LIVABILITY OF WAGES IN THE INDIAN EXPORT APPAREL INDUSTRY POST MFA QUOTA ABOLITION: A MANAGER’S PERSPECTIVE

by

HARSHITA JAGANNATHAN

(Under the Direction of Jan Hathcote)

ABSTRACT

Textiles and apparel have been major items of export for India because of the labor intensive nature of apparel production and competitive labor costs. The quotas by MFA until recently had been restricting low cost countries like India from expanding their exports. Even after MFA quota abolition, non-quantitative barriers in India were anticipated. One such area of concern was ensuring fair and livable labor wages. The purpose of this study was to assess wages in export units and estimate their livability for workers in India. Primary data on wages were collected through telephone interviews with managers of 17 export units in India. It was found that, not only do companies pay a minimum wage to workers, but most of them also provide additional benefits which contribute towards a living wage. However, the size of the export unit seemed to have an effect on the level of benefits provided to workers.

INDEX WORDS: living wage, Indian apparel export industry
LIVABILITY OF WAGES IN THE INDIAN EXPORT APPAREL INDUSTRY POST MFA QUOTA ABOLITION: A MANAGER’S PERSPECTIVE

by

HARSHITA JAGANNATHAN

BS, University of Mumbai, India, 2005
MS, University of Mumbai, India, 2007

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

ATHENS, GEORGIA

2009
LIVABILITY OF WAGES IN THE INDIAN EXPORT APPAREL INDUSTRY POST MFA QUOTA ABOLITION: A MANAGER’S PERSPECTIVE

by

HARSHITA JAGANNATHAN

Major Professor: Jan Hathcote
Committee: Yoo-Kyoung Seock
Katalin Medvedev

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
August 2009
ACKNOWLEDGEMENTS

I would like to thank my major advisor Dr. Jan Hathcote for her encouragement throughout the study. I would also like to thank John Campbell and John Prechtel from the main library for guiding me in finding secondary data using databases. I definitely want to thank Ms. Monica Periera who always had the time to direct me in locating articles for the literature review. I sincerely want to thank my committee members Dr. Medvedev and Dr. Seock for being supportive and contributing ideas and suggestions whenever needed. Finally, I want to thank my husband Amey for always being there to encourage and support me as well as push me when I needed it the most.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................................................................................................... iv

LIST OF TABLES ........................................................................................................................................................... vii

LIST OF FIGURES ........................................................................................................................................................... viii

CHAPTER

1 INTRODUCTION ......................................................................................................................................................... 1

   Reasons for outsourcing ............................................................................................................................................. 2

   Determinants of the location for outsourcing ......................................................................................................... 2

   The Indian Garment Industry ...................................................................................................................................... 6

   India’s potential ......................................................................................................................................................... 7

   Areas for concern ....................................................................................................................................................... 9

   Focus of the study ....................................................................................................................................................... 12

   Conceptual definitions .............................................................................................................................................. 13

2 THEORETICAL FRAMEWORK ................................................................................................................................. 14

   Factor conditions ..................................................................................................................................................... 15

   Demand conditions ................................................................................................................................................... 15

   Related and supporting industries ........................................................................................................................... 15

   Firm Strategy, structure and rivalry ......................................................................................................................... 16

3 REVIEW OF LITERATURE ......................................................................................................................................... 18

   Factor conditions ..................................................................................................................................................... 22
| 4 | METHODOLOGY .................................................................................................................................28 |
|   | Data collection ...............................................................................................................................28 |
|   | Data analysis .................................................................................................................................29 |
|   | Operational definitions ..................................................................................................................30 |
| 5 | RESULTS AND DISCUSSION ............................................................................................................31 |
|   | Hours of work ...............................................................................................................................32 |
|   | Wages ..........................................................................................................................................34 |
|   | Benefits ......................................................................................................................................38 |
|   | Discussion ..................................................................................................................................40 |
|   | Limitations .................................................................................................................................47 |
|   | Further research .........................................................................................................................48 |
| 6 | CONCLUSION ................................................................................................................................49 |
| REFERENCES .................................................................................................................................51 |
| APPENDICES ................................................................................................................................56 |
| A  | CONSENT SCRIPT .........................................................................................................................56 |
| B  | INTERVIEW PROTOCOL ..................................................................................................................57 |
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Working hours in the export unit</td>
<td>33</td>
</tr>
<tr>
<td>4.2</td>
<td>Wages in Rupees for tailors in the export units in India</td>
<td>36</td>
</tr>
<tr>
<td>4.3</td>
<td>Benefits provided to workers by export units in India (by unit type)</td>
<td>40</td>
</tr>
<tr>
<td>4.4</td>
<td>Mean monthly wages per worker for each unit type</td>
<td>41</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>U.S. suppliers of MFA textiles and clothing, 2006</td>
<td>4</td>
</tr>
<tr>
<td>1.2</td>
<td>U.S. imports of yarns, fabrics, apparel and made-up textiles, 2006</td>
<td>5</td>
</tr>
<tr>
<td>1.3</td>
<td>U.S. imports of MFA apparel by fiber type, 2006</td>
<td>5</td>
</tr>
<tr>
<td>1.4</td>
<td>Percentage share of top 10 countries in India’s Export Jan-Aug 2008</td>
<td>8</td>
</tr>
<tr>
<td>1.5</td>
<td>Wages in the Indian apparel and footwear manufacturing sector</td>
<td>10</td>
</tr>
<tr>
<td>2.1</td>
<td>The Diamond Model</td>
<td>14</td>
</tr>
<tr>
<td>4.1</td>
<td>Categorization of export units based on number of machines</td>
<td>32</td>
</tr>
<tr>
<td>4.2</td>
<td>Boxplot for wages in the small, medium and large categories (Minitab output)</td>
<td>41</td>
</tr>
<tr>
<td>4.3</td>
<td>Change in monthly wages in the apparel industry in India</td>
<td>43</td>
</tr>
<tr>
<td>4.4</td>
<td>Comparison of change in monthly wages in the apparel industry and change in consumer price index in India</td>
<td>46</td>
</tr>
</tbody>
</table>
CHAPTER 1

Introduction

In the global apparel sector, there is a general shift towards greater specialization by product type and price. American retailers are now inclined towards imports, since more and more consumers are now asking for value (Gereffi, 2001).

Firms prefer to source globally because of the intense competitive factors that they have to encounter. A detailed analysis of the factors like customer requirements, market opportunities world over, and supply-base location are a basis for a firm to adopt global sourcing strategies. It applies to all firms irrespective of the size of the firm (Handfield, 1994).

Specialization in the different areas of manufacturing has developed because of unrestricted and a more open field for international trade recently than before. Specialization has also extended to the different stages of production even within a single industry. Specialization, coupled with an outburst of a variety of products and advancement in global communication and information technologies, has facilitated the spread of trade and sourcing networks to far geographical distances across the globe for retailers and manufacturers. To compete with this globally integrated marketplace, U.S. companies must keep up with changing technology and customer demands, but at the same time reducing costs, providing better quality and customer service (Su, 2005).

Intermingling of individual domestic economies with the global economy is referred to as “globalization” and it is evident from increased volumes in world merchandise trade. There has been a constant 6% increase on an average during the years 1954-94. However, globalization in
the present has an additional dimension to it; that is the international division of labor. Producers in the manufacturing sector, like apparel, are now able to separate their supply chain into geographically dispersed steps making use of globally available resources. This creates chances for developing countries to benefit from global trade (Ramaswamy & Gereffi, 2000).

Reasons for Outsourcing

Outsourcing has its advantages and disadvantages. Advantages are that consumers are exposed to more goods and services for lower cost, or they are able to purchase higher quality merchandise for the same price. Conversely, there is job loss due to outsourcing. The U.S. apparel industry lost about 50,000 jobs from 1994 to 2004 because of the increase in overseas production. However, U.S. consumers are at an advantage because average prices of textiles and clothing have dropped by 2% in each of these years. Therefore, outsourcing is considered to be beneficial when savings to consumers goes far beyond the lost wages (Evans, 2004).

Determinants of the Location for Outsourcing

Apparel manufacturing involves labor intensive steps such as cutting and sewing, which cannot completely be replaced by technology. Low cost labor is considered the prime reason for the shift of manufacturing from U.S. firms to the developing and newly developed countries. There is a vast overall wage differential between domestic workers and overseas workers, but the importance of other factors like firm size, market strategy, ethnicity, and trade regulations cannot be underestimated as determinants of the location of manufacturing. It is easier for large domestic firms to produce overseas because they can easily access the best facilities and good network connections with government officials due to the bulk of their orders and market power. Finally, trade policies such as the Multifibre Arrangement (MFA) have been largely instrumental
in the organization of the global apparel industry and have led to the spread of production to low wage countries in the apparel industry. Post MFA, a massive shift of overseas production to countries like China and India was predicted, owing to their abundance in availability of low wage labor (Christerson & Appelbaum, 1995).

Trade liberalization and economic reforms since the 1990s have highlighted India’s presence in the global economy (Sekhar, 2007). India’s apparel exports increased enormously, totaling about US$ 9.68 billion in 2007-2008, making India the second largest producer of textiles and garments in the world after China (Apparel Export Promotion Council, India; Advantage India..!!; 2009).

Over the past decades, trade in textiles and apparel has been hampered by the existence of quantitative restrictions. The majority of the world textile and apparel trade fell under the quota system prescribed by the MFA from 1974 to 1995; where quotas were negotiated among the trading nations on a country-by-country basis. The World Trade Organization (WTO) approved the Agreement on Textiles and Clothing (ATC) in 1995 to eliminate the quota system by January 1, 2005 in four stages. In the first stage, a minimum of 16% of the quotas on textiles and apparel imports had to be removed by January 1, 1995. This was followed by an additional 17% and 18% by 1998 and 2002 respectively. All other remaining quotas were to be removed by January 1, 2005. World trade in textiles and apparel is now fully integrated into the WTO. Consequently, there are no quota restrictions over the amount of textile and clothing imports into the United States (Olson, 2003; Amponsah & Ofori-Boadu, 2006).

Prior to the MFA, the main source of imports for textiles and clothing to the United States was Hong Kong with a value of US$ 3686 mn, followed by China in the second place with US$ 3127 mn, in 1989. However, post MFA (by 2006) the import patterns changed and
China became the top supplier with US$ 27,067 mn followed by Mexico and India with values US$ 6,376 mn and US$ 5031mn respectively. Figure 1.1 shows the change in amount of imports since 2005 from these countries in 2006 (Khanna et al, 2007).

![Bar chart showing US$ mn imports from China, Mexico, India, and Indonesia.](image)

Figure 1.1 U.S. suppliers of MFA textiles and clothing, 2006


The recent shift in sourcing patterns was supported by two main trends in the US imports:

a) a shift within Asia from the ‘Big Three’ (Hong Kong, Taiwan and South Korea) to China and other developing Asian countries like India and

b) the growing share of non-Asian countries like Mexico and the Caribbean, owing to free trade agreements (Gereffi, 1999).

Clothing was the main import to the United States from these countries. The imports have constantly grown in value every year since 1989, except for 2001 when the imports fell by 2 %. The average import price was reduced from $2.41 per sme, (square meter equivalent) in 1996 to $1.75 per sme in 2005. This decline in the import price hastened the shift from domestic production to cheaper overseas import options, highlighting the trend of increased participation by developing countries in international trade.
Figure 1.2 U.S. imports of yarns, fabrics, apparel and made-up textiles, 2006


Figure 1.2 shows that apparel occupies the largest share with 43.2%, while Figure 1.3 reveals that cotton took over the supremacy from manmade fibers. It continued to be the most imported fiber type for apparel which indicates continued customer preference for cotton apparel (Sekhar, 2007).

Figure 1.3 U.S. imports of MFA apparel by fiber type, 2006

The Indian Garment Industry

Textiles and apparel have been major items of export for India (Shrivastava, 2004). Because apparel production is very labor intensive, it is not surprising that India is among the top suppliers for apparel, especially cotton clothing items, with its plentiful domestic supply of cotton (Sekhar, 2007).

The quotas by MFA until now had been restricting the low cost countries like India from expanding their exports. However, with the phasing out of quotas, a boom in the India’s total textile exports is projected from US$14 billion in 2004 to US$50 billion by 2010 (Shrivastava, 2004).

Major U.S. firms like Walmart, JC Penney, Target, Federated Group, Russell Corporation, and Sears Roebuck are negotiating outsourcing deals in India. Walmart has already placed US$500 billion worth of orders to Indian manufacturers, while JC Penney has sealed US$700 – 800 million in apparel sourcing from India for the next few years. Anticipating this growth in manufacturing, all major Indian textile firms like Raymond, Welspun, Arvind etc. have expanded their manufacturing facilities (Shrivastava, 2004).

India has a competitive advantage over many other nations, even China, where buyers can find similar overall quality but lower costs. Vertical integration of the complete manufacturing process from fiber to yarn to fabric to apparel is an important advantage. These benefits, combined with the virtually unlimited pool of cheap and skilled labor at low cost, make India a key player for sourcing in the garment industry, now ranked as the world’s third largest cotton producer and second largest textile producer with a tradition in textile production. Additionally, many U.S. buyers are looking at India as an alternative to China to prevent a monopoly (Shrivastava, 2004).
India’s Potential

India’s long history of traditions and its multi-cultural background have helped the textile and apparel sector grow (Saheed, 2006). The caste system has existed in India since ancient times. It developed as a demarcation of people into different groups or castes primarily based on division of labor (Malhotra, 2001). The caste system can be described as “professional distribution of labor of modern society” (Prosperity, 2006).

Even though it is not officially accepted as before, separated labor groups still exist in India today (Encyclopedia of the Nations, 2008). This prevailing labor class is another reason for India’s vast potential as a source of labor because it has 1065 million inhabitants presently, making it an almost limitless source of workers.

The progress in the clothing industry was affected by government protectionist policies. However, these bonds have been released, giving way to trade liberalization and the industry contributing substantially to India’s GDP, exports, employment and foreign exchange. India’s clothing industry is a strong pillar for the Indian economy. But this industry is very fragmented with 80% of the total of 60,000 readymade garment manufacturing units being small scale manufacturing units. This was a result of government policies favoring small scale manufacturing units. However, large manufacturing scale units with up-to-date production facilities are now entering the market, owing to liberalization. A target of US$25 bn has been set for apparel exports to be achieved by 2010 (Saheed, 2006).
Figure 1.4 Percentage share of top 10 countries in India’s Export Jan-Aug 2008

Source: Apparel Export Promotion Council of India, 2008

Figure 1.4 shows that United States still holds the maximum share of apparel exports from India despite the global financial crisis that started in 2007, when even countries like the United States, Europe and Japan became victims of the recession. Even though India has been affected, it has emerged strong with a healthy GDP growth rate of 7.1%, at a time when other national economies are straining themselves to stay afloat (Apparel Export Promotion Council, India, 2008).

The textile and clothing industry especially benefits in the international market because of competitive labor costs. In 2004, wages for the textile sector were US$0.67 per hour (Saheed, 2006) whereas in 2008, the average hourly wage of a garment industry worker reduced to US$0.51 (Thaindian news, 2008).
Areas for Concern

Even though the quota barriers would disappear, non-quantitative barriers in India can arise because of political issues; and the main areas that would be prone to attacks would be low wages, poor working conditions, use of child labor and environmental concerns (Shrivastava, 2004). In the apparel industry specifically, globalization of the manufacturing chain has brought about issues like sweatshop labor and poor work environment in the factories around the globe (Stenner, 2002). Recent studies on developing economies conducted by International Labour Office and U.S. universities have still discovered violations of workers’ rights in the apparel industry (Pollin, Burns & Heintz, 2004).

One such area of concern is ensuring that the labor wages are fair. Even though measures have been suggested, like increasing the retail cost of the end product to absorb the cost of higher wages to these workers, the issue that remains is determining a “living wage” (Pollin, Burns & Heintz, 2004). A living wage signifies an hourly wage that is required by an individual to maintain a basic standard of living. Fixing a level of living is a market-based concept of the industry and it involves subjectivity (Forgrieve, 2006).

What makes up a “fair and decent” wage for laborers has long been an issue of debate. The International Labor Organization (ILO) recommends that national governments “take account of the necessity of enabling the workers concerned to maintain a suitable standard of living” (Setrini, 2005). But the debate remains on what is considered “fair” or “decent”; as well as whether “fairness” or “livability” is a better way to gauge wage levels. The minimum wage level legislation to date has been the main measure to guard laborers against unfair pay. The ILO emphasizes that “the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards
of other social groups;” and “economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment,” be considered while determining the minimum wage (Setrini, 2005). But the minimum wage is governed by law and it may sometimes fail to qualify as a living wage (Forgrieve, 2006).

Figure 1.5 Wages in the Indian apparel and footwear manufacturing sector

Source: International Labour Organization

Figure 1.5 shows the changes in monthly wages from 1998 to 2005 in the Indian apparel and footwear manufacturing industry. It shows a sharp increase in wages from Rs.1183 ($23.5) in 2004 to Rs.2034 ($40.4) in 2005 which is a more than 70% increase. Abolition of the quotas by MFA and establishment of free trade in 2005 can be proposed as the reason for this sharp increase in wages. However, this current study can be used as a source to find data about wages currently in 2009 and a comparison can be made with this data. Changes in wage level much after MFA quota abolition can be tracked and observations can be made.
In addition, labor laws should promote efficiency and productivity. Although the hourly labor cost is 10% lower in India than that of China, it is 35% less efficient than China (“Move to raise layoffs”, 2005) indicating that a case for a decent living wage can be made with better productivity and in turn an enriched competitive advantage of the Indian apparel industry.

To improve the working conditions in their international supply chain, an important concern according to multinational companies is the living wage issue. It is an issue which needs immediate attention because of the very low levels at which prescribed minimum wages are set by regulations in developing countries. Apparel workers in countries like Vietnam, Bangladesh, Cambodia and Sri Lanka have recently protested against minimum wages and demanded an increase in the wage levels, due to the increased cost of living.

A minimum wage is set as per poverty threshold which is intended to support the basic needs of a worker, but in reality it is inadequate and usually tends to come across as a political compromise or a middle ground between taking care of workers’ needs and the prevailing economic conditions coupled with the employer’s financial capacity to pay. Therefore, apparel retail companies use minimum wage as a benchmark instead of living wage. ‘Minimum wage’ can be readily defined however; there is no universal definition of a living wage (Miller & Williams, 2009).

There have been multiple proposed definitions for what a living wage should constitute. Most of the definitions broadly encompassed the idea that a living wage should enable the worker to support the family, to maintain self-respect and support participation in the civic life of a nation. However, during the turn of the century, the living wage came to be defined in the United States as being “high enough to ensure that a full-time worker in a family of four would earn enough to keep his or her family out of poverty.” The federal poverty line was used as a
point of reference to measure this. On an international level however, it is difficult to arrive at a common consensus of what constitutes a living wage without the rise of an ethical debate. Therefore, using Brenner’s (2002) definition, living wage for this study would therefore be evaluated against the thresholds of “food, clothing, shelter, health and child care expenses, and transportation” (Brenner, 2002).

Focus of the Study

During the course of this study, to be able to assess wages from different export units and compare them with each other, a single item of import to the United States will be isolated. The most imported item of clothing was found using United States International Trade Commission (USITC) trade data web. From an assessment of most currently available data for apparel imports to the United States from India, it was found that women’s woven blouses/shirts made out of cotton was the top imported item from India. Women’s cotton blouses accounted for US$ 223,020 thousand as the top item of import. Therefore, this study will focus on suppliers of women’s cotton shirts/blouses to the United States and assess the wages in export units and estimate their livability for workers who manufacture women’s woven cotton blouses/shirts in India.

The objectives of the study are:

1) To gather first hand wage data in the export units which supply women’s cotton blouses/shirts to the United States from various size firms and see if differences exist

2) To compare these wages with International Labor Organization (ILO – part of United Nations) wage data using the Labor statistics database
3) To track changes in wage levels after MFA quota abolition and compare with other Asian countries

4) To discuss if the benefits provided in addition to the wages contribute towards a living wage

**Conceptual Definitions**

Global Sourcing: “A procurement strategy in which a business seeks to find the most cost efficient location for manufacturing a product, even if the location is in a foreign country” (BusinessDictionary.com, 2009).


Developed country: A country with a high level of per capita income, industrialization, and modernization. Such countries usually have lower levels of population growth (Western Kentucky University, 2009).

Developing country: A country that lacks strong amounts of industrialization, infrastructure, and sophisticated technology, but are beginning to build these capabilities (Teachmefinance.com, 2009).

Living wage: A wage used to compare against a threshold of the necessary dimensions of food, clothing, shelter (including utilities), health and childcare expenses, and transportation (Brenner, 2002).
CHAPTER 2

Theoretical Framework

Porter’s theory (1990) studied international trade to recognize competitive advantage of nations in particular industries and found that a nation is successful in an industry when the domestic environment for that industry is most favorable, forward looking and dynamic. The four main features are a) factor conditions; b) demand conditions; c) related and supporting industries; and d) firm strategy, structure, and rivalry; while government and chance being two additional external variables that determine the competitiveness of a nation.

Porter’s theory states that a nation’s competiveness is influenced by the ability of its industry to innovate and upgrade. Firms in that field build their competitiveness because they are in contest against the world’s best competitors and constantly under pressure to perform well. In addition; rivals, aggressive suppliers and demanding local consumers within the nation help to develop their competitiveness even further.

Figure 2.1 The Diamond Model

Source: From Adam Smith to Michael Porter, 2000
With increasing global competition, countries try to gain knowledge. Cultural differences as well as differences in values, economies, history etc. all facilitate competitive success. A nation gains competitive advantage in a field because the home environment favors it by being dynamic and challenging. Governments also support the development of national competitiveness by making changes in policies to favor domestic growth of the industries.

According to Porter, each nation operates by creating the diamond model for competing with other nations in international trade.

**Factor conditions**

Factors of production like skilled labor, land, natural resources, capital and infrastructure will dictate the flow of goods among nations. Nations will export only those goods which are produced by making maximum use of the factors that the nation is well equipped with (Cho & Moon, 2000). For example, Asian countries are endowed with abundant skilled labor that is available at a low cost. These countries have therefore become sourcing hubs for global production; adding to their competitive advantage (Cho & Kang, 2001).

**Demand conditions**

With global competition becoming increasingly widespread, importance of the domestic market may be undermined. However, the domestic demand plays an important role in driving a nation towards international competitiveness. The domestic market helps companies to perceive and interpret the buyers’ needs. The home demand acts like a prelude to the forthcoming international buyer needs.

**Related and supporting industries**

The third factor that determines a nation’s competitiveness is the existence of industries that relate to and support the growth of that industry in which the nation trades internationally.
The related industries are an advantage because they supply required raw materials, machinery and other inputs which are cost-efficient and time-effective. More than the supply of inputs, the related industries contribute to competiveness as they constantly upgrade and innovate.

**Firm Strategy, Structure, and Rivalry**

National situations would affect a company’s structure and management. They would also shape the nature of internal rivalry in the nation. All the organizational methods and management practices in a nation put together, combined with sources of competitive advantage in that industry, result in competiveness in that specific industry.

Company aims and the objectives of individuals in the company may differ. Company aims mirror the nature of national markets. But, the role motivation of an individual to work is equally important in the development of overall competitive advantage. It is rare to find outstanding talent; however, the level of education of the people, area of work and their efforts and dedication to work plays an important part in competitive advantage. On a national level, the goals set for the individuals and companies and the associated values, as well as the prestige a nation attributes to those certain industries, guides the inflow of capital and human resources into that industry. Thus, it leads to better performance and increases the level of competitive advantage of that industry.

Fierce local rivalry is the final factor that affects competitiveness. Rivalry creates a constant need to improve, innovate and upgrade. Local rivals force each other to reduce costs, provide better service and new and improved products.

As a whole system, the diamond model emphasizes the fact that the four factors are interdependent, and success of one is affected by the state of others. Weakness in any of these
determinants will restrict the potential upgrading and improvement in the industry’s performance, consequently affecting the competitive advantage of that industry.

The two outside variables, viz. government and chance, play an indirect role in creating competitive advantage. The government acts like a catalyst, establishing policies that create an environment for companies to achieve competitive advantage and sometimes even driving companies towards competitive advantage (Cho & Moon, 2000).
CHAPTER 3

Review of Literature

In a study which investigated the relationship between supply chain management and overseas sourcing strategies to benefit firms in the global market, it was found that apparel firms involved in retail trade have a choice of two sourcing strategies: 1) buying already made garments, and 2) buying semi-finished products and hiring manufacturing services. There can also be a mix of these two strategies within the same firm. In the clothing sector, opportunities for enlarging a firm’s geographic diversification affect the firm’s choice for vertical integration. Sourcing is believed to be a driver towards competitive advantage. To fully explore and utilize the expanding sourcing opportunities, increasing a firm’s body of knowledge is critical. Improved knowledge will aid in this sphere of relationship marketing applied to buying, especially with the increase in intercultural interactions, thanks to geographical diversification of the supply chain (Guercini & Runfola, 2004).

Cho & Kang (2000) conducted a study on the benefits and challenges of global sourcing as perceived by apparel firms in the United States. The data was collected from the presidents of U.S. apparel retail firms that outsource. Results showed that the main advantages were service enhancement and competitive advantage. It was the women’s clothing firms that sought for maximum service enhancement; while India was rated the highest on competitive advantage. The two top challenges faced by these firms in outsourcing were trade regulations (quotas and tariffs) and logistics. The study concluded that firms outsourcing women’s clothing perceived more service enhancement. India and China were perceived as possessing the highest competitive
advantage, but the challenges associated with logistics and trade regulations were also perceived as maximum from these Asian countries (Cho & Kang, 2000).

Immense competition from countries like India, China and Mexico would be responsible for a shift in global apparel production. As a response to the inflow of new competition, branded marketers are looking to make their supply chain more effective and widen the scope of global sourcing options. Lesser but more capable manufacturers are employed as an attempt to minimize the supply chain. Contractors receive instructions on where to get required components, hence diminishing their own purchase and redistribution activities.

Manufacturers in developed countries employ foreign production by supplying intermediary inputs like fabric, thread, trim etc. to countries in close proximity. Free trade agreements with such countries help the marketers to re-import the finished products from those countries, paying only for the added foreign labor as a tariff charge. Thus, there is a shift in global sourcing among U.S. firms from Asia to North America, with Mexico being a strong player. Mexico is exercising its networks with the U.S. industry to capture the market share that previously belonged to the East Asian suppliers (Gereffi, 2001).

Elimination of textile and apparel quotas was expected to serve as a boost for outsourcing and a rise in international trade. Olson (2003) predicted a shift in the buying in the U.S. apparel industry. U.S trade in apparel and textiles was scheduled to be completely quota-free beginning January 1, 2005. However, it was predicted that elimination of quotas would hinder exports rather than facilitating it especially for small international producers. Analysts predicted that only those countries which are fully utilizing their quotas would benefit from the abolition of quotas, and that only those will actually increase their amount of exports after the phasing out of the quotas (Olson, 2003).
One implication of the abolition of quota systems is that production will be relocated to fewer low-cost locations. Firms will have access more freely to products and comparative wage levels. Other factors that would decide the location of production would be skills and flexibility of labor, status of the country’s financial system and origin of capital, production processes and approach towards technology, as well as infrastructural facilities like transport and communication. China and India are likely to gain the maximum production for export, having abundant indigenous fabrics. Major retailers and brand based companies will gain from the opening of markets, and these are the global players who will have control over the industry without government protection being imposed on them. Improved technology at the stores helps them to track fashion trends, and therefore these companies are now looking for more flexible action suppliers. The major retailers and brand based companies obviously benefit from trade liberalization because they will now be able to source from profitable locations which were initially restricted. This will pressurize competitive suppliers to further lower their price, and the burden of reduced costs will finally be passed on to the workers. Workers will be expected to work for longer times without sufficient overtime compensation. However, some governments may reciprocate by upgrading their infrastructure. From an international survey, it was found that the most significant reason for failure in an open market was unsuitable products for a fast changing market. Such a demand for flexibility will also lead to uncertain employment conditions for labor and forced overtime. The apparel industry was always known for poor working conditions and low wages for its laborers. Trade liberalization will only push this even further (Hale, 2002).

However, positive implications for India have been predicted after the phasing out of quotas. India has high potential for growth and progress in the textile and apparel industries
because of its comparative advantage over other industries as well as other nations. But this potential was constrained by domestic government regulations and international regulations as those by MFA. Low efficiency of processing sectors was partly due to the reservation of sections of the industry for small scale industries. The cotton industry being a comparative advantage was protected by severe restrictions against import of man-made fibers. Cotton growers benefited completely because there were quotas imposed on the exports. These distortions are the contributing factors towards reducing competitiveness of the Indian clothing industry.

By measuring the scale effects, it was clearly exhibited that the textiles and clothing sector became more efficient with removal of these distortions. The textiles and clothing outputs also increased in developing countries. There was also improvement in the labor and capital returns (Chadha, Pohit, Stern & Deardoff, 1999).

However, India will also have to face a number of challenges in the global market. Ramaswamy & Gereffi (2000), studied and presented their perspectives on the changing scene in the global marketplace for apparel and the nature of the export market in India. Currently, in the global apparel market, retailers have more control over the pricing and designing of the products with the growing size and their changing structure. This has compelled suppliers to adopt techniques like electronic data interchange to be able to satisfy the retailers in a timely manner. Retailers are also looking to increase their market share by having wider product lines. Hence, there is uncertain demand, and therefore retailers want to order in smaller quantities and replenish when there is a need later during the season. This has resulted in decreased lead times for suppliers in the global apparel industry. There is also a move towards more specialization in product categories to capture a niche market and to counteract the loss of competitiveness. The traditional competitive advantage of low cost and high volume is losing its ground to the new age
mantra for competitiveness that is quality, design and service. However, in India production for exports is independent from the production for domestic consumption. Reservation of apparel products for the small scale industries has prevented foreign direct investments into this industry and consequently limited technological advancement. Competitors like China, Malaysia, Sri Lanka and Mauritius have advanced quickly owing to foreign investment. The challenge is restructuring the Indian clothing industry to prepare it for the competition that will arise post phasing out of the quotas (Ramaswamy & Gereffi, 2000).

Factor conditions

Following from the theory, this research is focused on the factor conditions, especially labor conditions in India, that will affect its overall competitiveness in the global apparel market. As global apparel manufactures would be drawn towards low wage countries, the issue of sweatshops emerges as a significant determinant. A study by Adams in 2002 stated the various issues in sweatshop labor and about organizations that have been established to protect sweatshops. Adams (2001) states that some of the factors which result in the spread of sweatshops are corporate greed, lenient international policies where nations are short of stringent and effective labor laws, and a search for the cheapest prices. However the benefits of low cost must be carefully weighed against the consequences of negative publicity and lawsuits.

In a broader perspective, sweatshops are helpful to the poor. Income from working in sweatshops is the only source of living in many developing countries; therefore it is better than having no income at all. Sweatshops in such countries, in fact, aid in the economic development process. This can be supported by two points: firstly, sweatshops may symbolize the path towards economic progress in under-developed countries with a rich pool of unskilled labor and require capital investment. Secondly, sweatshop critics do not evaluate conditions on a realistic
scale. Their working conditions may be considered below standards when compared to the western countries, but when compared to other developing countries, the conditions are sometimes even better than the national standard.

In December 1995, a group named “Trendsetters” was created for improvement in sweatshop conditions. Major retailers like The Gap, Nordstrom, The Limited and Land’s End were a part of it. National Retail Federation of the United States, an organization that works towards protecting the interests of the retail industry, requires its members to comply with its “Statement of Principles on Supplier Legal Compliance” which means that retailers need to buy goods that are “legally, ethically and morally” produced (Adams, 2002, 151).

Effects of sweatshop reform, at both the firm level and national level, should be carefully evaluated by retailers. Retailers, critics and activists must keep in mind that a widespread sweatshop reform would be expensive, and the cost will be transferred as higher prices with reduced effect (Adams, 2002).

With increasing concerns about the spread of sweatshops internationally, European and U.S. activists have been working towards increasing awareness. One of their popular instruments for the cause of apparel industry workers globally, is the corporate code of conducts (Brenner, 2002). A related study by Rivoli (2003) summarized criteria for evaluation of labor standards especially useful for buyers who are looking to source to the low wage countries. The criteria were divided under the following categories.

**Codes of conduct.**

Most U.S. firms have taken up codes of conduct to oversee their business relationships with outside countries. The apparel and toy industries are the most susceptible to sweatshop charges. These industries have accepted supplier specific codes of conduct.
Some codes are a result of deliberations by group of similar industries or industry associations, some codes are specific to individual companies, while some others are an effect of efforts by human rights or religious groups. Some examples are American Apparel Manufacturers Association, the Fair Labor Association, and the Workers’ Rights Consortium. Codes from these associations overlap on a number of points such as prevention of child labor, prohibition of race or sex based discrimination and provision of minimum health and safety standards for the workers. Very few codes grant workers the right to collectively organize.

**Dissemination.**

Just the presence of codes is insufficient for investors who want to evaluate a firm. The dissemination of those codes to workers is equally important. Sub-contractors, workers and employees should be aware of the codes. The ILO found that very few U.S. companies have written provision for declaring codes of conduct.

**Disclosure.**

An emerging issue in student and shareholder campaigns is the extent of disclosure of details about their sub-contracting firms by U.S. firms. It is believed by activists that exposure will force improvement in firm behavior. Therefore they believe in maximum disclosure. However, the flipside is that more disclosure may eventually result in less serious monitoring.

**Monitoring and enforcement.**

The monitoring for a major portion of US firms is conducted as part of an internal audit system. When a sub-contractor is employed, codes fall into the contractual agreement. Other options include monitoring by an external non-profit organization, or by an external for-profit monitoring service by consultants.
A serious concern in the wide spread, anti-sweatshop movement is that, although the movement is for the advantage of low wage workers, it may work against them. Even though the working conditions may be objectionable for US firms, these low-skill work opportunities are the best opportunities for many workers in developing countries. Though the goal is betterment, these movements may in fact reduce employment opportunities and, in turn cause harm to the working poor. Recent liberalization in trade has accelerated a ‘race to the bottom’, that is, a shift in production facilities to a location where there is abundant and lower wage labor available. This race has been helpful in providing a source of living to the poorest, raising their standard of living and reducing poverty irrespective of the codes (Rivoli, 2003).

A feature of studies involving corporate codes of conduct is the evaluations of wage levels (Brenner, 2002). Chan & Ross (2003) studied the global labor scenario in the northern and the southern hemispheres, with specific emphasis on China and Mexico in their race to capture the North American market. They studied the labor movements of the South and the likelihood of a “race to the bottom”; where fierce competition among nations is leading to constantly decreasing labor costs. They observed that, with increased production for global markets in the apparel industry, there has been a tremendous increase in employment. However, this growth has not benefited the laborers, in China, as well as Mexico, in the form of higher wages. This affects the real purchasing power of the laborers.

Chan & Ross (2003) showed that wages in China are lower than in Mexico but those wages include provision of housing and subsidized food for the work force. In this way, the management has more control over the mobility of the workers and their work hours. By providing subsidized food, time spent on chores like cooking is expected to be reduced. In Mexico however, the workers are mainly single women with families to take care of. Therefore
they have to spend a portion of their time on cooking and taking care of the house. Hence there is less control of the management over the working hours and overtime. In reality, the wages are much below the minimum wage levels in Mexico.

The researchers concluded that more jobs did not necessarily mean better wages and working conditions. In fact, the more the inflow of jobs to China from its neighbors, the lesser is the wages levels for workers. The authors finally recommend that, to achieve a redistribution of global wealth, minimum wages should be local livable wages, and laborers should be granted the rights to take action in defense of their wages. These must be established as global norms (Chan & Ross, 2003).

Miller & Williams (2009) examined various approaches by which a living wage instead of a minimum wage can be implemented for apparel industry workers. It was concluded that a modest price increase in the retail price of the product could provide for living wages for the workers. This increase in price could also be taken up by working towards saving with the aid of better supply chain management. However, a careful assessment of other public and private projects that proposed implementation of decent wages for workers revealed various problems in this approach for implementation. The sourcing companies will need to integrate with the manufacturing companies in order to be able to monitor unit labor costs and ensuring payment of living wages against the benchmarks set for each country. Such a level of integration has not yet developed in this sector according to researchers (Miller & Williams, 2009).

Globalization has led to a number of social concerns internationally, one of them being labor standards. In the review by Lee in 1997, it was stated that globalization and intense competition led to increased downward pressures on the labor standards. The author argues that the acceptance of a universal policy for labor standards may not be an optimum solution because
human rights and labor standards may be culture specific; also they are highly dependent on the existing economic conditions and analytical beliefs of the nation (Lee, 1997).
CHAPTER 4

Methodology

Data Collection

The purpose of this study is to assess the wages in export units of women’s woven cotton blouses/shirts in India and to estimate the livability of this wage. Primary data on wages were collected through telephone interviews with the managers or their representatives of export units in India that manufactured women’s blouses and exported them to the United States. Five online resource databases for Indian exporters were located using a google search. The five databases were:

1. www.tradeindia.com
2. www.indianindustry.com
3. www.thomex.com
4. www.indiamart.com
5. www.indiaetrade.com

These five databases were used to locate exporters in India who manufacture women’s cotton blouses and also trade with the United States. Convenience sampling was used to create a list of sixty exporters in India meeting these criteria. These criteria were confirmed by visiting the catalogue webpage of these export companies. Multiple phone calls were made to each company over a period of two months and finally 17 interview responses were received. The response rate represents approximately 30%. Three of the 17 companies contacted, indicated that they would prefer to answer the survey via email at their own leisure because they were too busy for a
telephone interview. They were then sent the interview protocol and consent script via email. Therefore, three of the total 17 responses were received via email.

During the brief telephone interview, respondents were educated about the study and the data collection procedure using an IRB approved consent script found in Appendix A. The interview protocol was divided into four sections each containing one main question with multiple subparts. The four main sections were: 1) work culture, 2) workforce composition, 3) wages and 4) benefits. The interviews were recorded and transcribed.

Data Analysis

The information from interviews was analyzed objectively and data were categorized as per the size of the company based on the number of installed machines they possessed. One-way ANOVA test was used to check if differences existed between wages in the different categories. United Nations data were used as a secondary source of data to make comparisons on wage levels since 2005. International Labour Organization (ILO) is the agency under United Nations that aggregates national governments, employers and workers of all its member nations globally. Promoting decent work all over the world is a primary mission of the ILO (International Labour Organization, 2009). “LABORSTA” database of labor statistics was the source of past monthly wages in the textile and apparel industry in India. A comparison was made between these wages and the current data collected through interviews to track changes.

From the obtained primary data, the benefits provided to workers in the Indian export units were objectively described and discussed.
Operational definitions

Wages: “Wage rates usually include basic wages, cost of living allowances and other guaranteed and regularly paid allowances, but exclude overtime payments, bonuses and gratuities, family allowance and other social security payments made by employers” (International Labour Organization, *Main statistics (monthly) - wages, 2009*).

Hours of work: Hours of work is the number of hours spent at the place of work excluding official break time.

Method of wage payment: Method of wage payment is the duration between payments of wages to a worker by the export unit. For example, a monthly wage is paid every month while a daily wage is paid every day to the worker. It can also be a piece rate, where in a worker is paid a wage based on the number of pieces produced by him/her every day.

Consumer Price Index: “The CPI is a current social and economic indicator that is constructed to measure changes over time in the general level of prices of consumer goods and services that households acquire, use or pay for consumption” (International Labour Organization, *Main statistics (annual) – consumer prices, 2009*).
CHAPTER 5

Results and discussion

There were 17 export units/companies that participated in the study either by telephone or email. The interview consisted of four sections:

1. Work culture

2. Workforce composition

3. Wages

4. Benefits

Section 1 was used to collect background information about the company. It included questions about the investment level of the company, number of workers employed, working hours, break time and number of shifts. The number of workers recorded during the interview included tailors and other staff. Export unit representatives said that apart from machine operators, the unit had workers for cutting, ironing, packaging and other general staff. The number recorded was the total number of employees in the unit. Hours of work recorded were for a single day.

The export units were categorized into three different groups based on the size of the unit. Size of the unit was assessed by evaluating their production capacity, that is, the installed number of machines in the individual export units. Machines included sewing machines as well as special machinery like button/buttonhole sewing machine, overlock machines and pressing units.
The three categories of export units were:

1. Small: Units with up to 50 machines
2. Medium: Units with 51 – 100 machines
3. Large: Units with more than 100 machines

As indicated in Figure 4.1, more than half (53%) of the export units were small, that is they had up to 50 machines in their unit. While there were only 12% that were medium sized, the large sized units accounted for 35%.

**Hours of work**

The majority of all the export units followed eight hour working shifts per day. They also had a one hour lunch break or a half hour lunch break and two 15 minute tea breaks. However, three small units (units 9, 10, and 11) had eight hour shifts plus overtime if it was required according to the order size that they were currently undertaking. There were two small units (units 3 & 9) though, which followed a 12 hour shift and mostly employed males (90-95%) because according to the export unit representatives, females could not work for that long. Two
large units (12 & 15) followed two 6 hour shifts per day. The working hours for each unit have been summarized in table 4.1.

Table 4.1 Working hours in the export unit

<table>
<thead>
<tr>
<th>Unit</th>
<th>No. of Machines</th>
<th>Category (unit size)</th>
<th>No. of workers</th>
<th>Hours/day</th>
<th>Shifts/day</th>
<th>Hours/week (per worker)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>small</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>small</td>
<td>45</td>
<td>8 * 3</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>15-20</td>
<td>small</td>
<td>Data unavailable</td>
<td>12</td>
<td>1</td>
<td>72</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>small</td>
<td>25</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>small</td>
<td>20+</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>6</td>
<td>45+</td>
<td>small</td>
<td>75+</td>
<td>8</td>
<td>1 overtime</td>
<td>48</td>
</tr>
<tr>
<td>7</td>
<td>40 +</td>
<td>small</td>
<td>40</td>
<td>8</td>
<td>1 overtime</td>
<td>48</td>
</tr>
<tr>
<td>8</td>
<td>50</td>
<td>small</td>
<td>80</td>
<td>8</td>
<td>2 overtime</td>
<td>48</td>
</tr>
<tr>
<td>9</td>
<td>50</td>
<td>small</td>
<td>70</td>
<td>12</td>
<td>1</td>
<td>72</td>
</tr>
<tr>
<td>10</td>
<td>85</td>
<td>medium</td>
<td>110+</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>11</td>
<td>100</td>
<td>medium</td>
<td>146</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>12</td>
<td>100+</td>
<td>large</td>
<td>300+</td>
<td>6 * 2</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>13</td>
<td>150</td>
<td>large</td>
<td>250</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>14</td>
<td>150</td>
<td>large</td>
<td>175+</td>
<td>8</td>
<td>1 overtime</td>
<td>48</td>
</tr>
<tr>
<td>15</td>
<td>200+</td>
<td>large</td>
<td>1877</td>
<td>6 * 2</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>16</td>
<td>550</td>
<td>large</td>
<td>875</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>17</td>
<td>1200</td>
<td>large</td>
<td>1200</td>
<td>8</td>
<td>1</td>
<td>48</td>
</tr>
</tbody>
</table>

Four out of 17 managers or representatives stated that they provide overtime only if it was required according to work load. Each unit worked six days a week. Because overtime hours were not consistent and based on individual order sizes, it was excluded while calculating the total hours of work per week per unit. The overall weekly hours of work for each unit for an individual worker have been calculated and presented in the last column. There was no specific pattern in the hours of work across the three categories. Considering all 17 units, the average weekly hours of work, excluding overtime, for an individual was thus calculated to be 49 hours with 9.3 hours standard deviation.
The average hours of work per week in the textile, apparel and leather industry in India was 47.5 hours in the year 2005 (International Labour Organization, 2009). Thus, the hours of work have increased by an hour and a half (3%) since 2005.

**Wages**

Section 3 on the interview protocol was designed to record the wages of workers in the export units. During the interview, export unit representatives mentioned that the wages differed according to the job. Wages for tailors or machine operators were different from the ones that worked on cutting or packaging. Designers and managers were paid differently when compared to machine operators. Besides there was also general office staff which followed a different pay scheme.

While examining the global apparel value chain, Miller & Williams (2009) found that the values added by sewers/tailors were understated and their skill level was underestimated. They were located at the bottom of the apparel value chain in the apparel manufacturing industry (Miller & Williams, 2009). Therefore, in this study only the wages of tailors were recorded.

Different methods of wage payment definition were observed viz. monthly salary, bimonthly and piece rates. The monthly salaried are the ones that had a fixed monthly salary. Bimonthly is when the employees were paid twice a month. Piece rate tailors were paid by the number of pieces they stitch per day. According to the export unit representatives, piece rate workers can earn varied amounts of money depending on their speed of stitching. Also, the rate for each piece depends on the style and difficulty level of the product. All respondents who followed piece rates for payment of wages confirmed that they make sure workers received daily minimum wages. Even if the individual piece rate differed from style to style, the total wage for
a single day will not be below the minimum wage level stipulation of that particular town or state. Unit 3 representative explained this norm as follows:

“Workers earn for what they produce. Piece rate is different for every product based on design, complication, fabric etc. But the minimum is Rs.200 per day. A worker needs at least Rs.200 per day, so I have to pay them that. If the product is made by a soft sheer fabric, then they will be able to produce less, but if it’s a thick fabric they can produce more per day. It all depends on the product. If they are able to produce only two pieces per day because of design complication, they will receive at least Rs.100 per piece so that the minimum wage level of Rs.200 is being paid” (Unit 3 representative).

Piece rates are very specific to each unit as well as the product being produced. All respondents were able to present only a range for the daily earnings. For this reason, the researcher inquired about the piece rate for the most basic cotton shirt and the minimum number of pieces produced per day was recorded. Using these figures, the minimum earnings per day was calculated. This number represents only the lower limit, and according to the respondents almost every tailor tends to earn more than this amount as they usually make more than the minimum goal. Other respondents gave a salary figure which represented the minimum that any tailor in the unit earned. These numbers have been summarized in Table 4.2.
Table 4.2 Wages in Rupees for tailors in the export units in India

<table>
<thead>
<tr>
<th>Unit</th>
<th>Firm category</th>
<th>Wage type</th>
<th>Earnings per day (if pc rate)</th>
<th>Earnings per month (if salary)</th>
<th>Approximate monthly wages - lower limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>small</td>
<td>pc rate</td>
<td>150</td>
<td></td>
<td>3750</td>
</tr>
<tr>
<td>2</td>
<td>small</td>
<td>salary</td>
<td></td>
<td>confidential</td>
<td>unavailable</td>
</tr>
<tr>
<td>3</td>
<td>small</td>
<td>pc rate</td>
<td>200</td>
<td></td>
<td>5000</td>
</tr>
<tr>
<td>4</td>
<td>small</td>
<td>salary and pc rate</td>
<td>300</td>
<td>5500</td>
<td>6500</td>
</tr>
<tr>
<td>5</td>
<td>small</td>
<td>salary</td>
<td></td>
<td>5900</td>
<td>5900</td>
</tr>
<tr>
<td>6</td>
<td>small</td>
<td>pc rate</td>
<td>200</td>
<td></td>
<td>5000</td>
</tr>
<tr>
<td>7</td>
<td>small</td>
<td>salary and pc rate</td>
<td>280</td>
<td>3000</td>
<td>5000</td>
</tr>
<tr>
<td>8</td>
<td>small</td>
<td>salary and pc rate</td>
<td>depends on style</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>9</td>
<td>small</td>
<td>pc rate</td>
<td>250</td>
<td></td>
<td>6250</td>
</tr>
<tr>
<td>10</td>
<td>medium</td>
<td>pc rate</td>
<td>800</td>
<td></td>
<td>20000</td>
</tr>
<tr>
<td>11</td>
<td>medium</td>
<td>salary</td>
<td></td>
<td>6000</td>
<td>6000</td>
</tr>
<tr>
<td>12</td>
<td>large</td>
<td>pc rate</td>
<td>350</td>
<td></td>
<td>8750</td>
</tr>
<tr>
<td>13</td>
<td>Large</td>
<td>bi- monthly</td>
<td>confidential</td>
<td></td>
<td>unavailable</td>
</tr>
<tr>
<td>14</td>
<td>large</td>
<td>pc rate</td>
<td>250</td>
<td></td>
<td>6250</td>
</tr>
<tr>
<td>15</td>
<td>large</td>
<td>pc rate</td>
<td>depends on style</td>
<td></td>
<td>unavailable</td>
</tr>
<tr>
<td>16</td>
<td>large</td>
<td>salary</td>
<td></td>
<td>3692</td>
<td>3692</td>
</tr>
<tr>
<td>17</td>
<td>large</td>
<td>salary</td>
<td>3000 + incentive</td>
<td></td>
<td>3000</td>
</tr>
</tbody>
</table>

Table 4.2 shows a column for each of the following: earnings per day for tailors earning piece rates, and earnings per month if tailors received a monthly salary. Units 4, 7 and 8; all
being small units had tailors employed on piece rates as well as tailors working on salaries. For these three units, both figures were recorded and an average of the two was calculated as the average monthly earning for a worker in that unit.

For uniformity, all earnings were converted into average monthly wages per worker for each unit as presented in the last column of table 4.2. For units which had tailors working on piece rates or daily wages, their pay was converted to monthly earnings using the following formula:

\[
\text{Monthly earnings (pc rate workers)} = \frac{\text{Earnings per day}}{\text{Number of working days per month}} \times \text{per day} \times \text{per month}
\]

Earnings per day recorded were based on the rate for each piece produced multiplied by the number of pieces produced in a single day. Number of working days per month was calculated by considering the annual national and religious holidays specified by the Government of India.

Because India is a religiously diverse country, there are multiple religious holidays that the Government of India honors. There are not only the national holidays that are common for the whole country, but also additional state and other religious holidays which are categorized as ‘restricted holidays’. A company can chose a limited number of holidays from the restricted ones depending on its location and work force (Robinson, \textit{TIME}, 2007). The Government of India calendar lists these national and restricted holidays (India.gov.in, 2009). For the purpose of this study, the average number of holidays in a year was considered 17 (Robinson, \textit{TIME}, 2007).

Each unit worked six days a week. With 17 holidays per year, each month accounts for 1.5 holidays. For calculation of the monthly wages, one holiday per month was considered. Therefore, 25 working days per month was used to calculate monthly earnings. Considering one holiday instead of 1.5, balances out with alternating 30 and 31 days in each month.
A mean of the total average earnings for all units gives Rs.6220 as the average monthly wages for units covered by this study.

Benefits

The last section on the interview protocol was designed to obtain information about benefits provided to the workers in the unit in addition to the wages. For easy discussion, as mentioned earlier, all participating export units were categorized as small, medium and large units according to the number of machines they possessed. The benefits provided by units under each category are discussed below.

Small units: There were nine units that were categorized as small units. Each of them provided different kinds of benefits to the employees. Those were basic benefits like conveyance in the form of monthly local bus passes or pick up and drop offs during night shifts, maternity leave, snacks and refreshments during the day, provident fund (paid after retirement), annual bonus during religious festivals like Diwali. Some units provided for Employee State Insurance (ESI) for the workers. Nevertheless, three of the nine small units (Units 3, 6 and 9) did not have any benefits for the workers because according to those representatives, workers were employed on daily wages. And therefore they were temporary workers. They did not remain with a single unit for a long period of time. When inquired about benefits for temporary workers, unit 3 representative said that,

“Workers are not fixed to one single factory unit. If they find better work or higher pay somewhere else, they go there for work. So, to attract them and keep them to our unit, we try and provide food sometimes, or give them subsidized loans which they never end up paying. It is a totally labor oriented industry” (Unit 3 representative).
Medium units: Two units (Units 10 & 11) fell under the medium category. These units had 85 and 100 employees respectively. Unit 10 employed workers on a piece rate and provided for benefits like health care, insurance as well as conveyance. Unit 11 had salaried workers and they also received insurance and health care benefits. In addition, the salaried workers also received incentives for “quality and productivity.”

Bheda et al (2003) suggested that an incentive for workers is a step towards productivity. There is scope for higher productivity in the Indian apparel industry. Productivity will not be sustainable until individual workers benefit from the productivity (Bheda et al, 2003).

Large units: Six units (Units 12-17) were categorized as large units because the units had more than 100 installed machines. The maximum number was 1200 machines in unit 17. All of the large units provided benefits to the workers even though half of the units employed workers on piece rates. All large firms provided for medical benefits. It included benefits like health checks, paid medical facilities for worker and family and medical insurance. Unit 16 also had an in factory occupational health center. The unit has a trained nurse on all working days and weekly visits by the doctor. Besides, it also had a special insurance police for female workers. Unit 15 had accident and insurance policies for worker and families. It also had a proposal to set up an in house world class hospital and school for employees and their families. There were plans to build to a mini township, theater and community hall for the employees.

Large units also provided for conveyance benefits, provident fund and annual bonus. There were two other unique benefits in these large units. Unit 12 provided accommodation for out of state workers. Unit 17 had a daycare facility for the employee’s children. Table 4.3 summarizes the benefits provided to workers by small, medium and large units.
Table 4.3 Benefits provided to workers by export units in India (by unit type)

<table>
<thead>
<tr>
<th>Unit type</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
</table>
| Benefits  | • Conveyance  
             • Insurance  
             • Snacks & refreshments  
             • Special pick up & drop during night shifts  
             • Provident fund  
             • Bonus | • Conveyance  
             • Insurance  
             • Health care  
             • Incentives for quality & productivity | • Conveyance  
             • Insurance  
             • Special insurance for female workers  
             • Accident insurance policies  
             • Provident fund  
             • Bonus  
             • Medical checkup, doctor visits, nurse availability, hospital  
             • Daycare facility  
             • Accommodation for out of state workers |

Discussion

Discussion of objectives

1) To gather first hand wage data in the export units which supply women’s cotton blouses/shirts to the United States from various size export units and see if differences exist

Data were collected from various size export units in India. Average monthly earnings for each unit obtained from Table 4.2 were used to generate a mean for each category of the export units. The mean monthly earnings for each unit type have been presented in Table 4.4.
Table 4.4 Mean monthly wages per worker for each unit type

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Mean monthly wages per worker (inRs.)</th>
<th>Equivalent dollar amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>4925</td>
<td>$98</td>
</tr>
<tr>
<td>Medium</td>
<td>13000</td>
<td>$258</td>
</tr>
<tr>
<td>Large</td>
<td>5423</td>
<td>$108</td>
</tr>
</tbody>
</table>

Workers in the small and large units earned similar wages within the range of Rs.4900 – Rs.5500 i.e. $97 - $110 per month. However, the medium sized unit had a much higher number of Rs.13000 or $258. This may be because there were only two medium units, whereas there were nine small and six large units. The medium units were not represented equally.

Figure 4.2 shows the boxplot for wages across categories and the comparison between them.

Figure 4.2 Boxplot for wages in the small, medium and large categories (Minitab output)
It can be verified from figure 4.2 that wages in the small and large units were in the same range, while wages in the medium units are fewer in number and more widespread. They can thus be considered as outliers. The means for wages in large and small units are closer to each other while the mean for medium units is much higher. Hence it can be concluded that, there was a difference in the monthly wages for workers in medium units, while there was not a significant difference between the large and small units.

2) **To compare these wages with International Labor Organization (ILO – part of United Nations) wage data using the Labor statistics database**

From the data obtained through this study, the mean of the total average earnings for all units was Rs.6220. Even though this study had a limited sample size due to feasibility issues, it covered export units from all over India instead of concentrating on a single city/town. Therefore, for the purpose of discussion, the current average monthly earnings of workers i.e. the 2009 figure will be used as Rs.6220.

In 2005, the average monthly earnings in the textile, apparel and leather industry was only Rs.2033.5; according to ILO Labor statistics database. ILO data on wages in the Indian apparel industry post 2005 is unavailable. Figure 4.3 depicts the change in wages from 2005 to the current.
Figure 4.3 Change in monthly wages in the apparel industry in India

Source: International Labour Organization & results from the current study

Current average monthly wages is Rs.6220 ($123.5). As seen from figure 4.2, there is a sharp increase from Rs.2033.9 ($40.4) in 2005 to Rs.6220 ($123.5) in 2009. The wages have increased by 205% after 2005.

3) To track changes in wage levels after MFA quota abolition and compare with China

In 2005, the quota system of international trade by the Multi Fiber Arrangement was abolished and free trade was established. Post MFA, a massive shift of overseas production to India was predicted, owing to its abundance in availability of low wage labor (Christerson & Appelbaum, 1995). India, with China, was likely to gain the maximum production for export, having abundant indigenous fabrics. On the other hand, it was envisaged that trade liberalization post MFA will only push wages even lower in the apparel manufacturing industry, which was already known for poor working conditions and low wages (Hale, 2002).
In 2005, average monthly wage in the Indian apparel manufacturing industry was Rs.2033.9 ($40.4). The data from the current study show that the average monthly wages increased to Rs.6220 ($123.5) in 2009, which is a 205% jump. Therefore, data obtained from the current study go against the premise that wages will be pushed lower after as a result of trade liberalization. The overall trend showed that wages have grown three times the original level since the MFA quota abolition.

In 2005, average monthly wage in manufacturing sector (data in apparel manufacturing was unavailable) in China was ¥1313.08 ($192.5) as against that of Rs.1234.4 ($24.5) in India (International Labour Organization, 2009). Wages in India were approximately 86% lesser than those in China. Although current data for wages in China is unavailable, in 2007 the manufacturing wages had risen to ¥1740.33 ($255.1). The fact that wages in the manufacturing sector have risen from $192.5 in 2005 to $255.1 in 2007 also support the argument that trade liberalization has only led to an increase in wages rather than a decrease.

The above conclusion is further supported by Rivoli (2009), who stated that there has been an increased awareness about fair pay and better working conditions for the workers in China. There has been increased number of protests and demands by workers which has now led to higher wages to the Chinese workers. Violators of work code ethics are now brought to justice by ‘noncorrupt regulatory and judicial system’ (Rivoli, 2009, 136). Thus, according to Rivoli (2009), trade liberalization and new labor laws are only resulting in the betterment of the conditions for workers (Rivoli, 2009).
4) To discuss if the benefits provided in addition to the wages contribute towards a living wage

A minimum wage has a defined threshold while there is no universally accepted definition for a living wage. There are specific thresholds to calculate a living wage. Therefore, companies who source globally, end up paying a legal minimum wage as stipulated by the local government (Miller & Williams, 2009).

As found in this study, all export unit representatives were committed towards paying at least a minimum wage to the workers as stipulated by the local government. More than half of the respondents made it clear that minimum wages are the lowermost limit and that workers end up earning more than the minimum wages if they exceeded the minimum target. Unit 17 representative mentioned that the targets are usually achievable and workers are encouraged to produce more so that they can earn more.

Miller & Williams (2009) shared that a practical approach to assess a living wage would to ‘negotiate’ rather than ‘calculate’. The ‘negotiating’ approach offers more flexibility to cater towards the needs of the local workers and provides the possibility of meeting with the requirements of the specific workforce in a specific locality (Miller & Williams, 2009). In this study, a similar trend was observed. Even though all the companies ensure minimum wage payment to workers, most of the companies also provided additional benefits to workers depending on the local requirements. From table 4.3, it is evident that irrespective of the size of the company, small, medium and large sized units provided workers with conveyance because workers lived far from the units or factories. Some units also provided medical facilities for workers and their family. Some others provided food and refreshments during the day. Therefore, despite being paid minimum wages, the provision of additional benefits can be
attributed towards the earning of a living wage. Also, these benefits satisfy in parts (though not whole) the aspects of “food, clothing, shelter, health and child care expenses, and transportation” of a living wage as proposed by Brenner (2002).

The livability of these wages can be further supported by taking into account the change in consumer price index during the period 2005 to 2009 as shown in figure 4.4.

Figure 4.4 Comparison of change in monthly wages in the apparel industry and change in consumer price index in India

Source: International Labour Organization & results from the current study

Consumer price index is an indicator of change in the prices of consumer goods and services of a nation. Even though the monthly wages have increased by 205% from 2005 to 2009, the consumer price index graph in figure 4.4 shows that consumer prices only increased by 26.5% from 121.5 in 2005 to 153.7 in 2009. Despite there being an increase in the consumer price index, the increase in wages of the workers is far more (205%) than the increase in
consumer prices (26.5%). Therefore, it can be concluded that the increased wages and additional benefits account towards a living wage for the worker in India.

However, the size of the unit may influence the kind of benefits provided to workers. Table 4.3 suggests that large units have better medical facilities like an in-house nurse, regular visits by the doctor, accident insurance policies etc. Large units also provided additional benefits like special insurance and daycare facilities for female workers. An in-house medical hospital and school were proposed for workers in Unit 15.

It can therefore be concluded that these benefits provide much more than a basic minimum wage to a worker. But the size of the unit and the level of investment involved had an effect on the quality of benefits that a worker is entitled to.

Limitations

1. The study was only limited to those export units or companies that were listed on the online databases used in the study.

2. The study was also limited to the units that produced women’s cotton blouses or shirts and exported to the United States.

3. Because the units were located in a different country, visits to these units could not be made to verify the infrastructure.

4. The data were provided by the managers or their representatives contacted and were not verified by the workers or a third party.

5. Wages rates for 2009 are calculated from the 17 unit sample. ILO data were collected by National Sample Survey Organization and calculated by the Labour Bureau, Ministry of Labour, India (ILO, 2009).
Further Research

This topic provides baseline data for further study. Because this study was qualitative, the inquiry can be continued in the form a quantitative study where a living wage can be compared against specific mathematical figures. Any of the proposed definitions for a living wage can be used and an approximate living wage can be calculated using national level data. A comparison against this number would yield the real livability of the wage.

Another aspect that can be included in future research is the physical working conditions in the units. Even if the wages paid to workers are higher than minimum wages, the physical conditions in the units can be studied to see if the wages are indeed decent enough. This study only covered a manager’s perspective. Hence, further research can be initiated to actually include the workers’ opinions.
CHAPTER 6

Conclusion

After the abolishment of MFA quota system of international trade since 2005, it appears that there has been a huge jump in the wages from Rs.2033.9 ($40.4) in 2005 to Rs.6220 ($123.5) in the Indian apparel industry. Even though there has been a 3% increase in the average hours worked during a week, the wages have steeply proliferated a 205% since 2005. All managers reported that their companies consistently paid at least a minimum wage to the workers irrespective of the size of the export unit. It was found that, not only do companies pay a minimum wage to workers, but most of them also provide additional benefits to the workers. The benefits included conveyance, healthcare and medical facilities for workers and their families, and insurance. In addition, the consumer prices have increased 26.5% while the wages have increased by 205% from 2005 to 2009. However, the size of the export unit seemed to have an effect on the level of benefits provided to workers. Large firms with high level of investment had more medical facilities like in house availability of nurse, weekly doctor visits and special insurance for female workers. One of the large units even provided daycare center within the premises for workers with young children. Thus, as the level of investment in the unit went higher, the benefits also increased. Considering the wage rates, benefits provided to workers and consumer price index, it was concluded that the total earnings for a worker were much higher than the minimum wages and indeed contributed towards a living wage by providing for healthcare and transportation as well.
On a macro level, it can be concluded that trade liberalization and increased competition have led to better facilities and higher wages and greater benefits contributing to a livable wage for the apparel industry worker in India. This strengthens India’s competitive advantage in the global apparel industry. With the labor costs in India being much lower than those in China, India shall prove as the most competent sourcing hub for buyers around the world.
References


Apparel Export Promotion Council, India (2009). *Advantage India...*. Retrieved February 2, 2009 from

http://www.aepcindia.com/site/index.php?option=com_content&view=article&id=1&Itemid=204

Apparel Export Promotion Council, India (2009). *Apparel weekly online.* Retrieved February 19, 2009 from


http://www.businessdictionary.com/definition/global-sourcing.html

http://www.businessdictionary.com/definition/globalization.html


Chan, A., & Ross, R. J. S. (2003). Racing to the bottom: international trade without a social


World Scientific Publishing Co. Pte. Ltd.


Encyclopedia of the nations. *India*. Retrieved February 23, 2009 from


Evans, M.K. (2004). Outsourcing could hurt, help the U.S. Consider Lost Wages, Quality and


Technology and Management*, 2(1).

Hale, A. (2002). Trade liberalisation in the garment industry: who is really benefiting?

*Development in Practice, 12*, 33-44.


http://india.gov.in/calendar/calendar.php


http://laborsta.ilo.org/


http://rajivmalhotra.sulekha.com/blog/post/2001/01/is-there-an-american-caste-system.htm


Setrini, G. (2005, July). *Wages in the apparel industry; what constitutes a decent Standard?* Jo-
In/MIT meeting conducted at the Massachusetts Institute of Technology, Massachusetts, 
U.S.

Shrivastava, S. (March 6, 2004). After IT, India is set to grab US textile jobs. *The Straits Times* 
(*Singapore*).


http://www.teachmefinance.com/Financial_Terms/developing_countries.html

Thaindian news. (2008, June 1). *Indian Garment workers get highest wages among South Asians* 
(*Lead*). Retrieved February 20, 2009, from http://www.thaindian.com/newsportal/south-
asia/indian-garment-workers-get-highest-wages-among-south-asians-
lead_10055302.html

from the USITC Interactive Tariff and Trade DataWeb database.

http://bioweb.wku.edu/courses/Biol115/Wyatt/Population/population_define.htm
APPENDIX A
CONSENT SCRIPT

My name is Harshita Jagannathan and I am a Master’s student at the University of Georgia. As a part of my curriculum, I am conducting research on the working conditions and wage levels of the laborers in export units in India. Your participation in the interview would be very valuable to my research. It will not take more than 15 minutes of your time. Your voluntary consent to participate would be highly appreciated.

There are no risks or discomforts involved with this study and you may choose to not participate in it anytime during the interview without penalty or loss of benefits to which you are otherwise entitled. The information gained from this interview will be published without revealing the participant’s identity. Your name and contact information will not be used anywhere.

Increased awareness about the working condition of the laborers may benefit them with the possibility of upgrading and improvement in the unit if required. This interview will be audio taped and the tape will be held safely in a locked cabinet which can only be accessed by me. No one else will have access to the tapes and the tapes will be destroyed after data collection and analysis procedures.

If you have any questions about the research project now or later, you can contact us anytime. Harshita Jagannathan: phone 734-546-6846, email harshita@uga.edu; Dr.Jan Hathcote: email jhathcote@fcs.uga.edu

If you have any questions regarding your rights as a research participant, please feel free to contact The Human Subjects Director, University of Georgia Institutional Review Board, 612 Boyd G.S.R.C., Athens, Georgia 30602-7411; telephone (706) 542-3199; email address irb@uga.edu
APPENDIX B
INTERVIEW PROTOCOL

1. What are the **working conditions** in the unit for the workers?
   - Number of machines -
   - Working hours -
   - How many shifts -
   - Break time -
   - No. of days in a week-
   - Food provided?

2. What is the composition of the **work force**?
   - Number of workers -
   - Proportion of male to female (%)-
   - Average age of the workers -

3. What are the **wages** paid to the workers?
   - By piece or by time or salary? -
   - How much -
   - Goals of production to be met? -
   - Approximate retail price of the garment being produced (in $) -

4. What are the **benefits** provided other than the wages?
   - Health care -
   - Children’s education -
   - Conveyance etc. -
   - Any other? -