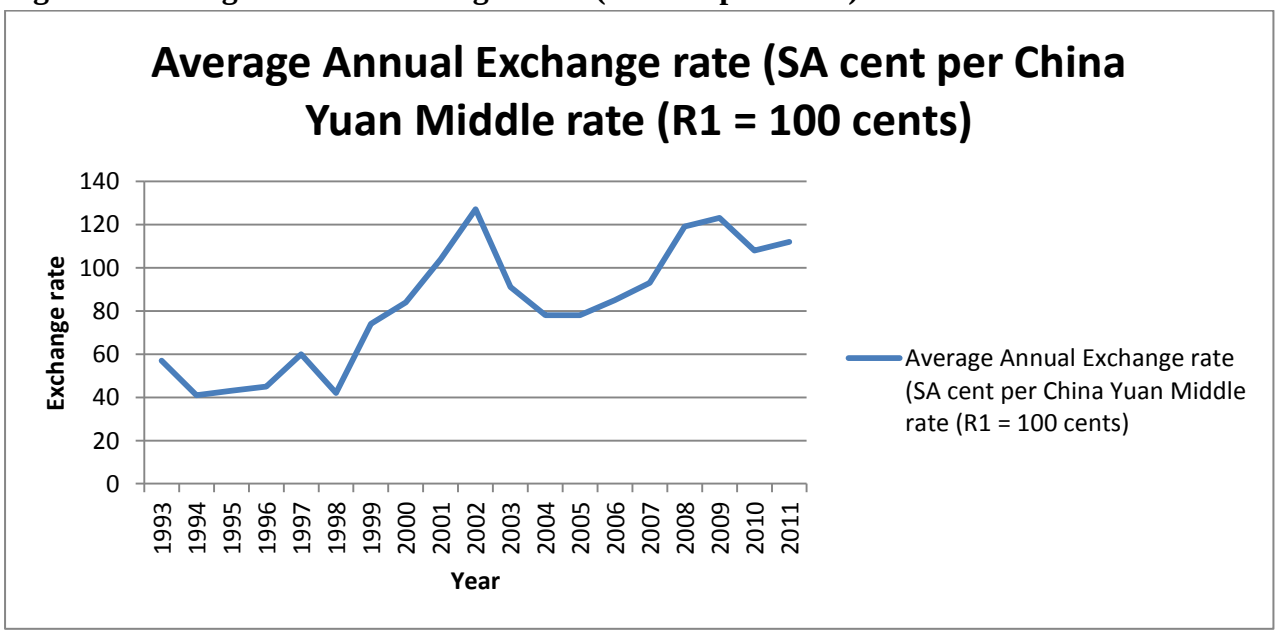


Figure 6: Average Annual Exchange Rates (SA cent per Yuan)



Before analysing the data as presented in the figures above, it is important that frequency of data for each variable are checked. A frequency distribution can reveal the number of missing values if any, outliers and extreme values as well as the central tendency, variability and shape of the distribution. It should be noted that the data being used in this study is readily available in the secondary sources identified above.

Variables analysed in this study are non-stationary time series. The econometric consequences of non-stationary data can be quite severe, leading to least squares estimators, test statistics and predictors that are unreliable. A stochastic process (time series) is stationary if its mean and variance are constant over time and the covariance between two values from the series depends only on the length of time separating the two values and not on the actual times at which the variables are observed. The danger of obtaining significant regression results from unrelated data when using non-stationary series in regression analysis is obtaining spurious regression results.

4.3. Frequency tables

According to tables 1, 2 and 3 below, the collected data (Employment, Imports and Exchange rates) is valid at all points and there are no missing values. The data was sorted in an ascending order before the frequency tables were created using SPSS.

Table 1: Frequency table for Employment levels in the textile sector

Statistics

Employment

N	Valid	19
	Missing	0

Employment in the textile industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34556	1	5.3	5.3	5.3
	36057	1	5.3	5.3	10.5
	40207	1	5.3	5.3	15.8
	45637	1	5.3	5.3	21.1
	46518	1	5.3	5.3	26.3
	46895	1	5.3	5.3	31.6
	47647	1	5.3	5.3	36.8
	51208	1	5.3	5.3	42.1
	53384	1	5.3	5.3	47.4
	53997	1	5.3	5.3	52.6

	54519	1	5.3	5.3	57.9
	55080	1	5.3	5.3	63.2
	57794	1	5.3	5.3	68.4
	58267	1	5.3	5.3	73.7
	65054	1	5.3	5.3	78.9
	66142	1	5.3	5.3	84.2
	68165	1	5.3	5.3	89.5
	75875	1	5.3	5.3	94.7
	78694	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

Table 2: Frequency table for Imports

Statistics

Imports

N	Valid	19
	Missing	0

Imports of textile from China(In Value)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	204233199	1	5.3	5.3	5.3
	236017606	1	5.3	5.3	10.5
	249936611	1	5.3	5.3	15.8
	333059812	1	5.3	5.3	21.1
	380682874	1	5.3	5.3	26.3
	439587924	1	5.3	5.3	31.6
	557789751	1	5.3	5.3	36.8
	1002381156	1	5.3	5.3	42.1
	1204676620	1	5.3	5.3	47.4
	1829773525	1	5.3	5.3	52.6
	2445725368	1	5.3	5.3	57.9
	3920808284	1	5.3	5.3	63.2
	5136624873	1	5.3	5.3	68.4
	6069625522	1	5.3	5.3	73.7
	7264853044	1	5.3	5.3	78.9
	7522365774	1	5.3	5.3	84.2
	8580876970	1	5.3	5.3	89.5
	10011000028	1	5.3	5.3	94.7
	11099269487	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

Table 3: Frequency table for exchange rates

Statistics

Exchange Rates

N	Valid	19
	Missing	0

Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	1	5.3	5.3	5.3
	42	2	10.5	10.5	15.8
	45	2	10.5	10.5	26.3
	60	1	5.3	5.3	31.6
	74	1	5.3	5.3	36.8
	78	2	10.5	10.5	47.4
	84	1	5.3	5.3	52.6
	85	1	5.3	5.3	57.9
	91	1	5.3	5.3	63.2
	93	1	5.3	5.3	68.4
	104	1	5.3	5.3	73.7
	108	1	5.3	5.3	78.9
	112	1	5.3	5.3	84.2
	119	1	5.3	5.3	89.5
	123	1	5.3	5.3	94.7
	127	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

4.4. Running correlations

Correlations in this study are run using scatter plotting and correlation tables. Correlation is a statistical method used to assess a possible linear association between two variables. Correlation is measured by the correlation coefficient, which represents the strength of the putative linear association between the variables being studied. A correlation coefficient of zero indicates that no linear relationship exists between two continuous variables, and a correlation coefficient of −1 or +1 indicates a perfect linear relationship. The strength of relationship can be anywhere between −1 and +1. The stronger the correlation, the closer the correlation coefficient comes to ±1 (Mukaka, 2012).

According to Mukaka (2012), if the coefficient is a positive number, the variables are directly related (i.e. as the value of one variable goes up, the value of the other also tends to do so). If, on the other hand, the coefficient is a negative number, the variables are inversely related (i.e. as the value of one variable goes up, the value of the other tends to go down).

Scatter plotting is normally used to examine the association of two continuous variables. A positive correlation means that as the value of one set of data increases, the other data will also increase while a negative correlation means that as the value of one set of data increases, the other data will decrease.

Figures 7 below show a negative and linear correlation between employment and import data presented. As the level of imports increase, employment levels also drops.

Figure 7: Scatter plotting for Employment and Import levels

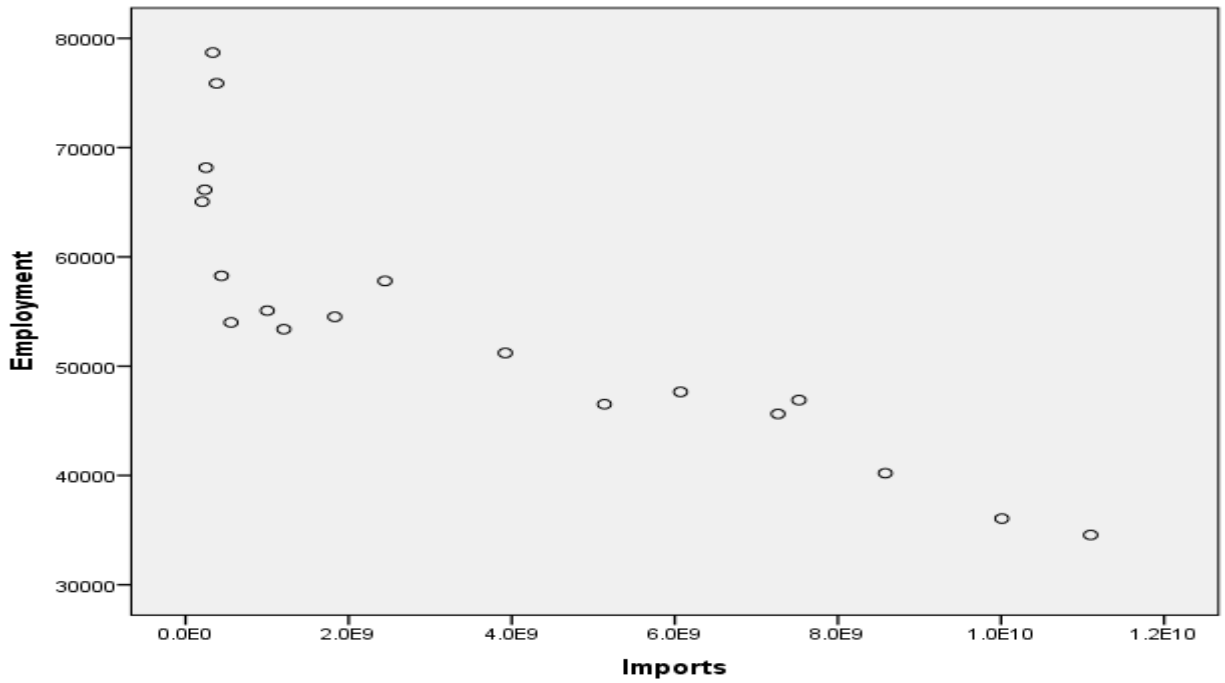


Figure 8 below shows that there is a negative and no linear correlation between employment and exchange rate as the data do not follow a linearity pattern. An appreciation of exchange rate indirectly lead to a fall in employment levels as a strong rand makes imported goods to be cheaper thereby boosting imports which lead to a fall in employment levels. The relationship of these variables will be discussed in detail in section 4.5 below. A non-linear correlation may be due to the fact that an increase or decrease in exchange rates does not directly impact employment levels.

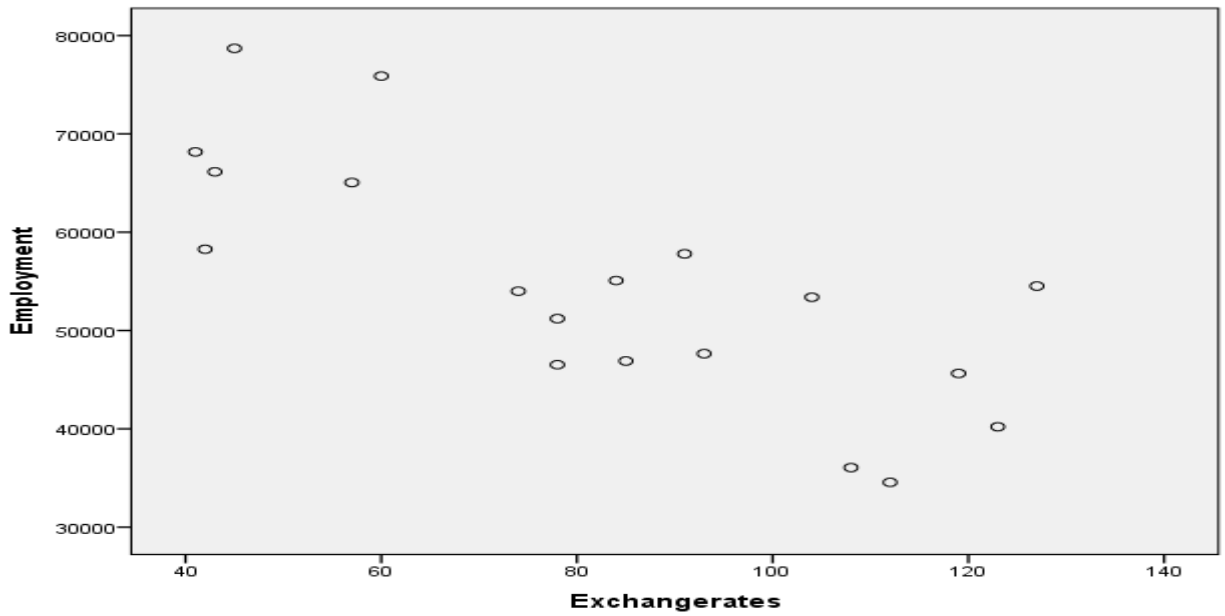


Figure 8: Scatter plotting for Employment and Exchange rates

The study uses the Pearson's correlation coefficient which measures the strength of the linear relationship between two scale (ratio or interval) variables. Table 4 below, shows a negative correlation between employment levels in the South African textile industry and imports of textile products from China while table 5 shows a negative relationship between Employment levels in the South African textile industry and exchange rates. When the value of textile imports increase, there is a decline in employment levels within the textile industry. Furthermore, when the rand weakens, textile products become expensive which reduces the demand of imported goods, thereby reducing imports levels while a strong rand will make imported goods to be cheaper which increase their demand leading to an increase the level of imports.

Table 4: Correlations – Employment and Imports

		Employment in the textile industry	Imports of textile from China(In Value)
Employment in the textile industry	Pearson Correlation	1	-.866**
	Sig. (2-tailed)		.000
	N	19	19
Imports of textile from China(In Value)	Pearson Correlation	-.866**	1
	Sig. (2-tailed)	.000	
	N	19	19

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5: Correlations – Employment and Exchange Rates

		Employment	Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents)
Employment in the textile industry	Pearson Correlation	1	-.765**
	Sig. (2-tailed)		.000
	N	19	19
Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents)	Pearson Correlation	-.765**	1
	Sig. (2-tailed)	.000	
	N	19	19

**. Correlation is significant at the 0.01 level (2-tailed).

4.5 Statistical tables

Table 6 below provides the descriptive statistics which provide the mean, range and the standard deviation for employment, imports and exchange rates. The number of data points analysed for all variables is 19. The mean explains the average in terms of the data provided for the research period while the standard deviation measures how widely spread the values in a data set are. If the data points are all close to the mean, then the standard deviation is close to zero and if many data points are far from the mean, then the standard deviation is far from zero. If all the data values are equal, then the standard deviation will equal to zero. The descriptive statistics of the model were generated by SPSS utilising the data presented in figures 4, 5 and 6.

Table 6: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Employment in the textile industry	19	34556	78694	54510.32	12253.953
Imports of textile from China(In Value)	19	204233199	11099269487	3604699390.95	3732960530.313
Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents)	19	41	127	82.32	28.601
Valid N (listwise)	19				

According to the results in table 6 above, the average number of people employed in the South African textile industry between the period 1993 and 2011 is **54 510** with the standard deviation of **12 254**. The average value of textile imports from China during the period of study (1993 – 2011) amounts to **R3, 6 billion** with the standard deviation of **R3.7 billion** while the annual exchange rate (SA cent per China Yuan) is averaged at **82** cents (R0.82) with the standard deviation of **28.6**.

The model summary provided in table 7 below is used to determine how well a regression model fits the data. The "R" column represents the value of the multiple correlation coefficient which can be considered to be one measure of the quality of the prediction of the dependent variable (Employment in the South African textile industry). The R value of 0.89, in the table below, indicates a good level of prediction. The "R Square" column represents the coefficient of determination, which is the proportion of variance in the dependent variable that can be explained by the independent variables (i.e., it is the proportion of variation accounted for by the regression model above and beyond the mean model). The R^2 value of 0.81 shows that that the independent variables explain 81% of the variability of the dependent variable (employment).

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898[a]	.807	.783	5706.182

Predictors: (Constant), Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents), Imports of textile from China(In Value)

Table 8: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2181900532.590	2	1090950266.295	33.505	.000[b]
	Residual	520968187.515	16	32560511.720		
	Total	2702868720.105	18			

a. Dependent Variable: Employment data in the textile industry

b. Predictors: (Constant), Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents), Imports of textile from China(In Value)

F-ratio in the ANOVA table above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables (Imports and Exchange rates) statistically significantly predict the dependent variable (Employment): F (2, 18) = 33.505, p < .0005 (i.e. the regression model is a good fit of the data).

Table 9: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	73633.313	4479.356		16.438	.000
	Imports of textile from China(In Value)	-2.113E-6	.000	-.644	-4.288	.001
	Average Annual Exchange rate (SA cent per China Yuan Middle rate (R1 = 100 cents)	-139.785	64.310	-.326	-2.174	.045

a. Dependent Variable: Employment

Unstandardized coefficients in table 9 above indicate how much the dependent variable varies with independent variables, when all other independent variables are held constant. The unstandardized coefficient, B_1, for imports is equal to -2.11 which mean that for each R1 million increases in textiles imports value, there is a decrease in Employment levels of 2.11. Furthermore, for every R1 increase in the South African rand (appreciation of the rand), employment in the textile sector decrease by 140 due to the fact that a strong rand makes imported goods to be cheaper, leading to an increased demand of such products thereby reducing employment levels in the industry.

Table 9 above also shows that there is a negative but significant relationship between employment in the textile sector and imports from China. There is also a negative and significant relationship between employment in the South African textile sector and Exchange rate.

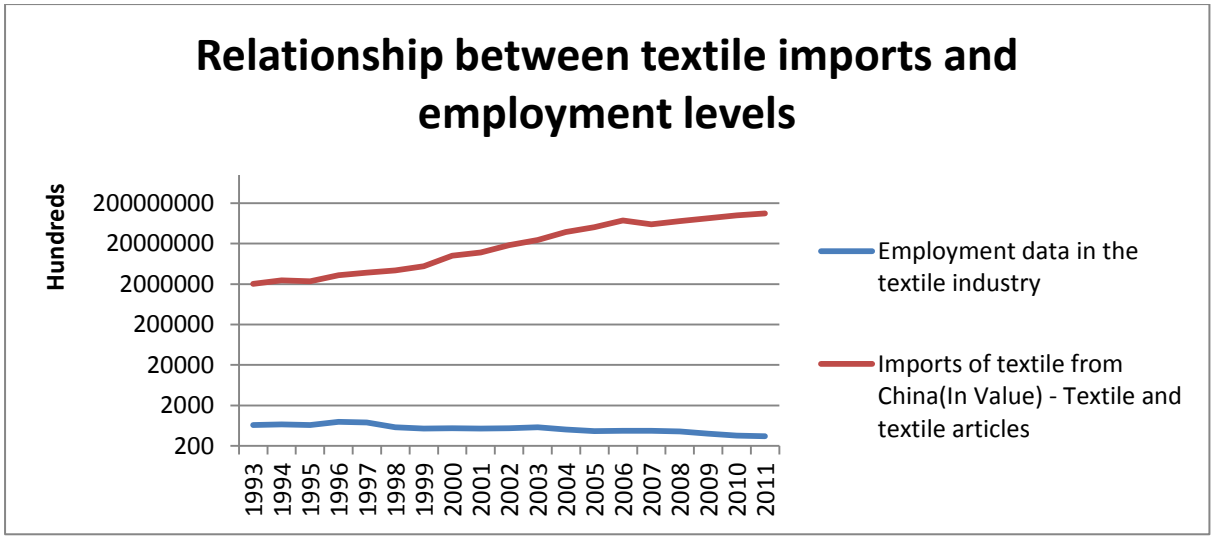


Figure 9: Graphical presentation of the relationship between imports and employment

The graphical presentation above (figure 9), illustrates the relationship between imports and employment levels within the textile industry which shows that an increase in imports of textile products lead to a fall in employment levels within the textile industry. In terms of the graph above, an increase in the value of imported Chinese textile products from R209 million in 1993 to R11 billion in 2011 resulted in a decrease in employment levels within the South African textile industry from 65 thousands in 1993 to 34 thousands in 2011. This shows that there is a negative and significant relationship between imports and employment in the South African textile industry.

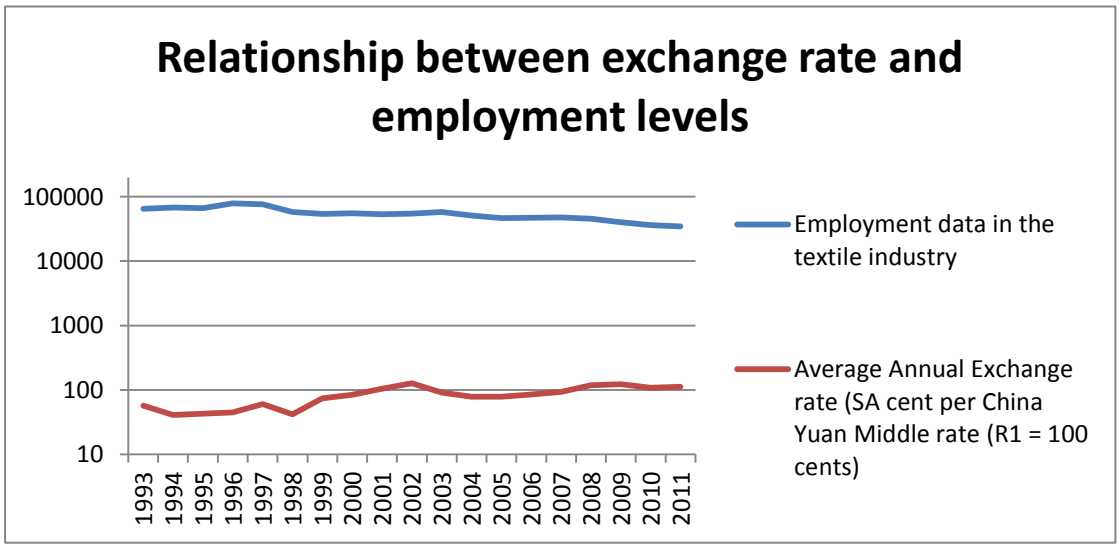


Figure 10: Graphical presentation of the relationship between exchange rates and employment

Figure 10 above illustrates the relationship between employment levels within the South African textile industry and exchange rates (South African cent per China Yuan). The graph shows a negative but indirect relationship between employment levels within the textile industry and exchange rates, as a strong rand contributes to an increase in imported textile goods thereby negatively impacting on employment levels within the industry as shown in figure 10 above, notwithstanding other underlying factors that impact on the level of imported goods such as labour costs, tariff levels and trade rules.

In 1996, the rate to exchange 1 Chinese Yuan in South Africa was 45 cents which weakened to R1.12 in 2011. During the same period, the textile imports value from China increased from R300 million in 1996 to R11 billion in 2011 while employment levels decreased from 78 thousands in 1996 to 34 thousands in 2011. The graph (figure 10) also shows that a weak rand does not necessarily have a positive relationship since the level of imports continued to increase even when the rand weakened.

4.6. Conclusion

This chapter provided evidence that not only high level of imports from China reduces employment levels, but other factors such as exchange rates have an indirect impact. The literature reviewed for this study indicates that high labour costs, trade liberalisation and quantitative restrictions such as import quotas can drive an influx in imports which consequently impact on the employment levels in the country. China's labour rates are low as compared to the labour costs in South Africa, which means that China will produce more goods in excess of its local demand which will boost exports. Implementing import quotas against only one country also does not help since other countries would have got an opportunity to export to South Africa which means that imports from other countries will still increase or remain the same. Furthermore, trade liberalisation which promotes free trade, makes it easy for China to dump its cheap goods to South Africa which has a negative and significant impact on employment levels.

It should also be noted that China only joined the World Trade Organisation (WTO) in 2000 while South Africa joined in 1947. China's WTO membership is said to have opened up its market for more international trade and investment as well as the world economy for China's exports. This shows that the WTO principles might have contributed to an increase in the level of textile imports from China as the presented data shows a very high increase of imports since China joined the WTO (i.e. an increase of textile imports value from R557 million in 1999 to R1 billion in 2000).

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The chapter concludes on the empirical analysis of the the impact of a high level of textile imports from china on employment levels in the South African textile industry. The chapter is divided into four sections which are:

- **The summary of results** which presents an empirical analysis on the impact of a high level of textile imports from China on employment in the South African textile industry. The summary provides details on why there is a negative and significant relationship between an increase in the import of textile products from China and employment levels in the South African textile industry.

- **The research findings** which provide details on whether the aim of the research was achieved and whether the hypothesis established was confirmed.

- **Recommendations** which provide recommended solutions by the researcher based on the lessons learned from other countries (empirical evidence) and the literature reviewed.

- **Final conclusions** which conclude the whole research report based on the findings and theories provided in the research report.

5.1.1 Summary of results

The research report presents an empirical analysis focused on the impact of a high level of textile imports from china on employment levels in the South African textile industry using South Africa's trade and employment data. The study also examines another factor that affects employment in the textile industry which is the exchange rate.

The results of data analysed in Chapter 4 shows that there is a negative and significant relationship between a high level of textile imports from China and employment levels in the South African textile industry. An increase in the value of textile imports from China will reduce the number of persons employed in the textile industry while a decrease in the value of Chinese imports of textile goods will lead to an increase in the number of persons

employed in the textile industry. The results also show that there is a negative relationship between a strong rand or an appreciating exchange rate and employment in the textile industry. A strong rand will make imported goods to be cheaper, which will lead to a high demand of such goods thereby boosting imports. In summary, the study concludes that high level of textile imports from China influence the fall in employment levels in the domestic textile industry.

As argued by Biselli (2009), China's dominance and competitiveness in the textile industry is mainly due to the following factors:

Labour costs – Since the textile industry is more labour intensive, it is critical that the labour costs are determined in such a way that will work for the industry as they can have a huge impact in the competitiveness within the market. The labour costs in China are very low as compared to other East Asian Countries which means that they can employ as many people possible who will increase the production level. Many Chinese move to the cities to look for better jobs without having proper education or training which leads to them having to take low-skill or labour intensive job opportunities which pay very low wages.

Exchange rate – Exchange rate plays a critical role in global trading transactions. Countries with currencies that are undervalued allow foreign buyers to use their relatively high or overvalued currency to buy "cheap" in the local market. The undervalued Chinese currency (Yuan) contributes to the high competitiveness of textile producers in China.

Foreign Direct Investment (FDI) – It is argued that for a country to be competitive in the global market, it is important that they focus on products that meet world market specifications in terms of design and quality. China has been very successful in producing low value added products which became a key advantage for China compared to other Southeast Asian countries. The inflow of FDI therefore led to an improvement on the Chinese production standards and technology, thereby increasing its competitiveness. The Chinese companies that received higher volumes of FDI present a stronger performance in the exports as the foreign companies that invest in the industry also contribute by sharing skills and expertise.

5.1.2 Research findings

The research aim was to get a better understanding of the relationship (impact) between a high level of textile imports from China and employment levels in the South African textile industry. The aim of the study is achieved because a negative relationship between high level

of textile imports from China and employment levels in the South African textile industry was realised in the study. In finding a negative impact in this research, data for South African imports of textile products in value, number of people employed in the industry and exchange rates (South African cent against the Yuan) was utilised.

The hypothesis established for the study was confirmed in the research findings based on the analysed data and literature reviewed. The confirmed hypothesis is as follows:

- High level of imported cheap textile products is associated with a fall in employment levels within the textile industry. As the demand for locally produced goods drops due to an increase in demand for imported goods, local firms are forced to reduce their supply or close down, thereby reducing employment levels as people lose their jobs.

- A strong rand is associated with high levels of imports, thereby indirectly reducing employment levels within the textile industry.

5.1.3. Recommendations

Dealing with the problems experienced by the South African textile industry requires collective efforts by all stakeholders (i.e. Government, firm owners, investors and consumers) aiming to accomplish a common vision. The interventions that the Government put in place must be of a national interest and linked to the long-term plan of the country which is the National Development Plan. This also applies to the entire value chain including interest groups. It is important to note that one action cannot address the challenges that the industry is confronted with, as other factors must also be taken into consideration. Moreover, clear co-ordination between the Government and other role players within the industry is critical to ensure that effective actions are implemented.

This research report shows a negative impact of imports from China on employment in the textile industry. The government and trade policy makers can do a lot to minimise this impact. It is important that the Government ensure that the legal, regulatory, accounting, tariffs and supervisory systems are in place. Although the South African Government is giving a helping hand to sinking industries through different programmes, if the problem is not solved from the trade policy perspective, it will be difficult to realise improvements.

The following recommendations are important in improving the South African textile industry:

- **The cost of labour in the South African textile industry**

As it has been indicated that high labour costs can negatively impact productivity levels, it is important that when dealing with the wage agreements for textile workers, unions consider that the impact of the minimum wages being determined as high wages might lead to more job losses. South African labour laws place a heavy emphasis on collective bargaining and allow unions and industry in the Bargaining Council to set minimum wages for specific sectors, which apply across an entire industry.

It is important that wages are linked to production levels. Since the demand of domestically produced goods decline as the level of cheap imported goods increase, firm owners find it difficult to sustain the payment of high wages while they lose profits, which results in them having to cut jobs. A principle of "*it's better for a lot of people to have a little than nothing at all*" must be used as it will help sustain employment within the South African textile industry. Countries like China have low wages which also increases their productivity levels.

- **Investing on skills development within the textile industry**

There is a critical need to develop skills in the textile industries as there are very few skilled people. Many people who work in the textile industry do not have relevant education while there is limited formal tertiary education support for the textiles industry in South Africa. If the South African textile industry is to raise its operational standards to become internationally competitive, more emphasis should be put in investing on skills development.

Tertiary institutions must participate in ensuring that programmes that deals with specialised textile industrial engineering or any undergraduate or post graduate degrees in textile management focussing on operational performance and production are designed.

Investing on skills development within the textile industry can improve the levels of productivity which may lead to the country producing products that can easily compete with imported goods. This can be done by improving the higher technical skills of workers in the textiles industry by allowing investors and businesses to train and develop workers to meet

the future skills needed for the business. Skills development applies for both operational and managerial workers since it is important that management can be able to come up with strategies that may ensure that their firms can compete with highly competitive countries such as China.

- **Managing the imposition of import tariffs**

Although import tariffs are imposed with a good intention, reducing tariffs may benefit the industry and employment levels can be raised. Tariffs must not be imposed with the purpose of them serving as a source of revenue for the country but to protect domestic industries, and to remedy trade distortions. South Africa needs to consider reducing the tariffs on imported textile products and concentrate more on the beneficiation strategy. This will ensure that the country focus more on exporting finished goods rather than raw materials so as to enhance foreign exchange through increased value added.

Exporting finished goods will also help to boost employment as people will be needed to produce the materials to be exported. Furthermore, effort must be put in reducing corruption in the borders to avoid the import and export of counterfeit goods and products that did not go through the normal customs process. High level of corruption in this industry may be caused by high level of tariffs which some firms from both South Africa and foreign countries try to avoid.

Exporting countries usually end up shifting the tariff to the consumers of the importing country as they add it to the selling price of a good that they are importing. This also implies that if South Africa also import raw materials from other countries to produce textile goods, they will purchase them at a high price due to the added tariff, which will increase the cost of the final textile product that will be produced from the imported raw material.

Even with high tariffs, China would not stop exporting textile products to South Africa, since their production costs are very low, with an undervalued currency. Fees for copy rights and patents must strictly be charged to help reduce imports of counterfeit brands and their impact on domestic textile industries.

- **Imposing import quotas**

The World Trade Organisation (WTO) has banned all quantitative restrictions in principle as a means of protecting domestic industries. South Africa as a member of the WTO, therefore cannot impose quantitative restrictions. Should it happen that South Africa decide to withdraw from the WTO and wants to impose quantitative restrictions, it is important that other factors are taken into consideration such as the impact it would have in opening the platform for other countries to increase their imports.

- **Attracting Foreign Direct Investment (FDI)**

South Africa should put more emphasis in attracting FDI within the textile industry. Although FDI may transform the textile industry from being a labour intensive industry to a capital intensive industry which may have a negative impact on employment, it is important to note that foreign investors do not only bring financial support but skills and expertise that can lead to the production of quality products that can compete with highly competitive countries like China.

For South Africa to create an enabling environment for FDIs within the textile industry, it is important that the trade policies and other determinants of production and trade are dealt with. For example, investment in skills development and other generic human capital can help attract foreign investors as investors always wants to be assured that their investment will bear expected returns.

- **Specialising in products that are highly competitive**

As the South African textile industry continues to be confronted with an influx in cheap imports of textile products from China, it is important that the industry focus on the production of goods that they have an absolute and comparative advantage on. Instead of producing all kinds of textile products, the industry must focus on the products which are more secure and have higher margins such as industrial and household textiles. This will allow the industry to compete with China, only on products which they are highly competitive on, while employment levels for the production of such product increases.

- **Implementable long-term strategy for the textile industry**

An implementable long-term strategy for the improvement of the South African textile industry must be put in place which put more emphasis on the following:

Export-led industry

Since it is difficult for the prices of locally produced goods to compete with imported goods from China, the South African textile industry must focus more on promoting exports as the domestic demand of locally produced goods may continue to decline. The Government must continue to assist the industry in ensuring that they increase production of products to be exported by way of providing export subsidies, investing in machinery and promoting skills development within the industry.

Markets

It is important to identify the market to ensure that good trade relations are created with countries that can be interested in purchasing textile products that are produced in South Africa.

Improve infrastructure

The quality of infrastructure such as roads, water, electricity, telecommunications and buildings is important for the textile industry to succeed. Improving infrastructure can not only help attract producers with high standards for quality and labour, it can also increase the demand and easy access to products. The Government should prioritise development in industrial zones close to the best ports and roads. Textile firms must be assisted to ensure that they can have improved infrastructure that can increase production levels.

Promote inter-firm learning

As the objective is to compete with international countries such as China to ensure an increase in employment levels and productivity within the local firms, it is important that competition between the local firms within the textile industry is discouraged. This will ensure that domestic producers learn from each other and assist each other where necessary. Cooperation and joint action, whether based on hierarchical value chain or horizontal

networking relationships will help raise competitiveness of the industry at an international level.

5.1.4 Final conclusions

The South African textile industry has experienced various periods of growth and decline. As proven by many studies conducted on the textile industry, cheap imports from China have negatively impacted the industry which led to different interventions by Government. Literature shows that underlying factors that impact the industry by increasing imports are fluctuating currency, import quotas, high labour costs and lack of a comprehensive industrial and sectorial policy which resulted in uncoordinated and fragmented response to the challenges that face the textile industry.

Although imports in the targeted lines from China dropped substantially due to the imposed quotas, other countries increased their imports which did not reduce the overall import level. The South African textile industry has the necessary experience and know-how to enable it to reposition itself, as a producer of higher value-added and high quality textiles. Although the DTI programmes to support the industry are starting to show improvements, serious questions should be raised about the industry's ability to become internationally competitive.

It also appears that the evolution of trade theory, from old trade doctrines to the new trade theories has impacted policy on the continuing support of the free trade doctrine to determine policy for developing areas, which is pushed mainly by advanced nations. Furthermore, policies that are pursued by advanced nations relies more on the new trade theories doctrine of strategic trade. The uneven power relations between the rich and poor nations of the world permits a continuation of this irregular combination of policies, to which trade theory unfortunately has contributed much. Much of the concern of the policymakers with the micro-theoretic formulations of trade theory, both old and new, are related to a total neglect of the macroeconomic issues relating to the national as well as the world economy.

The recognition of the difference between trade policy and policy of trade liberalisation is more critical. This distinction is important for protecting some policy space that can promote the country's development priorities. By adopting an analytical policy regime, effective support to the growth and development of small and informal sector activities with substantial employment and poverty alleviation effects can be provided, although such opportunities seems to have been missed to a large extent in many countries.

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