



**Asia-Pacific
Economic Cooperation**

Promoting
the Participation of
Small and Medium Enterprises
in the Global Textile
and Apparel Value Chains

Committee on Trade
and Investment

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FOREWORD

The primary objectives of these studies are: to facilitate the integration of SMEs into GVCs in the textile and apparel industry through positive trade and investment outcomes and building their capacity for sustainable and inclusive business growth; to identify the main barriers to trade and investment, such as tariffs and Non-Tariff Barriers (NTBs), that prevent SMEs from participating in GVCs in the textile and apparel industry; to develop policy recommendations and concrete action plans that APEC economies can undertake to facilitate the integration of apparel and textile SMEs into GVCs, resulting in positive trade and investment outcomes and improved competitiveness.

The studies were conducted in four APEC member economies including China, Indonesia, Mexico and Viet Nam where having advantages in developing garment and apparel industry in the region. Those studies has been completed within the Project CTI 07-2015 (Promoting the Participation of Small and Medium Enterprises in the Global Textile and Apparel Value Chains) of the Asia-Pacific Economic Cooperation (APEC) in order to explore ways in which policy-makers of APEC economies can contribute to increased SMEs participation in GVCs of the textile and apparel industries through positive trade and investment outcomes, while improving their competitive edge in the international markets.

The studies introduce the textile and apparel industry in four economies, along with a diagnostic of the current state-of-play of SME integration into GVCs, government policies and programs, specific barriers that SMEs face upon attempting to join GVCs, and finally, a series of recommendations and concrete action plans. The studies tried to identity and categorize numerous institutions and frameworks that had been created to support SMEs indirectly or directly and in return, how SMEs utilize government supports and engage with the rules of new model of trade integration.

Having studied some outstanding cases of the industry in each economy, the researchers have brought a closer view to the real activities of SMEs and came to recommendation on the actions needed for APEC, economy and also the enterprises themselves in order to improve the performance in both finance and scale.

In short, APEC could further enhance its function to (i) facilitate SMEs by providing technical and capacity building support, (ii) support business linkages, building of connections among SMEs and companies, and (iii) support data collection and information sharing. Besides, APEC member economies are also expected to be more active to set priority for the industry and create more preferential policies to enhance SMEs' participation in the global textile and apparel value chains.

Last but not least, as seen over years, APEC work is best in innovative solution and path-finding activities, therefore, it is expected that APEC can bring about as many as possible new approach to support SMEs in textile and apparel industry.



Asia-Pacific
Economic Cooperation

PROMOTING THE PARTICIPATION OF SMES IN TEXTILE AND APPAREL GLOBAL VALUE CHAINS IN CHINA

by
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CONTENTS

CHAPTER 1.....	7
Overview of Textile and Apparel Industry in China	7
1. China has established an independent and complete textile industrial chain.....	7
2. World leading manufacturing capacities	9
3. Vigorous and promising industry	9
4. Deep integration into GVCs.....	10
CHAPTER 2.....	19
SMEs’ integration into GVCs in the textile and apparel industry in China.....	19
1. The development of SMEs in China’s textile and apparel industry.....	19
2. The success of textile and apparel Industrial Clusters in China	27
CHAPTER 3.....	37
Barriers and Challenges.....	37
1. Higher tariffs in USA, EU and Japan.....	38
2. Surging wages and shortage of workforce	39
3. Unreasonable Cotton Policy	39
4. Rising comprehensive costs.....	40
CHAPTER 4.....	42
Policy Recommendations.....	42
1. More High Standard FTAs	42
2. Reform on the cotton import policy	42
3. More specific supporting policies from central government.....	43

EXECUTIVE SUMMARY

China's textile and apparel industry has been recognized to be very competitive in the past twenty years. The success cannot be achieved without deep integration into Global Value Chains of global textile and fashion industry.

This case study aims to find better ways to promote the participation of Chinese SMEs in textile and apparel global value chains, even to some extent they have made great progress in this area. The author is also willing to share the developing experience of textile SMEs in China with other APEC member economies.

Textile industry is a traditional pillar industry in China. The total fiber processing volume in China surpasses half of the whole world and China ranks No.1 in almost all the textile and clothing products. Perhaps, it is vital important that China has established an very independent and complete textile industrial chain, including natural and chemical fibers, yarns, fabrics, dyeing and finishing, garment, home textiles and industrial textiles with the supportive textile machinery and chemicals industry. In 2014, the overall 38,319 above scale textile enterprises have a total revenues more than 6.72 trillion Yuan and profits over 366 billion Yuan.

This private and market-driven industry is very vigorous and promising in China right now and has deeply participated in nearly all aspects of the global textile value chains, not only as China is the very leading exporter of textiles and leading importer of natural fibers in the past decade, but also China has achieved the most domestic value added in the supply chain of global textile and apparel industry. Furthermore, the open and huge domestic market of China has increasing importance in GVCs of textile industry.

In the second part of this case study, the author discusses the large numbers of SMEs in China's textile industry and their important roles in several aspects. Then, the study reveals that the mainstream participating methods of SMEs in GVCs are to make intermediate and finished products for global and domestic buyers as the suppliers or sub-suppliers in almost every sub-sector of textile industry, and detailed analysis has made with regard to different participation types. By an interview with Donghua Textile Group, a typical former small and medium textile company, the study provides the evolving story and shares some thought-provoking experience.

In China, textile industrial cluster is home to SMEs. As of 2015, CNTAC has named up to 204 industrial clusters in textile industry (including all sub-sectors) all over China. As a result, finding out how the industrial cluster works and its positive roles is very important to this case study. Thus, the author has conducted field investigations in two typical industrial clusters, Dalang Town in Guangdong Province and Shishi City in Fujian Province. Through interviews and seminars with local government, textile companies and associations, the study introduces the basic conditions of these two clusters, carefully analyzing the supporting strategies and policies for SMEs from local governments, and points out the current challenges to the sustainable development of many SMEs in these two clusters.

In the last two chapters, this study summarizes main barriers and challenges with regard to the SMEs' participation into GVCs. The main issues include surging wages and shortage of workforce, unreasonable cotton policies in the last few years and the rising comprehensive costs. To deal with these challenges and create better developing environment, this case study poses some policy recommendations for Chinese government, including but not limited to high standard FTAs with developed economies, reform on the cotton importing policy and more specific supporting policies from central government.

CHAPTER 1

Overview of Textile and Apparel Industry in China

Since the reform and opening-up in 1978, especially as of the entering WTO in 2001, China's textile industry has enjoyed high speed development and obtained remarkable achievements. Now, China has become the largest producer, consumer and exporter of textile and apparel in the world.

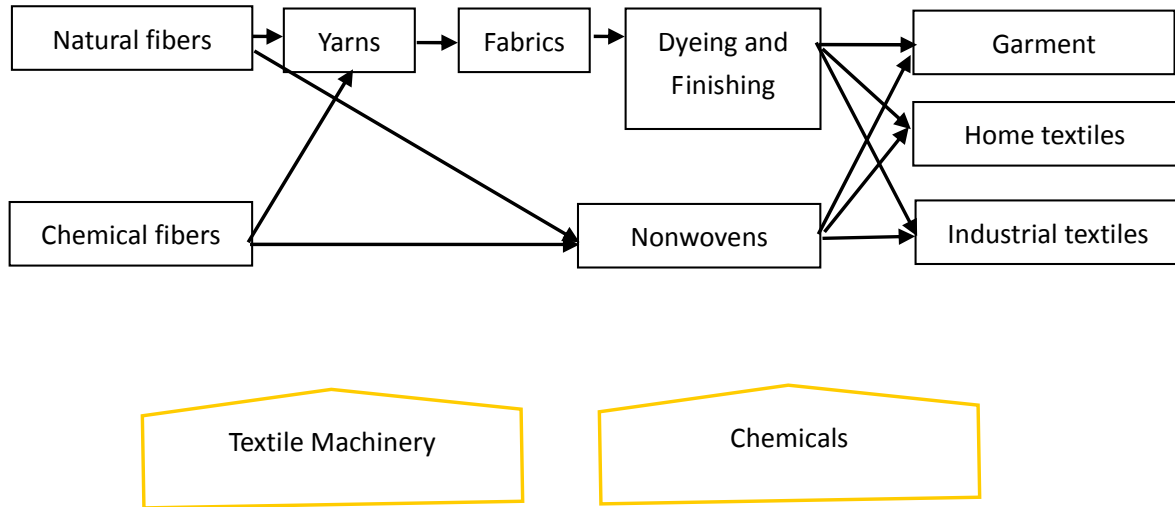
In the coming "Thirteen Five" plan of China's textile industry-which will be published in 2016, China National Textile and Apparel Council (CNTAC) recommends new position of China's textile industry in the new era: Textile (including apparel) industry shall be a traditional pillar industry of China, an important livelihood industry and an industry with new international competitive edge, and shall be the fusion of technology and fashion and the combination of apparel consumption and industrial use.

The success of China's textile industry can be observed in following aspects:

1. China has established an independent and complete textile industrial chain.

China has established a very competitive textile industrial chain, and the close links between up streams, middle streams and down streams all together create sound synergistic effects. From chemical fiber, cotton, wool, linen, silk, dyeing to knitting, apparel, home textiles, industrial textiles and textile machinery, all these sectors in China has developed very well to the extent that they constitute a very healthy, independent and complete textile industry and create abundant domestic wealth. The products from China's textile industry has extended from traditional dressing to many other fields like aviation, aerospace, water conservancy, agriculture, transportation, health care and so on.

Figure 1 textile industrial chain in China



Now, the numbers of enterprises in the whole textile industrial chain in China with annual revenue of 20 million Yuan or more from their main business operations (called above scale enterprises in China official statistics) have reached 38319. Most of them are in textile and garment sectors.

The numbers of above scale Enterprises				
	2011	2012	2013	2014
The Overall Textile Industry	35891	37406	38618	38319
Textile	22484	20370	20776	20494
Garment and Accessory	11168	14501	15212	15167
Chemical Fiber Manufacturing	1557	1796	1904	1938
Textile Machinery Manufacturing	682	739	726	720
Source: CNTAC				

In 2014, more than 38,300 Chinese above scale textile enterprises has gained total revenues of 6.72 trillion Yuan, increasing 6.83% on a year to year basis, and gained total profit of 366.3 billion Yuan. The profit margin has reached 5.45%.

As of 2014, the number of textile and garment enterprises listed in the Shanghai Stock Exchange or Shenzhen Stock Exchange has reached 79.

2. World leading manufacturing capacities

While the China's textile industry has built a complete and independent industrial chain, the manufacturing capacities of this industry are way leading in the world. In 2014, the fiber processing volume of China's textile industry has reached 50 million tons, accounting for more than 50% the global total share. In 2000, the share is only 25%. CNTAC estimates that, nowadays China's textile and apparel industry has directly employed appropriately 20 million workers, of which 80% are migrant workers.

The proportion of apparel, home textiles, industrial textiles fiber processing volume has changed from respectively 51:29:20 in Year 2010 into 46.8:28.6:24.6 in Year 2014.

In 2014, China has produced appropriately 43.9 million tons of chemical fibers, 33.79 million tons yarns, 89.4 billion meters of fabric, and the above-scale enterprises produced 29.9 billion pieces of clothes. The output of main products is leading in the world.

According to the statistics of general administration of customs of China, in 2014 China's total textile and apparel exports has reached \$ 306.96 billion, an increase of 5.1%, of which textile exports \$ 199.14 billion, an increase of 4.65%, apparel exports \$ 187.82 billion, an increase of 5.38%.

The growth rate of the manufacturing capacities of China's textile industry has been gradually slowed down. For example, the average annual growth rate of fiber processing volume has dropped from 10% in the "Eleventh Five-Year"(2006-2010) to about 4.9% in the "Twelfth Five-Year"(2011-2015).

3. Vigorous and promising industry

First, China's textile and apparel industry is total market-driven industry. The private enterprises play dominant roles and the proportion of state-owned enterprises is relatively low. Overall, the textile industry in China is very resilient and fast-responsive.

In Year 2014, the numbers of state-owned and state-controlling enterprises are only 463, accounting for merely 1.2% in the total 38,319 above scale textile enterprises. The business revenue of state-owned and state-controlling enterprises only accounts for 0.23% in the whole industry.

It is worth emphasizing that almost 100% of SMEs in China's textile and apparel industry are private enterprises.

Second, the textile industry in China continuously invests a lot these years to strengthen the manufacturing capacity and boost the productivity. Just from 2012 to 2014, the textile industry has completed fixed assets investments (in the projects investing more than 5 million Yuan) up to about 2.73 trillion Yuan. The output per worker arises amazingly from 16,000 us dollars in 2002 to 92,000 us dollars in 2012.

Third, fierce competition brings about hundreds of textile industrial clusters and specialized markets, through which the division of manufacturing and mass production contribute to the most efficient textile supply chain in this world. It is worth mentioning that almost every sub-sector in China's textile and apparel industry has spontaneously experienced industrial agglomeration

and then formed industrial clusters, and hundreds or thousands of SMEs are located in every different industrial cluster.

The Forth, consumption of domestic textile products grows and upgrades rapidly, which provides sufficient growing space for Chinese textile and apparel industry. The domestic apparel and home textiles consumption moves towards fashion, brand, individuality and integration of online and offline.

China's domestic apparel and textiles consumption has grown very fast. For instance, the average clothes consumption of an urban citizen is appropriately 1,823 Yuan in Year 2012, while only 800 Yuan in Year 2005. Last year, the total retail sales of garments of the above the scale enterprises reach 1.26 trillion Yuan with the growth rate up to 10.9%.

In particular, the e-commerce in China has surged these years. In Year 2014, the online retail sales of clothes and home textiles reach 670 billion Yuan with an astonishing growth rate of 37%.

The last but most importantly, China's textile industry has never stopped striving for industrial upgrading and innovation. The fiber processing volume proportion of industrial textiles has risen from 12.8% in Year 2000 to 24.6% in Year 2014. In the areas like high-tech fiber materials, sophisticated process of weaving, dyeing and finishing, and advanced textile machinery, the China's textile industry has made inspiring progress year by year. The development and use of green, energy-saving, resource-recycling technology is accelerating in recent years. For example, the water needed for printing and dyeing one hundred meters of fabrics has averagely dropped from 2.8 tons to 1.8 tons in recent years, and the percentage of recycling water has lifted from 15% to above 30%.

It is worth mentioning that the original design and local fashion brand attracts more and more consumers in apparel and home textiles.

4. Deep integration into GVCs

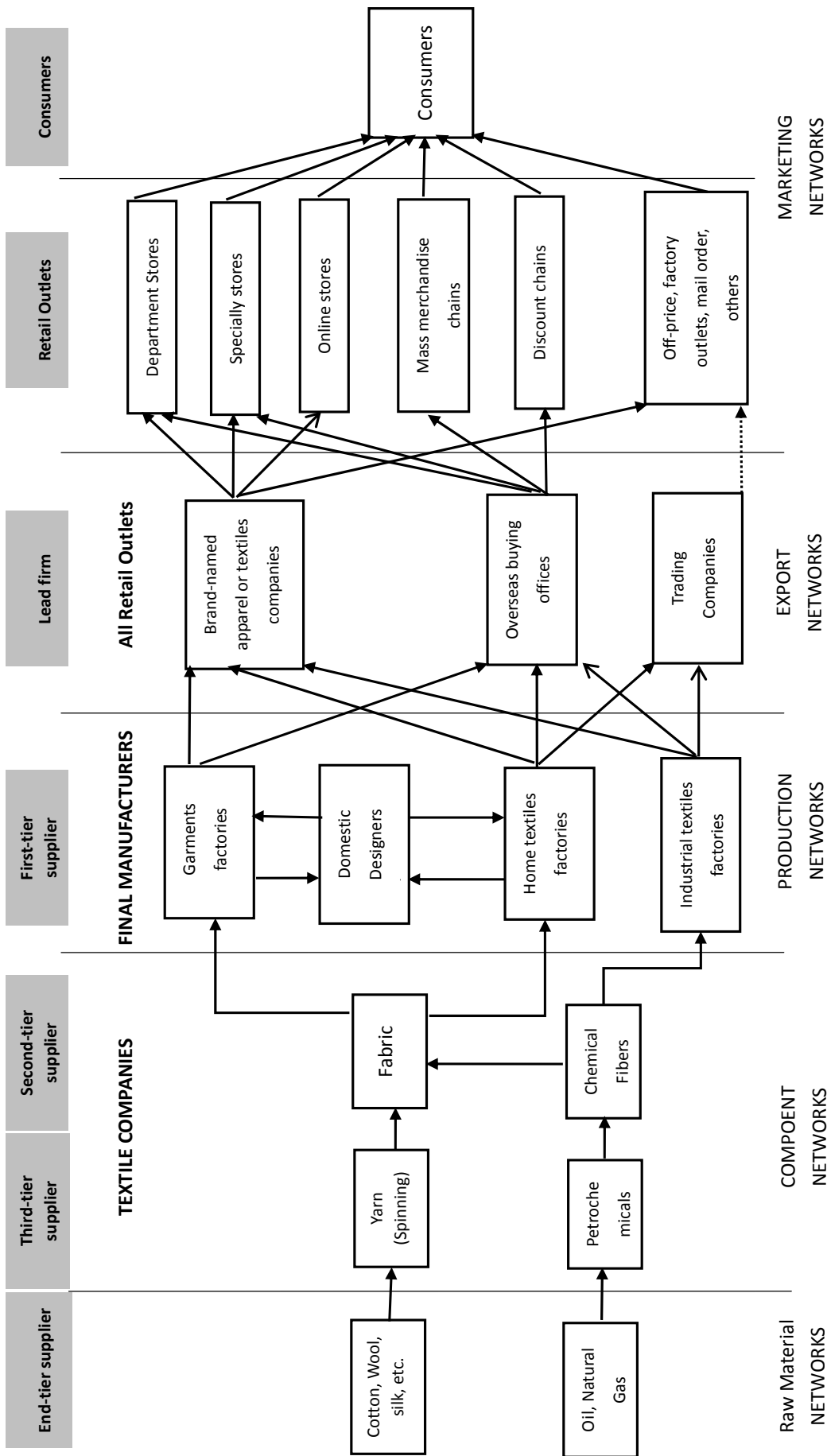
There have been some intensive discussions and studies about the GVCs of textile and apparel. Some scholars have pictured the GVCs of apparel from the perspective of the United States. (see figure below) In the "Workshop on Facilitating Global Apparel Value Chains in the APEC Region" held in Ha Noi in Year 2014, Ms. Pham stated it could be considered that the global apparel value chains are formed through 6 main stages: (i) Provide raw products, including natural and man-made fibers; (ii) Produce inputs such as thread, yarn, and fabric by spinning and weaving companies; (iii) Design product samples; (iv) Develop products by apparel companies; (v) Export products by intermediates; and (vi) Marketing and distribute products to consumers.

While China's textile industry has enjoyed rapid expansion since entering WTO in 2001, its global competitiveness has indeed increased dramatically. We can say that, in the last decade, China's textile and apparel industry has fully displayed its global comparative advantages, and deeply participated in all aspects of the global textile value chains above- mentioned.

● China plays a very important role in the global textile and apparel supply chain.

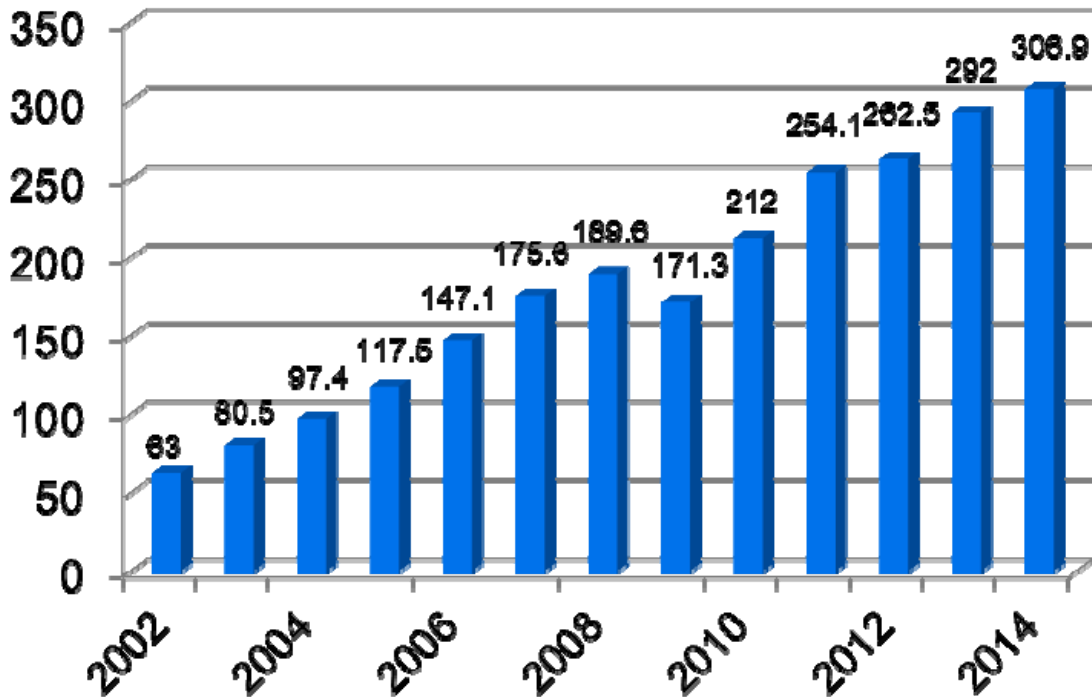
The proportion of China's textile and garment exports in the world's total exports has arising from

respectively 10.2% and 18.3% in Year 2000 to unprecedented 35.6% and 38.6% in Year 2014. In 2014, Chinese textile and apparel exports reach \$ 306.9 billion and the market share in the EU, the US and Japan's imports are respectively approximately 37.7%, 38.2% and 67.4%, all are ranking the first place. In recent years, China's textile and apparel industry has more connection with ASEAN economies, and growing apparel demand in emerging Asian economies and a regionally integrated production network has allowed Chinese apparel suppliers to upgrade and expand global market share. (Stacey Frederick & Gary Gereffi, 2011).

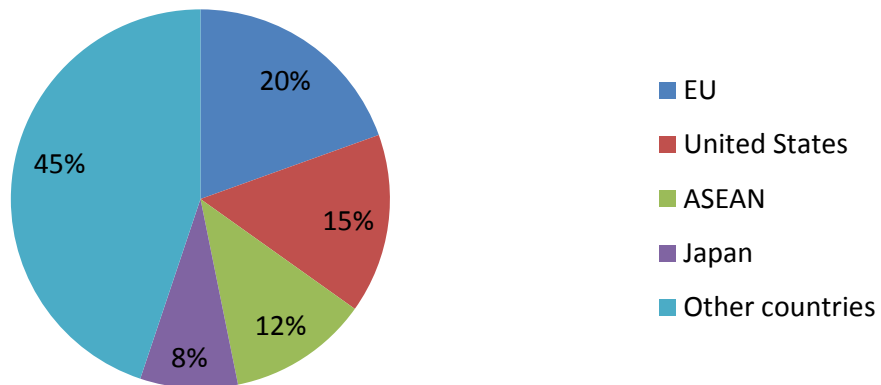


Source: (Modified based on Gereffi and Memedovic 2003)

Exports of China's textile and apparel (billion us dollars)



main export market of 2014



Leading exporter of Textiles (Billion dollars, %)

YEAR	2000	2010	2012	2014

	Value	share	Value	share	Value	share	Value	share
		10.4%	77	30.7%	95	33.4%	112	35.6%
		36.6%	67	26.8%	69	24.3%	75	23.8%
		10.1%	21	8.3%	22	7.8%	23	7.4%
		3.6%	13	5.1%	15	5.3%	18	5.8%
		7.1%	12	4.9%	13	4.7%	14	4.6%
		8.1%	11	4.5%	12	4.2%	12	3.8%
		2.3%	9	3.6%	11	3.9%	13	4%
		2.9%	8	3.1%	9	3.0%	9	2.9%
		4.5%	7	2.8%	8	2.7%	6	2%

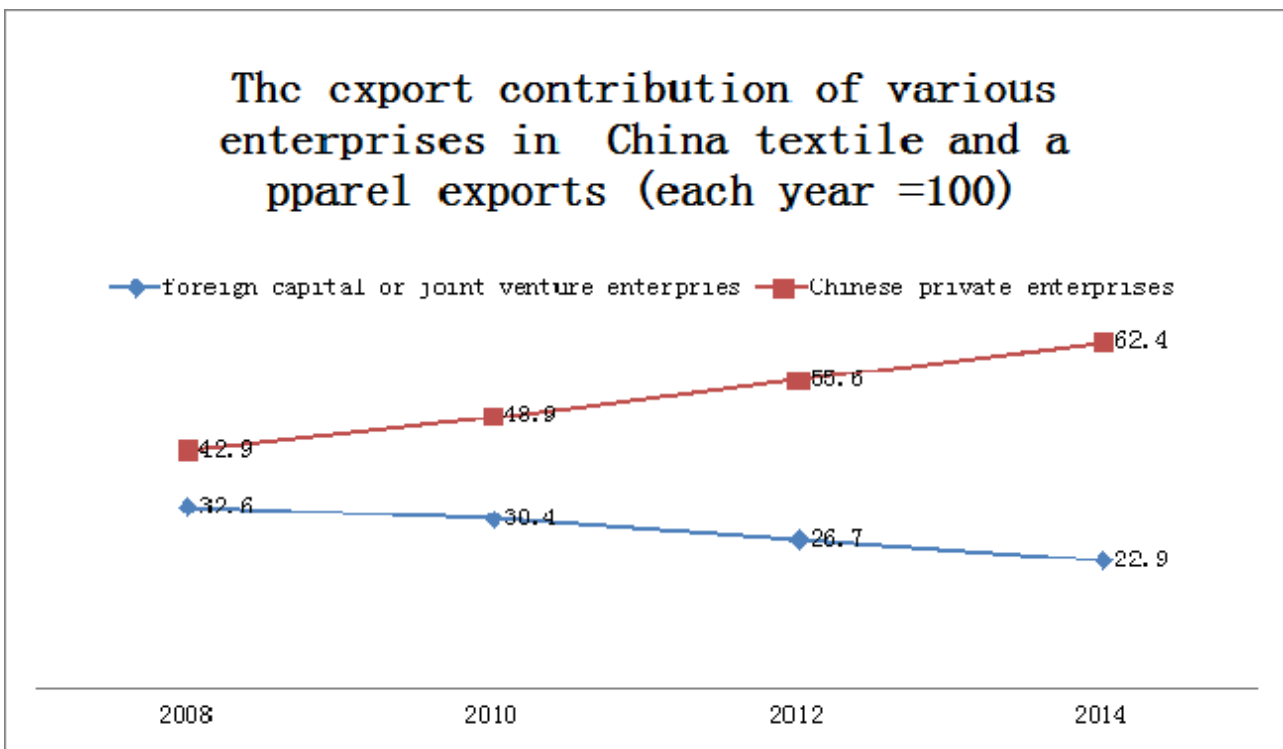
Leading exporter of Clothing (Billion dollars, %)								
YEAR	2000		2010		2012		2014	
Exporters	Value	share	Value	share	Value	share	Value	share
China		18.3%	130	36.9%	160	37.8%	187	38.6%
EU(28)		28.5%	99	28.1%	109	25.8%	127	26.2%
Extra-EU(28)		6.6%	22	6.3%	29	6.8%	32	6.6%
Bangladesh		2.6%	16	4.5%	20	4.7%	25	5.1%
Turkey		3.3%	13	3.6%	14	3.4%	17	3.5%
India		3%	11	3.2%	14	3.3%	18	3.7%
Viet Nam		0.9%	11	3.1%	14	3.3%	20	4%
Indonesia		2.4%	7	1.9%	8	1.8%	8	1.6%

Unlike many other developing economies, the proportion of general trade exports in the total exports of China's textiles and garments has increased a lot while the proportion of processing trade has decreased a lot. It means that the ability to provide a seamless "Yarn to Clothing" solution within China's textile production chain has been improved dramatically.

Year	2008	2010	2012	2014
General trade exports proportion	69.5%	74.4%	75.3%	76.2%

Source : General Administration of Customs of China

In addition, the export proportion of foreign capital or joint venture enterprises and state-owned enterprises has continued to decline, while the export proportion of Chinese private enterprises has continued to rise.



● **High level value added in domestic supply chain**

In China’s huge exports of clothing and home textiles, the proportion of the goods labeled with China’s own brand is very small. Most of China’s exports are labeled with overseas brands for global consumer spending, and the Chinese enterprises are only responsible for the manufacturing in the form of OEM or ODM for global buyers.

However, as the study of “Measuring Trade in Value Added”, an OECD-WTO joint initiative, shows that the Chinese textile and apparel enterprises has gained the most proportion and amounts of added value in the GVCs via the manufacturing process from fibers to clothing in China.

Domestic value added share of gross exports

China Textiles, textile products and footwear

1995	2000	2005	2008	2009	2010	2011
56.73	61.82	69.07	74.66	75.96	73.58	73.52

Source: OECD TiVA database

Indirect domestic value added content from domestic intermediates

Textiles, textile products, leather and footwear (million US dollars)

Economy	1995	2000	2005	2008	2009	2010	2011
China	9 503.06	14151.7	37985.85	74079.39	70574.65	82053.53	100009.1
Italy	11956.49	11360.6	14 947.51	18413.4	15 002.85	15468.37	18130.94
India	4173.5	5 392.85	7639.32	9941.82	9451.78	11810.59	12742.42
Turkey	2635.55	2735.81	6 229.53	7896.83	6733.28	7033.78	8060.51
Viet Nam	199.13	305.87	731.55	1595.93	1901.64	2316.91	2986.51
Indonesia	2037.99	2270.42	2 978.14	2799.18	2787.17	3381.31	3864.92

Source: OECD TiVA database

Domestic value added content of gross exports

Textiles, textile products, leather and footwear (million US dollars)

Economy	1995	2000	2005	2008	2009	2010	2011
China	15625.07	27346.06	64153.14	110589.86	102949.08	123035.14	147761.12
Italy	25194.85	22249.59	28847.06	35844.43	28726.94	29789.62	35026.05
India	6081.75	8175.95	11405.64	14064.66	13543.92	17041.21	18441.67
Turkey	5815.91	6064.35	10682.69	13210.55	11358.79	12389.49	13862.5
Viet Nam	600.78	1201.56	2660.2	4330.43	4457.05	5302.28	6480.31
Indonesia	5414.58	5638.13	6759.85	6450.32	6213.72	7534.4	8871.28

Source: OECD TiVA database

● **China is a very important user of natural fibers in the world.**

China's textile enterprises import a large amount of cotton, wool, flax every year and accounts for large proportion in respective global trade.

In 2014, China's dependency on imported PX and EG in chemical fibers industry has respectively reached 51.6%, and 70%, and both are at a very high level.

China's imports of natural fibers and certain chemicals (10,000 tons)			
	2005	2010	2014
Natural fibers			
Cotton	265.28	293.69	244
Wool	26.9	33.02	34.34
Flax and alike	21.38	24.61	81.16
Chemicals			
PX	160.79	352.71	997
EG	400.02	663.99	845

● **The Chinese domestic market is completely open to foreign companies and has increasing importance in GVCs of textile industry.**

China's clothing and home textiles market is completely open to foreign firms. In light of the rapid growth of purchasing power of Chinese consumers, most of global famous textile and clothing brands has entered into China, in the pursuit of more revenues and profit. As a result, the Chinese domestic market has become a real global market, and the textile and the apparel value chains inside China can be deemed as part of GVCs. Almost all the local Chinese textile and clothing brands have felt the greater pressure caused by fierce competition in Chinese market.

In recent years, the European Zara, H&M Group and Japan's Uniqlo, well known as the fast fashion brands, are developing rapidly. According to the 2015 Forbes Global Enterprise 2000, Zara, H&M and Uniqlo's respective annual revenues have reached 23.7, 22.3 and 13.6 billion dollars, and annual profit of 3.3, 2.9 and 0.73 respectively. As of July 2014, the store numbers of the three fast fashion brands in China has reached 145, 209 and 289 respectively and still grown very rapidly. For example, to January 2015, the number of stores in China has increased to 165.

China's domestic market is increasingly becoming the biggest growing sources of Uniqlo's overall revenues and profit. In the 2015 financial year (2014.09-2015.08) the revenue of

UNIQLO Greater China has increased 46.3% year-on-year to ¥304.4 billion and operating profit expanded by 66.1% year-on-year to ¥38.6 billion. The number of UNIQLO Greater China stores stood at 467 as of 31 August 2015, which accounts for 58.5% of the total number of UNIQLO International stores.

- **Chinese textile enterprises have made promising progress with regard to overseas investment and global layouts.**

Since the global financial crisis, China's textile industry has accelerated global layout, such as Viet Nam, Cambodia, Indonesia, Bangladesh and other Southeast Asian economies and to developed economies like the United States, Britain, Germany, Australia, Canada, Japan. The forms of investments mainly include green field investments, merges and acquisitions, involving new production plants, raw material bases, distribution channels, existing brands and high-tech technology.

The Chinese textile enterprises have invested overseas mainly in two main directions: One direction is to build cross-border manufacturing bases through green field investment, trying to maintain and enhance leadership in the global supply chain. For example, TEXHONG, BROS and HUAFU has invested a lot of spinning capacities in Viet Nam, and the overseas garments production capacities of Shenzhou International, Dongdu group and Younger have grown rapidly;

The other direction is to acquire global high-quality raw material resources, innovation resources, brand resources and market channels resources through direct investment or M&A, for the purpose of moving up the status on the GVCs from the international perspective. For example, Shandong Ruyi Group has gained first class cotton and wool resources through M&A in Australia and some brands in Japan and Europe.

Overall, through the practice of overseas investment, many Chinese textile and apparel companies have improved their international operation capacities and moved up in the GVCs.

CHAPTER 2

SMEs' integration into GVCs in the textile and apparel industry in China

1. The development of SMEs in China's textile and apparel industry

(1) Large numbers and important roles

According to the "Notice of the statistic standards of SMEs" jointly issued by the Ministry of Industry and Information Technology, National Bureau of Statistics, the National Development and Reform Commission and Ministry of Finance on June 18, 2011, the classification criteria of Chinese textile and garment enterprises in big, medium or small or micro size are as follows:

Classification criteria of Chinese textile and garment enterprises					
Key factors	unit	Big	Medium	Small	Micro
employees(X)	persons	$X \geq 1000$	$300 \leq X < 1000$	$20 \leq X < 300$	$X < 20$
revenues(Y)	10,000Yuan	$Y \geq 40000$	$2000 \leq Y < 40000$	$300 \leq Y < 2000$	$Y < 300$

The large, medium and small enterprises must meet both of the employees and revenues requirements, whereas micro-enterprises can meet one of the employees or revenues requirements. In other words, a textile company can be classified as a small or medium enterprise only need to be in either of the following conditions:

- enterprises employees less than 1,000 people;
- annual revenues are less than 400 million Yuan;

In particular, according to the Chinese classification standard, a company with annual revenues above 400 million Yuan is still considered as a medium-sized enterprise as long as its employees are less than 1,000 people.

Data of Ministry of Industry and Information Technology shows that small, medium and micro enterprises account for 99.7% of the total number of China's enterprises. Meanwhile, the value of final goods and services has been created by SMEs accounts for 60% of China's GDP, and SMEs contribute about 50 percent of total domestic tax revenue.

According to the third domestic economic census, whose benchmark day is December 31, 2013, the basic situations of China's textile and garment enterprises are as following:

The third domestic economic census in 2013		
	enterprise legal persons (10,000)	employees (10,000)
Textile	10.8	663.7
Garment and Accessory	12.1	750.8
Chemical Fiber Manufacturing	0.6	56.2
Wholesales of textiles, clothing and home-use articles	22.5	255.2
Special retails of textiles, clothing and home-use articles	12.1	137
Source : National Bureau of Statistics of China		

Statistics center of CNTAC estimates that, at least 99.5% of enterprises are SMEs in China's textile and apparel industry. The overall textile industry in China directly have a workforce around 20 million workers. Half of the total workforce is in the above-scale enterprises, and the other half are in the under-scale enterprises.

According to the above-mentioned criteria for the classification of SMEs, a conservative estimate of employment in SMEs in China's textile and garment industry reached more than 13 million -15 million workers.

SMEs play an indispensable role in China's textile economy. The following aspects show some of it:

Aspects	Role of SMEs
<p>Providing employment and improving worker's living standards</p>	<p>According to the new criteria of SMEs, a conservative estimate of employment in SMEs in China's textile and garment industry reach more than 13 million - 15 million workers, 80% of the total workforce are migrant workers from rural areas.</p> <p>According to the investigations of China Filament Weaving Association, the average monthly wage for a 8 hours weaving worker has increased from 3500 Yuan in 2013 to more than 4000 Yuan in 2014 in the industrial clusters like Wang jiangjing town and Ping wang town.</p>
<p>Economic output and exports</p>	<p>Although the existing statistics can't accurately calculate the share of small and medium textile and garment enterprises in overall industrial output and the main business income, in view of about 90% of the above-scale enterprises are medium-sized, we can estimate that small and medium textile and garment enterprises in economic output the proportion should be at least 50% - 60%.</p> <p>In the same logic, SMEs obviously contribute more than half of the total Chinese textile and apparel exports.</p>
<p>Support to the whole production chain</p>	<p>SMEs contribute a lot to the prominent international competitiveness of China's textile and garment industry. In all aspects of the vertical supply chain, especially fabrics, accessories and garment production sectors, SMEs have played an important role.</p> <p>First, the SMEs provide the supplementary production capacity. Many exporting orders of leading enterprises and large enterprises are co-finished by many SMEs around them through contracting and subcontracting, if the quality of products from SMEs can meet customer requirements.</p> <p>Second, SMEs are taking advantage of "Specialization and flexible business operations, in terms of design, parts supply, accessories, small wholesale and retailing, to provide competitive industrial services.</p> <p>For example, in 2014, the average single specialized textile or apparel market in China has an operation area of 91,700 square meters, but an average of up to 1,181 small retailer or wholesalers.</p>

(2) Development by the way of industrial clusters

One of the most important and most obvious characteristic with regard to the development of SMEs in China's textile and apparel industry is the ways of cluster development. Most of the small and medium enterprises, especially the most healthy and vigorous ones are located in various textile industry clusters within China.

As of the end of May 2015, the total number of all levels textile industrial clusters, which have established pilot development relationships with CNTAC, has reached 204. According to the statistics of CNTAC, the aggregated economy output of these 204 industrial clusters accounts for about 40% of China's total economic output of textile and apparel industry. In 2014, the main business income of these 204 textile industrial clusters reached nearly 4 trillion Yuan.

As an OECD study reveals, clusters allow for economies of scale and agglomeration and also help developing an experienced local pool of skilled labor and a network of firms co-operating in complementary areas of specialization. By doing so, they strengthen their competitive advantages in a sustainable manner and become attractive sites for quality FDI. (OECD 2008) In China, the cluster also is very attractive place for local investment and the arising of entrepreneurs groups. The industrial clusters are the best places for SMEs in textile and apparel industry to enhance their manufacturing and distribution capacity. Naturally, The SMEs in industrial clusters are in a better place to expand their sales both inside and outside of China, thus integrating into the GVCs more intensively.

Later, I will share the finding from field trip investigations to two typical textile industrial clusters in this Chapter.

(3) SMEs' status and types of Participating in GVCs

● Status of Participating in GVCs

Overall, due to the high degree of market-oriented reform on China's textile industry and the leading global market share, now we can say that the SMEs in China's textile and apparel industry have deeply participated in global value chains.

The mainstream participating methods of SMES in GVCs are to make intermediate and finished products for global and domestic buyers as the suppliers or sub-suppliers. The SMES do not involve very deeply in establishing direct overseas distribution networks.

Let us check more details in several sectors of the vertical production chain of the overall textile industry.

- **Cotton imports:** in light of the administrative regulations and import quota system, SMEs haven't imported a lot of cotton directly.
- **Cotton Spinning and Weaving:** previous a lot of SMEs in this sector, but closure and bankruptcy has rising sharply as the surging importing of cotton yarns from India, Pakistan and Viet Nam. Many SMEs start to produce blend cotton yarns, chemical fiber yarns and blend fabric.
- **Wool, Silk, Bast and Leaf Fibers Textile Industry:** a lot of SMEs in these sectors, deeply participating in the GVCs as suppliers or sub-suppliers.
- **Dyeing, Printing and Finishing:** China has fairly good dyeing, printing and finishing industry and this sector is essential for a strong vertical textile production chain. A lot of SMEs

exist. The final exporting textiles and clothing from China are almost all dyeing and printing domestically.

- **Home textiles and Garments:** Abounds of SMEs in these sectors as the entrance barriers are very low, participating in the GVCs as suppliers or sub-suppliers intensively.

- **Industrial Textiles:** a fast growing sector in China, the overall annual revenue and profit of 1,795 above scale enterprise has respectively reached 270.2 and 15.4 billion Yuan in 2014. This sector is promising but lack of very big leading firms. The exporting value of this whole sector is 20.7 billion us dollars in 2014.

- **Chemical Fibers:** a capital and technology-intensive industry. Due to the high entrance barriers, the number of SMEs is relatively small. But the downstream industry of chemical fibers, filament weaving, is very flourishing in China and there are a lot of SMEs in this sector.

- **Textile Machinery:** textile machinery industry is a very import part of China's textile industry. Most of the 720 above scale enterprises in this sector belong to medium enterprises. This sector provides a lot of textile machinery and spare parts for China's textile and apparel industry.

• Types of SME's Participation in GVCs

As the GVCs of the global textiles and clothing is a typical buyer-driven mode, The mainstream China's small and medium-sized enterprises in textile and apparel industry participate in GVCs is to provide various intermediate or final products for international buyers. At the same time, due to China's domestic market is highly open and internationalization, sales in domestic market can also be deemed as participating in GVCs.

SME's Participation can be observed as following:

- As a contractor, providing OEM or ODM products to overseas buyers directly, mainly in sectors of knitting or woven garments, home textiles and industrial textiles.
- As a sub-contractor, providing final products to the contractor who has overseas orders. For example, Jiexiang County in Shandong province is a famous textile industrial cluster of glove. the leading glove firms, around 20 in the city, subcontract their overseas glove orders to more than 2000 small enterprises and more than 500 households in nearly all the towns of this county, creating more than 50,000 jobs.
- As a contractor or sub-contractor, exporting intermediate products like fabric or accessories to other economies (mainly ASEAN economies and South Asia economies) for further garments production.
- As a contractor or sub-contractor, making intermediate products like yarns, fabric and accessories or providing dyeing and printing services for the clothing or home textiles to be exported.
- As a contractor or sub-contractor, making intermediate products or final clothing or home textiles or industrial textiles for domestic market (with global brands or local brands or no brands).

Since the exporting value of China's textile and clothing exceeds 300 billion, together with more than 2 trillion Yuan domestic clothing and home textiles market volume, the above mentioned types of SME's participation in GVCs are all very common in manufacturing's perspective.

• Important trend

Production for exports directly generates value added and contributes to GDP, job creation, income generation, tax income and so forth. And, in a longer term, GVCs can provide opportunities for industrial upgrading along the value chain. (APEC 2015) This trend has developed in China's

textile and apparel industry in recent years. In view of the fierce competition and low profit margin in pure manufacturing stage, many SMEs in China's textile and apparel industry with accumulations of capital, technology, expertise and distribution resources are seeking to move towards both ends of the so-called "smiling curve".

Some SMEs, which did not have the R&D capacity, has begun to build their research or design center, for the purpose of attracting more domestic or overseas clients and push up the added value.

Some SMEs are trying to transform from OEM/ODM factories to original brand manufacturer or original brand operator, by making full use of the huge domestic consuming market through both offline and online channels. As a result, these SMEs have become Buyers instead of contractors in the GVCs.

The researcher has conducted several interviews in terms of the attempts of upgrading in the GVCs with Mr. Xu Dong, the CEO of Donghua Textile Group (hereinafter to be referred as Donghua) in October, 2015.

Donghua is located in Changzhou city, Jiangsu Province, and the researcher wants to share its development story as a typical Chinese small and medium textile enterprise.

SME's upgrade in the GVCs - Story of Donghua

1. Development Path of Donghua

In the summer of 1991, Mr. Xu Tongbao registered Changzhou Wujin Donghua Textile CO., Ltd in Hutang town, Wuhan district, Changzhou City, Jiangsu Province. The main business of Donghua at that time was local trade of gray cloth and cotton yarns. Mr. Xu was once named "king of gray cloth" and "king of cotton yarns" in Wujin district when the business was expanding well.

In 1994, Donghua established a Yarn-Dyed Fabric & finishing mill, entering into the manufacturing sector from trading sector, and continually invested in spinning, weaving and garment assembly sectors. At the summit of manufacturing capacity, Donghua had 60,000 cotton spindles in spinning mills, 108 advanced Toyota air-jet looms in weaving mill and the maximum employees in garment assembly sector reached 500. The yarns, fabric and garments were provided for domestic demand and overseas buyer mainly in OEM ways.

Donghua Textile Group was established in 1996, representing a start of modern corporate governance structure. In 1999, Donghua acquired a local state-owned foreign trade corporation, renamed it as Changzhou Donghua foreign trade company later. After acquisition, this foreign trade company achieved textile and apparel exporting more than 60 million us dollars in the first year.

During the several years after 2000, Donghua has strengthened its design and innovation ability through technology upgrading in production processing and design teams in Changzhou and Italy. Now, Donghua still keeps a sample-making workshop up to 4,000 square meters.

Donghua registered a subsidiary call Changzhou Dingguagua colored cotton Apparel Corporation in 2002. This subsidiary focused on promoting the own brand “顶瓜瓜” (Dingguagua means very good or perfect in Chinese) through the department stores all over the Mainland China, and the main products are natural color cotton underwear and clothing. The sales grew very fast: 6 million Yuan in 2002, 70 million Yuan in 2003 and more than 350 million Yuan in 2007. The “顶瓜瓜” trademark was recognized as well-known trademark by the State Administration for Industry & Commerce of China. To keep the leading position of natural cotton products in domestic market, Donghua has successfully applied for several core patents for invention in China concerning the production of natural color cotton yarns and fabric, and has established natural color breeding center in Xinjiang, Jiangsu and Anhui provinces.

During 2007-2012, the OEM, ODM, foreign trading and own brand business of Donghua all encountered bottlenecks and difficulties, under the macro backgrounds of overcapacity of China’s textile industry and the world financial crisis, the total revenues went into stagnation, the profit margin declined sharply and the inventories increased a lot.

To solve these problems, Donghua take bold reforms since 2012 as following:

First, Donghua contracted the manufacturing and foreign trade business drastically. During this period, Donghua sold out all the spinning mills and air-jet looms and even 15 hectares industrial land, only kept the garment factory with 400 employees and the “顶瓜瓜” brand operation team with 300 employees. Meantime, the foreign trade subsidiary changed its importing and exporting from textile or garments to other products like chemicals due to the very low profit margin.

Second, Donghua created a fast response supply chain system for “顶瓜瓜” in domestic market, which helped to establish effective inventory management system and boost the efficiency of retail channels. Dingguagua bought a customized information management platform from institute of software of Chinese academy of sciences, which can connect headquarters and all the retail stores around China. This system help Donghua is able to arrange and adjust the manufacturing process according to the daily retail data, and thus significantly optimize inventory management and distribution networks.

Third, to effectively expand the sales via online platforms. Donghua formed a full-time e-commerce team in the fall of 2011. Young management team (bored after 1985) has been playing vital importance. The sales from internet have grown from more than 9 million Yuan in 2012 to about 260 million Yuan in 2015. At present, Donghua’s Dingguagua brand has established a retailing network in domestic market with more than 600 physical stores (own-operating 50, agent 550) and distribution channel on Internet platforms like Tianmao and Taobao. The Dingguagua brand has gradually achieved to form a sustainable development mode which puts net profit first rather than revenue. On the day of 11.11, the gross revenue of Dingguagua store on Tianmao is more than 30 million Yuan.

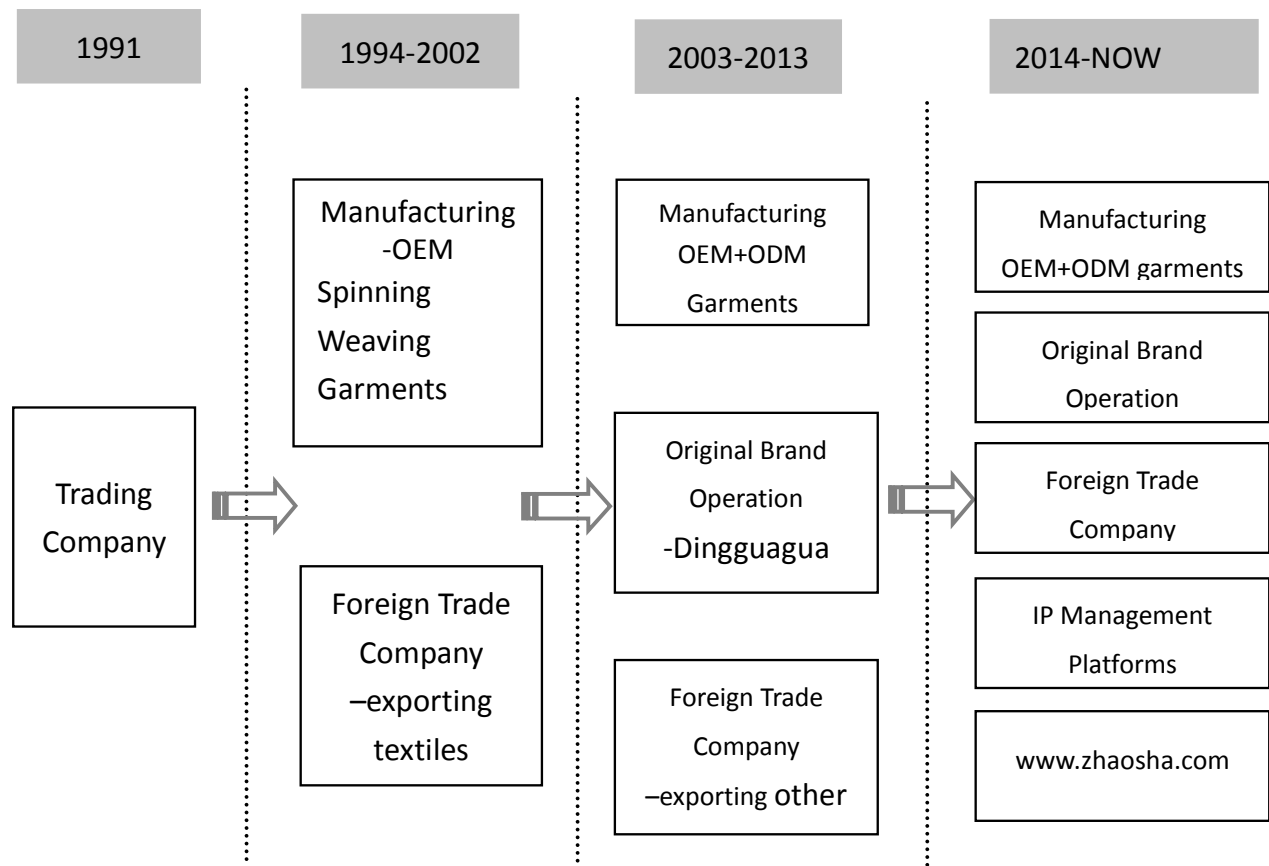
In mid-2014, by setting up brands management platform, Donghua began a new transformation. The direction of transformation is a business model called “Less manufacturing assets, more IP Management”. Only over one year, ATG and MRH, which are Donghua’s holding subsidiaries, have acquired franchising rights in Mainland China of eighteen overseas brands

in fashion and home textiles catalogue through exclusive trademark license or joint venture. For instance, the gross sales of U.S. POLO ASSN. in Mainland China have surpassed 200 million Yuan in the first year.

In April, 2015, Donghua founded www.zhaosha.com, aiming to provide a high efficient and cost-friendly trade service platform through new internet technology for the yarns and other products in vertical supply chain of China's textile industry. In August, zhaosha.com was officially online. The trade volume has surpassed 40 million Yuan in November.

In short, as a representative of hundreds of thousands of SMEs in China's textile and apparel industry, the growing story of Donghua shows its path of capacity building and moving up along the global value chain.

Evolving of Donghua in GVCs



The experience Donghua can share with other SMEs in APEC economies

- Relying on the domestic market to successfully transformation from OEM manufacturer to original brand operator. Dingguagua enjoyed a very fast growing during 2002-2005, because i) the huge and fast growing domestic consuming market in China, ii) Donghua kept an eye on the consuming trend, and seize the opportunity to meet the new consuming demand of green textiles and apparel.
- Using the advanced information and communication technology (ICT) in original brand operation. Dingguagua encountered severe excess inventory problem in over 1000 retail stores in 2011. By implementing the customized information supply chain management platform from institute of software of Chinese academy of sciences, Dingguagua solved the inventory crisis and optimized the distribution channel successfully. Since 2011, Dingguagua has cut down its retailing stores from over 1000 to about 600, but increased the net profit. Dingguagua gradually learns to prioritize the profit instead of the scale.
- SMEs shall also make full use of global resources to enhance the core competitiveness. Textile and apparel industry is a fully market-driven competitive industry all over the world and sustainable business success requires a global vision. In the past decade and more, Donghua has utilized all possible high-quality international resources to enhance itself in terms of manufacturing process, product R&D, foreign trade business and overseas brands franchising. And indeed Donghua benefit a lot.
- Talents matter. In the success story of fast-growing E-commerce business of Dingguagua, hiring and trusting new generation executives plays a key role. The younger team learns and digests new ideas quickly, and is eager to innovating and taking rapid action. Right now, Donghua has initiated the transformation from traditional manufacturing enterprise to knowledge based enterprise, and in this process, executives with brands managing experience from the United States, Hong Kong, China in the holding subsidiary MRH, have contributed a lot to the introduction of real qualified overseas brands and relevant IP operations.
- Pay more attention to Internet. Not only Dingguagua has expanded its sales via successful e-commerce, but Donghua also has been trying to seize the opportunities arising from “Internet +” for China’s textile and apparel industry. Zhaosha.com fully integrates big data, cloud, mobile internet and other new and advanced tools, aiming to create an efficient, transparent and real-time responsive textile industrial trading ecosystem based on internet.

2. The success of textile and apparel Industrial Clusters in China

(1) The overview and origins of textile industrial clusters

● The overview of textile industrial clusters

We all know that industrial cluster is home to SMEs. SMEs are aggregated together in the same manufacturing sector or in up streams and down streams. Some industrial clusters have a large number of vigorous SMEs both in the production side and the trading side.

Therefore, so it is essential to study the development and status quo of China's textile and apparel industrial clusters.

China's textile industrial clusters are well developed in nearly every sector on the whole vertical textile industry chain. There are respectively or collectively industrial clusters in terms of chemical fibers, cotton textile, wool textile, silk textile, bast and leaf fibers textile, filament weaving, home textiles, industrial textiles, knitting and clothing, which is unique in the world.

CNTAC has established pilot co-building relationships with local government (at city, county and town level) with regard to the development of industrial clusters. As of 2015, CNTAC has named up to 204 industrial clusters in textile industry all over China. These clusters mainly locate in the eastern coastal regions, and the numbers of clusters in Jiangsu, Zhejiang, Fujian, Shandong, Guangdong provinces amount to 153, the numbers in middle of western China total to 35.

According to the statistics of CNTAC, the aggregated economy output of these 204 industrial clusters accounts for appropriately 40% of China's total economic output of textile and apparel industry. In 2014, the main business income of these 204 textile industrial clusters reached nearly 4 trillion Yuan.

Among these clusters, the annual total industrial output in 8 districts has surpassed 100 billion Yuan. They are: Binzhou City in Shandong Province, Xiaoshan District, Keqiao District and Tongxiang City in Zhejiang Province, Changle City in Fujian Province and Jiangyin City, Changshu City and Wujiang City in Jiangsu Province.

In addition, there are 3 clusters with annual trading value surpassing 100 billion Yuan, and they are Keqiao District in Zhejiang Province, Changshu City and Shengze Town in Jiangsu Province.

Table 1 Typical Textile Industrial Clusters in China

Sector	Typical industrial clusters
Chemical Fibers	Jiangsu Province: Zhouzhuang town, Huangjing town Zhejiang Province: Yaqian town, Zhouquan town
Home textiles	Zhejiang Province: Yuhang district, Xuchun town Shandong Province: Gaomi city Jiangsu Province: Tongzhou district, Sanxing town
Cotton industry	Jiangsu Province: Xianfeng town, Jingang town Shandong Province: Xiajin county, Zhoupin county Henan Province: Xinye county

Industrial textiles	<p>Jiangsu Province: Zhitang town, Tiantai county</p> <p>Fujian Province: Youxi county, Ling county</p> <p>Hubei Province: Xiantao city</p>
Wool industry	<p>Guangdong Province: Dalang town</p> <p>Hebei Province: Qinghe county</p> <p>Ningxia Province: Lingwu City</p> <p>Zhejiang Province: Puyuan town</p>
Knitting	<p>Shandong Province: Zhucheng city, Jimo city, Jiexiang city</p> <p>Zhejiang Province: Xiangshan county, Datang town, Maqiao town</p> <p>Guangdong Province: Xiaolan town</p> <p>Fujian Province: Jinfeng town</p>
Garments	<p>Jiangsu Province: Jintan city, Gaoyou city, Changshu city</p> <p>Fujian Province: Shishi city</p> <p>Guangdong Province: Humen town, Shaxi town</p> <p>Zhejiang Province: Shengzhou city</p> <p>Shandong Province: Zhucheng city</p> <p>Jiangxi Province: Gongqingcheng city</p> <p>Liaoning Province: Xincheng city</p>
Silk industry	<p>Jiangsu Province: Shengze town</p> <p>Zhejiang Province: Heshan town</p>

● The origins of textile industrial clusters in China

First, the local textile has a long history. In 1980s, “textile” became the natural first choice for local people and government when developing township enterprises.

Second, the local government supported a lot in the process of industrialization and formation of “one place, one product” pattern in 1980s and 1990s. Therefore, there were some industrial agglomeration concerning of some specific textile products.

Third, at the beginning of opening up and reform, China has introduced plenty of policies attracting FDI. The relevant export-led policies attracted a lot of foreign capital to set up textile and garment factories in China. Later, many local people learned from these FDI companies and started to establish factories which aimed to produce similar textiles and clothing, and then a cluster emerged. This situation is very popular in the Pearl River Delta, Yangtze River Delta and the southeast coast regions of China.

The fourth, the local industry and specialized trading market together yielded interactive supporting effect, which helped to accelerate large scales of industrial agglomeration. By the ever-growing private investment in manufacturing sector, together with trading market upgrading led by local government, the production and trading became more and more flourishing in these clusters and created apparent competitive edge.

The fifth, one or several key and major enterprises promote the formation and development of industrial clusters. An excellent backbone enterprise not only has a strong processing capacity, but also usually has good R&D and marketing capabilities. Some backbone enterprises may have their own retailing brands. The backbone enterprises often require a large number of SMEs to support its processing and distribution, and in this way, an industrial cluster emerges.

(2) Field investigations in two typical industrial clusters

For a better understanding of the integration of SMEs into the GVCs, as well as of relevant policies of local governments, the researcher visited Dalang Town of Guangdong Province and Shishi city of Fujian Province to conduct field investigations in October and November of 2015. The researcher had official seminars, interviews and communication with local governments, industry organizations and entrepreneurs.

In the following charts, the researcher will share the basic situations of these two industrial clusters, and to summarize the promotion policies for SMEs to participate in GVCs more intensively of local governments, for the purpose of providing some feasible experience to promote the development of SMEs in textile and apparel industry.

A very important fact is that 99.9% enterprises in these two clusters belong to SMEs according to the aforementioned new classification of statistics. Therefore, the situations of local textile economy can fully reflect the operations of SMEs collectively.

	Dalang Town	Shishi City
Basic conditions of clusters		
Geographic location	Located in the central south district of Dongguan City of Guangdong Province, covering an area of 118 square kilometers and governing 28 communities (villages), with a permanent population of 69,000 and an actual population up to 500,000.	Located in Quanzhou city, Fujian Province, governing 7 towns and 2 sub-district offices including 102 villages and 25 communities, with a permanent population of 317,000 and migrant population of 400,000.
Main textile industry in the cluster	<p>The wool industry is the pillar industry of Dalang.</p> <p>Awarded “China’s Famous Town of Wool Sweaters” by CNTAC</p>	<p>Shishi has established a very complete textile and apparel industrial chain.</p> <p>Awarded “China’s Famous City of Casual Clothing” and “China’s Famous Trading City of Casual Fabrics” by CNTAC</p> <p>Lingxiu Town - China’s Famous Town of Sporting and Casual Clothing</p> <p>Hanjiang Town - China’s Famous Town of Trousers</p> <p>Baogao Town - China’s Famous Town of Accessories for Apparel</p> <p>Hongshan Town - China’s Famous Town of Casual Fabrics</p> <p>Fengli Sub-district - China’s Famous Town of Children’s wear</p>
Local Associations	<p>Dongguan wool textile association</p> <p>Dongguan wool fashion designer association</p> <p>Dongguan textile machinery association</p>	<p>Shishi Chamber of textile and apparel</p> <p>Shishi fabric association</p> <p>Shishi Accessories for garments association</p> <p>Shishi Dyeing and Finishing association</p> <p>Shishi trousers Association</p> <p>Shishi children’s wear association</p> <p>Shishi garment markets association</p>



<p>Development history</p>	<p>At the very beginning of the opening up and reform of China, Dalang attracted many FDI from Hong Kong, China investing in wool knitting factories and many local peasants became employees in these factories.</p> <p>Subsequently, many people who had learned the skills of production and management started their own wool knitwear factories.</p> <p>After over 30 years' development, the wool knitwear industry in Dalang has grown into an influential industrial cluster in China and even in the whole world. From small to large, from weak to strong, from scattered to the cluster, from OEM to own brands and independent sales, the growing story is very impressive.</p>	<p>In 1980s, Shishi took full advantage of the oversea Chinese resources to build well-known clothing markets with fashionable and various kinds of garments.</p> <p>As the domestic market and exporting flourished, the manufacturing capacity of textiles and garments grew a lot in 1990s, Numerous SMEs in textile industry enjoyed a fast growing time.</p> <p>Now, Shishi has become an important and competent textile and apparel industrial cluster in China, with a complete textile production chain.</p> <p>Shishi's casual men's wear, sporting wear, children's wear have gained a fairly market share in China.</p>
<p>The current textile economy performance Current challenges</p>	<p>Very concentrated cluster. Dalang has more than 7,000 wool knitwear SMEs, one international procurement center of wool knitwear, two wool products specialized markets, six wool textiles production area and 12 wool products streets.</p> <p>Strong Production Capacity. Annual sales volume of sweaters in the whole industry cluster exceeds 1.2 billion, among which 800 million sweaters are from Dalang, 60% of Dalang sweaters are exported to more than 80 economies and regions around the world including Italy and USA, the numbers of numerical controlled weaving machines have increased to near 50,000.</p>	<p>Very Strong Production Chain. After twenty years of development, Shishi has developed a complete industrial chain of textile and garment, covering raw materials, spinning and weaving, dyeing and finishing, garment assembly, accessories, R&D, marketing and other fields.</p> <p>Flourishing SMEs In 2014, the numbers of textile and apparel enterprises included in the government statistics reached 5625, and nearly all of these enterprises belong to SMEs.</p> <p>The total industrial output value of these enterprises reached 49.4 billion Yuan, 2.99 times to 2005.</p>

	<p>Complete industrial chain and supporting industries. The production chain of wool textile products is very strong and complete, including but not limited to R&D, raw materials, accessories, production and processing, machinery, logistics, trading centers, personnel training, technology services, information consulting and other supporting sectors.</p> <p>The sub-contracting is very popular in Dalang.</p> <p>The total industrial output of wool industry has reached 19.06 billion Yuan in 2014, up 7.1% over previous year.</p> <ul style="list-style-type: none"> -weak oversea demands - higher and higher wages -shortage of labors 	<p>A Sourcing Center. Shishi's textile and apparel industry has been deeply integrated into the global sourcing system and GVCs. Many global brands buy garments from Shishi as this cluster can provide all in one solutions. Shishi exports 1.75 billion US dollars textiles and garments in 2014, more than 13 times to 2005.</p> <p>Leading Specialized Markets. Shishi has some very influential specialized markets relating textile products, such as Shishi clothing city, Yuanyang chi fabric market, Taqian garment accessories market, Yangxia fabric and accessories market, Taqian garment machinery market, and the coming Shishi textile city.</p> <ul style="list-style-type: none"> -weak oversea demands, exports decline - higher and higher wages -strict pollutions control - less access to normal loans form banks
Supporting strategies and policies of local governments		
<p>Making industry development plans and strategies</p>	<p>The Dalang town government establishes a wool knitwear administration office to serve the healthy development of wool knitwear industry.</p> <p>In 2012, inviting CNTAC to jointly made and issued “ Planning on the industrial transformation & upgrading and sustainable development of Dalang’s wool knitwear industry”, aiming to promote the agglomeration of creative ideas, R&D, design, sales and other high value-added ingredients of the industrial chain.</p>	<p>In Late 2012, Making “Oriental Milan” strategic planning, to boost textile and garment upgrading and build the fashion city & the world famous garment city.</p> <p>Early in 2015, Shishi government issued the “Opinions on supporting the transformation and upgrading of textile, garments and footwear industry”, coupled with “1+6” detailed supporting policies.</p>



	<p>Led by four “Dalang Elements”, which are “Dalang price”, “Dalang standard”, “Dalang market”, “Dalang platform”, and seize both sides of the smile curve, and promote “wool industry + E-commerce”, “wool industry + Robots” and “services + brands”.</p>	
<p>Creating local collective brands and visions</p>	<p>The local government has registered “Dalang” collective trademark in more than 80 economies and regions, and keeps on promoting this trademark in terms of wool textiles worldwide.</p>	<p>The local government supports to present Shishi pavilion in Intertextile exhibitions and other major exhibitions.</p>
<p>Marketing support</p>	<p>AnnualChina(Dalang)International Woolen Knitwear Fair has become the brand fair of this industry for the past fifteen years.</p>	<p>Organize SMEs to participate in professional exhibitions in and outside China to expand potential markets and show the Shishi Textile brand. For example, in 2014, the government, together with the industry associations, organized 22 SMEs to join CHIC, 55 SMEs to Join Intertextile Shanghai.</p>
<p>Promoting the technology innovation and industrial upgrading</p>	<p>Organize China Knitwear Trend Release for eight years. To establish the Dalang wool textile products research center, and enhance research and design level through cooperation with well-known designers, cooperation with textile colleges and organizing sweater design contest. Currently, more than 80% of the total wool knitwear enterprises have R&D department, with 1,300 senior designers, and design more than 300,000 kinds of sweaters. To implement the “Machines in place of People” strategy. Remarkable achievements have been made in the town’s efforts to</p>	<p>Encourage SMEs in textile and apparel industry to implement technological innovation and establish the intelligent and automatic production workshops; Providing steam heating collectively in three concentrated controlled dyeing and finishing areas to the printing companies; In December 2014, 15 major printing companies co-founded the Quanzhou technology innovation alliances of clean dyeing and printing, aiming to solve common environmentalprotectiontechnology in terms of water treatment and waste gas treatment.</p>

	<p>boost the wool industry by using more efficient machines, with the numbers of numerical controlled weaving machines increased to near 50,000 in 2014, from only 637 in 2004.</p> <p>The total economy output of wool knitwear industry in Dalang has increased to 19 billion Yuan in 2014 from 12 billion Yuan in 2009, but the employees has decreased from over 120,000 to less than 90,000 in the same period.</p> <p>In general, The productivity has improved a lot.</p>	
<p>Promoting the public services platforms for SMEs</p>	<p>Making effort to improve six public services platforms in terms of R&D, quality testing and compliance, personnel training, exhibitions and logistics, financing.</p> <p>The Dalang government has sponsored to set up Guangdong Provincial Quality Woolen Textiles Supervision Station (Dongguan), China (Dalang) woolen textile products developing center and Dalang Woolen websites and alike, providing strong support to the transformation and upgrading to the wool knitwear industry.</p>	<p>The Shishi government has sponsored or facilitated to set up the following platforms for SMEs:</p> <p>Quality testing platforms: Including testing center of CNTAC, Fujian province, Fujian bureaus of Inspection and Quarantine Textile Laboratory (Shishi City) and other quality testing agencies.</p> <p>Staff training platform: workforce skills will become increasingly important elements for developing economies to maintain and upgrade their positions in the global apparel value chain.(Karina Fernandez-Stark, Stacey Frederick, Gary Gereffi.2011) For the purpose of solving the actual production problems and enhancing the relative skills, Shishi government had supported training programs involving 216,780 persons from SMEs just from 2005-2009.</p> <p>Modern Logistics Platforms: gradually build professional regional logistics system including</p>



		a large comprehensive logistics center in Shihugang industrial park, clothing distribution center of Shishi clothing city and Lingxiu storage plus distribution center of fabrics.
Financing Support	No direct financing support from local government, but there are two Small Loans companies have provided near 1,000 credit guarantees for the loans of wool knitwear enterprises.	<p>Technology Platform: To set up clean manufacturing service platform for Shishi's dyeing and printing industry. In October, 2014, Shishi set up a special financial service center for the first time in China. In accordance with the principle of "Government lead, industry responsible and standardized operation", Shishi has set up three loans continuances funds with regard to 200 million Yuan for textile and apparel, 55 million Yuan for fabric and 80 million Yuan for exporting and importing. So far, these funds have supported 1,733 continuances of loans of 729 SMEs with the loan value up to 17.64 billion Yuan.</p>
Supporting the E-commerce and "Internet +" strategy	<p>In late 2012, the government promoted the establishment of Dalang e-commerce association. Dalang has built an e-commerce industry center up to 20,000 square meters. The government encourages 3,300 wool knitwear enterprises to start their e-commerce and at present over 180 Dalang wool knitwear enterprises has engaged into "Dalang Wool" area in "Tao factories" platform built by Alibaba. From January to September in 2015, the gross sales of wool knitwear e-commerce enterprises has reached 3.55 billion Yuan, increasing 60%.</p>	<p>The government promotes the e-commerce very actively. At present, the numbers of online stores owned by enterprises and individuals of Shishi has surpassed 30,000.</p> <p>The government has cooperated with big e-commerce platforms like Alibaba and JD to facilitate local textile and garment enterprises to expand their online stores and direct sales. Shishi ranks No.1 in "JD 100 counties list" and NO.2 in "Alibaba 100 e-commerce counties list".</p>

CHAPTER 3

Barriers and Challenges

Although China's textile and apparel SMEs enjoy a lot of advantages, such as following:

- China's highways, railways, ports and energy networks and other infrastructure are first-class in the whole world, which can support fast response supply chain including a lot of SMEs.
- The complete and long textile and apparel industrial chain in China create large market share for the SMEs, including but not limited to design, primary or intermediate and final manufacturing, distribution and retailing, etc.
- China's rapid development of electronic commerce is creating huge new demands and opportunities for the start-ups.
- High skilled workers and advanced machinery together contributing high productivity.

However, the healthy and sustainable development of SMEs in China's textile and apparel industry has encountered many challenges.

Especially in recent years, as the WTO bonus disappears and the global financial crisis emerges, the "golden era" of SMEs in textile and apparel industry in China has gone. According to the surveys from China Home Textile Association, the not so good operating performance data from 40 small and micro home textile enterprises in 2014 shows that the business situation is very challenging.

40 Small Home textiles Firms Operating Data in 2014				
Sub-sectors	Gross Revenues growth rate	Profit growth rate	Gross industrial output value growth rate	Domestic output value Growth rate
Bedding textiles (4)	-35.7%	-63.7%	-34.32%	-33.9%
Towels (20)	-6.6%	-7.4%	-0.2%	-0.35%
Decorative Fabrics (16)	-40.2%	12.5%	-0.95%	-15.2%

Source: China Home Textile Association

Furthermore, the total profits of 18,218 enterprises below the designated size in eleven home textile industrial clusters have decreased 13% in 2014 comparing to 2013, while the total sales volume are almost the same.

The main barriers and challenges which prevent SMEs from participating in GVCs in Chinese textile and apparel industry are following:

1. Higher tariffs in USA, EU and Japan

The export competitiveness of China's textile and garments are increasingly reduced by higher tariffs comparing to the counter-economies, especially with regard to the markets of the United States, Japan and European Union.

In recent years, Chinese textiles and garments in the imports shares of the United States, EU and Japan, the three major developed markets, have declined. In 2010, China's textiles and garments in the imports shares of the United States, EU and Japan account for respectively 40.1%, 41.2% and 75%, but from January to September in 2015, the proportion in the United States and Japan has respectively dropped to 38.7% and 64.3%, and the proportion in EU has fell to 36.3 percent from January to August in 2015.

Import share changes in there major developed market						
Economy	USA textile and garment imports		EU textile and garment imports		Japan textile and garment imports	
	2014 share (%)	percentage change vs. 2013	2014 share (%)	percentage change vs. 2013	2014 share (%)	percentage change vs. 2013
China	38.9	-0.9	37.9	-0.4	69.9	-1.3
Viet Nam	9.3	0.9	2.6	0.3	8.1	1.3
Bangladesh	4.7	-0.2	11.2	0.3	1.7	0.2
India	6.3	0.3	7.3	0	1.2	0.1

Source : CNTAC calculation

The main reason of the market share decrease is the higher tariff in the aforementioned markets. The textiles and garments exported to the United States, EU and Japan from China can only enjoy the most-favored-nation (MFN) tariff rates, which are much higher than the zero or preferential tariff rates that the exports from Bangladesh, Cambodia, Myanmar, Viet Nam, India, Pakistan and other economies can enjoy wholly or partly. As a result, the SMEs in the Chinese textile and apparel industry find that it is more and more difficult to keep their overseas orders.

2. Surging wages and shortage of workforce

According to the National Bureau of Statistics of China, the average salary per worker in the textile and apparel enterprises above designated size was 32,793 Yuan / year, equivalent to 2733 Yuan / month. Then, according to CNTAC's survey, the salary in the textile industry has maintained an average annual increase rate about 10% since 2011. Right now, in the coastal provinces of China, a worker's salary is appropriately between 3,500 Yuan / month to 5,000 Yuan / month depending on his / her duty and expertise. The Salary is slightly lower in Middle and West China, around 2500-3500 Yuan / month.

After the implementation of China's new Labor Contract Law in 2008, the labor cost of textile and garment enterprises burdened has significantly increased. Social security and public housing fund paid by both the employer and employee can account for about 30 percent of worker's actual income. Naturally, the SMEs with low profit margins are under great pressure when facing the surging salary cost.

In addition, it is a great concern that the current Chinese young generation generally do not want to work in the factory even the salary is fairly high. We can surely forecast that many SMEs in China's textile and apparel industry will face the dilemma of severe workforce shortage.

3. Unreasonable Cotton Policy

Over the years, the cotton price in China has always been higher than the international market, especially in the years from 2012 to 2014. Due to the execution of temporary domestic storage policy, domestic cotton price was higher than the international market for more than 30%. The maximum price gap of cotton in and abroad China was over 6000 Yuan / ton at some times, and then the domestic cotton price was even higher than the price of imported cotton yarn, which was obvious harmful to the local cotton spinning industry.

Cotton price gap in and abroad China			
	Year 2012	Year 2013	Year 2014
Average cotton price gap in and abroad China (RMB/ton)	5006	5248	4202
Source: China Cotton Textile Association			

Long-term price gap of cotton has weakened the competitiveness of China's cotton yarns and fabrics a lot, and as a result the export of Chinese cotton yarns, fabrics and even knitting garments has suffered a hard time. In effect, the global competitiveness of China's textile and apparel supply chain has been negatively impacted.

During the same period, the imports of cotton yarns have surged, which results in closure or bankruptcy of many SMEs in Chinese cotton spinning sector since 2013 according to the investigation of China Cotton Textile Association.

China's Cotton Yarns Import				
	2011	2012	2013	2014
Cotton Yarn Imports (10,000 tons)	90	153	210	201
Source : CNTAC				

Since the cease of temporary domestic storage policy last year, the cotton issue is still unresolved. There are still more than 10 million tons domestic cotton reserves balances. As the quality is poor and the auction price is too high, sale of the reserved cotton is very difficult.

Accordingly, the Chinese government has significantly reduce the cotton import quotas, only issued 894,000 tons of import quotas for the fulfillment of the obligation of WTO this year, resulting in serious shortage of high quality cotton. No qualified cotton, no more high-end orders. There has been a sharp decline in the international competitiveness of SMEs in China's cotton spinning and weaving sector.

4. Rising comprehensive costs

According to a report from the Boston consulting group, the combination of appreciating currency, the rising wages and the surging costs of electricity and industrial natural-gas has obviously weaken China's manufacturing competitive advantages in the world over the past ten years. The textile and apparel industry is affected in the same way.

According a survey from 29 chief procurement officers at leading European apparel companies, conducted in late 2013 and early 2014 by Mckinsey, almost three-fourths of sourcing executives had planned to reduce their sourcing from China. Bangladesh, Viet Nam, India and Myanmar are listed ahead of China as the expected top sourcing markets over the next five years in the same survey.

The main reason of the shift of sourcing orders is that the comprehensive costs in China's textile and apparel industry have increased a lot. The capacities of sustainable development have been weaken a lot, especially with regard to the SMEs. According to the investigation of

CNTAC these two years, the international sourcing orders have the tendency to go to large suppliers instead of many different medium or small suppliers, that is a really bad news for the SMEs.

Several key factors concerning the rising manufacturing costs are as following:

- **Energy prices** - China's current average industrial electricity price is about 0.75 Yuan / kwh, which is about 2 or 3 times to the industrial electricity price of Viet Nam, Central Asia, South Carolina State of America and even Ethiopia in Africa, and the price of natural gas is expensive too in China comparing to many other counter-economies.
- **Financing** - textile and apparel enterprises always have financing difficulties in China. According to surveys, although the benchmark interest has reduced several times these two years, but bank lending interest rates for textile enterprise are still generally 20% -30% higher than the benchmark interest rates, usually more than 6% per year. A number of small and micro enterprises are unable to obtain bank loans without enough guaranties, so they have to seek the financing via private lending with interest rates more than 10% per year.
- **Environmental protection** - the standards and requirements concerning the pollutant emissions in textile industry in China has continued to be stricter, and there are no enough transition periods for the industry and the enterprises. Due to the lack of capital and technical strength, a large number of small and medium enterprises are struggling to meet the new environmental protection standards in the short time. To complete the task of environmental protection, some local governments are taking "one size fits all" approach by simply prohibiting the new printing and dying projects.

CHAPTER 4

Policy Recommendations

1. More High Standard FTAs

The Chinese textile industry always welcomes and supports the global free trade of textile and garments. With the trend of growing regional FTAs in effect, especially the FTAs concerning the USA, EU and Japan, the global value chains and trade flows of textiles and garments are under great change. Chinese textile and apparel industry has felt the pressure when TPP is enacted this year, and the industry welcome that the Chinese government can build more and more high standard FTAs as soon as possible.

At present, China has signed 14 FTAs in total, involving 22 economies or regions as following:

China - Australia	China - Korea
China - Switzerland	China - Iceland
China - Costa Rica	China - Peru
China - Singapore	China - New Zealand
China - Chile	China - Pakistan
China - ASEAN	CEPA with Hong Kong, China
China - ASEAN(update)	CEPA with Macau
China- Chinese Taipei (ECFA)	

At present, the negotiations on China - Pakistan upgrading FTA, the regional comprehensive economic partnership (RCEP), China - GCC FTA, China - Sri Lanka FTA and China -Japan - Korea FTA are in progress. The Chinese textile and apparel industry has given full support to the aforesaid negotiations and hope that a more liberal tariff policy can be reached. In addition, the industry welcome a more comprehensive FTA negotiation can be discussed at the APEC level.

In general, the SMEs of Chinese textile and apparel industry will benefit from more effective FTAs with lower tariff and higher lever of liberalization of trade.

2. Reform on the cotton import policy

All the textile companies cannot freely import high quality cotton because of the existing cotton import quota system. The very high cotton price gap in and abroad China has reduced the competitiveness of the whole Chinese textile industry and especially of the small and medium textile companies.

The import obstacle of cotton is a very severe challenge to the sustainable development of SMEs in Chinese textile industry, as the imports of lower counts cotton yarns from India, Pakistan and Viet Nam have surged in the last several years, which has resulted in closure or bankruptcy of many SMEs in Chinese cotton spinning sector.

In light of this situation, the industry recommends that the Chinese government can gradually

abandon the existing cotton import quota system, and establish a market-driven cotton import policy, under which the textile companies can import abundant high quality cottons with reasonable import tariff and restore the global leading competitiveness.

3. More specific supporting policies from central government

At present, the Chinese central government has not made specific supporting policies on SME's integration into GVCs in the textile and apparel industry in China, however, the local governments, in particularly at the county or town level, has done a lot for the better development of textile and garment industrial clusters. In light of the problems and difficulties the SMEs in textile and apparel industry have encountered, the textile industry in China recommends Chinese central government the following supporting policy:

Energy costs: As the coal price has dropped deeply in China, the government shall reduce the electricity price for industrial use accordingly, easing the pressure on rising business costs.

Taxes and fees: the government shall

- Cut down the proportion of social security and housing public fund in the employee' salary in SMEs which are in labor intensive sectors
- Give SMEs proper tax credits or VAT refund according to the enrollment of employees
- Give a preferential 15% rate of corporate income tax for the SMEs which develop their own brands in and abroad China to encourage the elevation of status in the value chain

Finance: the Chinese government shall establish a credit risk compensation fund for SMEs, through which the SMEs can reduce the financing interest rate.

Business environment: the Chinese government shall take actions to cut down the unreasonable high costs both in domestic retail channels and online channels through strict administrative law enforcements, to create a better business environment for the SMEs which are striving to sell their own brands goods.

Public service platforms in industrial clusters: the Chinese government shall allocate more resources to improve the functions of public service platform in textile and garment industrial clusters. The public service platforms could play very important role in capacities building of SMEs with regard to market opportunities, e-commerce, testing, skill training for works, common R&D and etc.

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PARTICIPATION OF MICRO, SMALL, MEDIUM
ENTERPRISES TEXTILE AND APPAREL SECTOR
IN GLOBAL CHAIN VALUE

CASE STUDY IN INDONESIA

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ABSTRACT

Textile and apparel SMEs play a strategic role in the Indonesian-economy. The development of textile and apparel SMEs associated with employment and non-oil exports. The main issues for the needs of raw materials (input) still depends on imported commodities. The role of SMEs more in the trade chain, so that the value added obtained is still very low. Textile and apparel SMEs linkages with large-scale enterprises have not formed, and thus require regulatory support and favor large-scale enterprises. The main issue of textiles and apparel SMEs in Indonesia concerning the issue of stable supplies of inputs, lack of technology, the high cost of capital and investment, lack of innovation, protection against illegal textile and apparel products, the instability of the policy sector of energy, limited events promotion, and development of the global market. Solutions to improve the participation of SMEs in the textile and apparel global value chain needs the support of government policy in the medium term. Relying on the ability of each SME business operators to engage in the global value chain requires a long time, so it requires transformations.

CONTENTS

Abstract	46
TABLE OF CONTENT	47
EXECUTIVE SUMMARY	48
A. INTRODUCTION	50
B. PROBLEMS IDENTIFICATION	58
C. RELEVAN PREVIOUS RESEARCH.....	58
D. POLICY	58
E. SUMMARY AND RECOMMENDATION	79
F. CLOSING	81
REFERENCE	81

EXECUTIVE SUMMARY

The existence of micro, small, and medium enterprises is very meaningful in the life of Indonesian people and economy. By macro, the main challenge of Indonesia economic development is making micro, small, and medium enterprises as the main pillar of high competitive Indonesian economic so that it can have a role in Global Value Chains. On the other hand, micro, small, and medium enterprises in Indonesia still need a systematic and sustainable effort concerning increased competitiveness through enhancing the human resource quality, the utilization of the right production technology and information technology, as a vital challenge to the development of micro, small, and medium enterprises. Beside that, increasing market and financial accessibility are also unseparable part for making micro, small, and medium enterprises as Indonesia economic pillar.

The development of micro, small, and medium enterprises in textile and apparel industry Indonesia to be more involved in GVC network still have various obstacle, such as: (1) infrastructure limitations, such as: harbour, railroad, highway, airport, and warehouses; (2) old transportation facility; (3) long service time in the harbour; (4) high service cost in the harbour; (5) economic connectivity; (6) policy certainty, such as: increase in fuel prices and electricity tariffs; (7) weakness in input, especially raw material; and (8) weakness of coordination between the ministry and institution and central government and states. Indication that the integration effort of Indonesian micro, small, and medium enterprises textile and apparel industry in GVC are still weak can be seen from: (1) the commodity price produced were relatively more expensive, that made them less competitive; (2) there was a difference or price disparity locally or among province; (3) goods supply and distribution often disturbed; dan (4) poor role or contribution in international trade. With the limitation of Indonesian micro, small, and medium enterprises in textile and apparel industry to have a role in GVC, because consumer aren't sensitive to micro, small, and medium enterprises product that were produced in the economy, consumer only see the comparison of commodity price in the market, so textile and apparel product market are full with imported commodity and even used, illegal apparel. To have a part in GVC, Indonesian micro, small, and medium enterprises in textile and apparel industry must build cooperation with medium and big textile and apparel exporter. Then micro, small, and medium enterprises are also required to innovate product and coordination and reduce various obstacles that hinder micro, small, and medium enterprises development. Policies concerning micro, small, and medium enterprises, can not be general, but must be done specifically.

There are some findings on the current situation of Textile and Apparel industry value chain in Indonesia, i.e.:

- In the downstream industry, there are three types of raw materials for Textile and Apparel sector, i.e., cotton fiber, rayon fiber and polyster. Production capacity of cotton fiber in Indonesia is extremely small, i.e., 0.2% of total domestic demand (Indonesian Statistics Beureau, 2013). This means that 99.8% of the demand is fulfilled through export. The low production is due to limited cultivation field and inadequate technology for cotton fiber cultivation.
- Similarly, the industry also imports rayon fiber and polyster to fulfill domestic demand in the Textile and Apparel industry, due to significant gap between domestic supply and demand of the materials.
- The Textile and Apparel industry also fulfills demand for cotton through export, as most of the domestic production is exported. This situation also applies to fabric, garments and other textile products.
- Despite high domestic demand, products of downstream, mid-stream, and upstream industry

of Textile and Apparel have been exported. This is due to the fact that price of those products in the export market is much higher than that in the domestic market.

- To fulfill domestic demand, government imports similar commodities with lower level of quality. Price of the commodities is suitable for domestic market. However, domestic market consumes lower quality products;

Performance of Indonesian Textile and Apparel SMEs is quite promising, in general. This is indicated by size and contribution of the industry, employment, output and value added, as well as positive and stable industry growth. Despite the promising performance, the SMEs still face some obstacles, including:

- a. Low product quality standard
- b. Less adequate technology and instruments applied in the production process;
- c. High dependency on import of raw materials;
- d. Insufficient knowledge, experience, and access to product marketing facilities;
- e. Inadequate access to capital and investment;
- f. Low innovation and product diversification;
- g. Government incentive has been wrongly addressed.

Below are some proposed policies and action plans to overcome the above mentioned obstacles:

- a. Initiating textile raw material centers that focus on domestic product and give incentive to consumers and producers that actively involve in the centers.
- b. Protecting domestic market from illegal import of raw material.
- c. Providing inducement to help domestic natural fiber producers meet their needs, such as sufficient cultivation field, appropriate seed cotton price, as well as high quality seed;
- d. Consistently providing intensive guidance, training and assistance for the Textile and Clothes SMEs, to help them be bankable and visible.
- e. Developing software of brief financial report that can be easily operated, and suit accounting standard applied by Bank and other.
- f. Facilitating Textile and Clothes SMEs to access investors.
- g. Reducing required collateral level and providing low-interest loan to the Textile and Clothes SMEs.
- h. Improving quality and value-added of the SMEs' product by introducing domestic uniqueness.
- i. Applying technologies for Textile and Clothes products that have been advanced at Indonesian universities.
- j. Actively involving designers and experts in designing cultural-based products that will be produced by the SMEs.
- k. Privatizing government-managed agencies that specialize in product development, particularly in product quality and design.
- l. Regularly organizing domestic product exhibition at district, provincial, and domestic level. Textile and Clothes SMEs with high achievement are given opportunities for promoting their products in particular World Textile and Clothes Exhibition..
- m. Encouraging local governments to initiate Cultural Festival which can attract massive tourists.
- n. Providing the SMEs effective access to world prominent e-commerce sites.
- o. Encouraging the Textile and Clothes SMEs to keep developing their business and helping them be metamorphosed to a larger business entities through business development assistance.

A. INTRODUCTION

The existence of micro, small, and medium enterprises is very meaningful in the life of Indonesian people and economy. In 2013, total numbers of Indonesian enterprises were 57.9 million units, which 57.19 million units or 98.77% were micro enterprises, 654.222 units or 1.13% were small enterprises, and 52.106 units or 0.09% were medium enterprises. While big enterprises were only 5,066 units or 0.01%. The employment of micro, small, and medium enterprises was very large, reached 96.99%. But micro, small and medium enterprises contribution to Gross Domestic Product was only 57.56%. This showed that the productivity of micro, small, and medium enterprises were far below the productivity of big enterprises.

By macro, the main challenge of Indonesia economic development is making micro, small, and medium enterprises as the main pillar of high competitive Indonesian economic so that it can have a role in Global Value Chains. On the other hand, micro, small, and medium enterprises in Indonesia still need a systematic and sustainable effort concerning increased competitiveness through enhancing the human resource quality, the utilization of the right production technology and information technology, as a vital challenge to the development of micro, small, and medium enterprises. Beside that, increasing market and financial accessibility are also unseparable part for making micro, small, and medium enterprises as Indonesia economic pillar.

Textile and apparel industry position is a strategic sector in Indonesian economic, so its performance will continue to be optimized. Textile and apparel industry, have great contribution in certain things: (1) Textile and apparel production is the leading commodity producer in Indonesian non-oil export. Between January to November 2015, FOB value of Indonesian apparel export (excl. knitwork) reached 3,5 billion USD and was the sixth biggest contributor of Indonesian non-oil export Apparel export contribution between January to November 2015 was 2,96% from total Indonesian non-oil export export.

Beside that, (2) textile and apparel industry in Indonesia has become the Indonesian employment trestle. Employment in Indonesian textile dan apparel industry reached 2.796.131 workers, or 18.7% of all workers in manufacturing industry sector and forming 2.5% of total Indonesian workers in 2013. While other indicators concerning textile and apparel industry contribution in Indonesian economic can be seen in Table 1.1.

TABLE 1.1

ECONOMIC INDICATORS OF INDONESIAN TEXTILE AND APPAREL INDUSTRY 2013-2014

Performance	Unit	Amount	Description
Export	Billion USD	12,74	2014
Textile and Apparel Product Contribution to Total Non-oil Export	%	8,73	2014
Textile and Apparel Product Contribution to Total Domestic Export	%	7,23	2014
Textile and Apparel Industrial Workers	People	2.796.131	2013
Textile and Apparel Industrial Workers Contribution to Total Workers in Manufacturing Industry	%	18,7	2013
Textile and Apparel Industrial Workers Contribution to Total Domestic Workers	%	2,5	2013

Source: Indonesian Textile Association, (2013 and 2014)

TABLE 1.2

INDICATORS OF INDONESIAN TEXTILE AND APPAREL INDUSTRY OF MACRO, SMALL, AND MEDIUM ENTERPRISES IN INDONESIA YEAR 2013-2014

Performance	Unit	Amount	Description
Total Textile and Apparel Industry	Unit	663.000	2014
Total Micro, Small, and Medium Enterprises Textile and Apparel Industry	Unit	658.000	2014
Percentage of Micro, Small, and Medium Enterprises Textile and Apparel Industry to Total Indonesian Textile and Apparel Industry	%	99	2014
Micro, Small, and Medium Enterprises Textile and Apparel Industrial Workers	Orang	2.796.131	2013
Percentage of Indonesian Micro, Small, and Medium Enterprises Textile and Apparel Industrial Workers to Total Indonesian Textile and Apparel Industrial Workers	%	32	2013
Percentage of Indonesian Micro, Small, and Medium Enterprises Textile and Apparel Industrial Workers to Total Domestic Industrial Workers	%	3,4	2013

Source: Indonesian Textile Association, (2013 and 2014)

The strategic indicators of the micro, small, and medium enterprises in textile and apparel industry can be seen from fluctuation in the number of micro, small, and medium enterprises (Table 1.3). Fluctuation in the growth number of micro, small, and medium enterprises shows that micro, small, and medium enterprises industrial development in Indonesia is still unstable. In year 2013 the number of micro scale textile business (enterprises) grew 38.17% and small scale enterprise grew 83.51%. But in year 2014, the same indicators, the growth was only 9.66% and -55.54%, respectively. The same condition has also happened to the apparel industry, in year 2013 the growth of micro scale apparel industry was -30.77% and for small scale was -7.44%. But in year 2014, the same indicators seem extreme, where the growth of micro scale apparel enterprise reached 26.40%, while the growth of small scale apparel enterprises were suppressed, reaching -49.41%. The expected condition of textile and apparel micro, small, and medium enterprises in the future increasing business units and then business scale improvement, from textile and apparel micro scale industry to textile and apparel small scale industry. The instability growth in the number of textile and apparel micro and small scale industry indicates the high factor affecting the business existence, other than micro problem related the running of the company itself.

TABLE 1.3
NUMBER OF TEXTILE AND APPAREL MICRO AND SMALL SCALE ENTERPRISES YEAR 2012-2014

TYPE OF BUSINESS	NUMBER OF COMPANIES (UNITS)		NUMBER OF COMPANIES (UNITS)		NUMBER OF COMPANIES (UNITS)	
	2012		2013		2014	
	MICRO	SMALL	MICRO		MICRO	SMALL
TEXTILE	192 149.00	15 008.00	265 498.00	TEXTILE	192 149.00	15 008.00
APPAREL	347 887.00	107 141.00	240 833.00	APPAREL	347 887.00	107 141.00
TOTAL BUSINESS	540036.00	122149.00	506331.00	TOTAL BUSINESS	540036.00	122149.00
TOTAL BUSINESS GROWTH (%)	2011 TO 2012 GROWTH(%)		2012 TO 2013 GROWTH (%)		2013 TO 2014 GROWTH (%)	
YEAR	2012	2012	2013	YEAR	2012	2012
BUSINESS SCALE	MICRO	SMALL	MICRO	BUSINESS SCALE	MICRO	SMALL
TEXTILE	-14.98	-12.32	38.17	TEXTILE	-14.98	-12.32
APPAREL	71.53	5.42	-30.77	APPAREL	71.53	5.42

Source: Indonesian Central Bureau of Statistic (2015)

To observe the micro, small, and medium enterprises textile and apparel industry dynamics and development, among them are input value information, output value and value added produced by the company. The information can be seen in Table 1.4 through Table 1.6. The ideal condition of the development of the micro, small, and medium enterprises textile and apparel industry business in Indonesia in the future is directed to increase even larger value added, so that the input value growth must be suppressed lower than the increasing output growth. The condition was desired because it indicates that Indonesian textile and apparel enterprises performance is relatively good, so that there is an increasing productivity in the using of input to produce larger value added growth. The current condition (2012-2014), still showing the increasing growth of larger input than the increasing output growth, so textile and apparel value added growth in Indonesia is becoming lower. This condition can be seen in the input growth of micro scale textile enterprises year 2012 for 446.7% while in the same year the output growth was only 331.51% or even lower.

TABLE 1.4
TEXTILE AND APPAREL INDUSTRIAL INPUT VALUE
MICRO AND SMALL SCALE YEAR 2012-2014

TYPE OF BUSINESS	INPUT VALUE (MILLION RUPIAH)		INPUT VALUE (MILLION RUPIAH)		INPUT VALUE (MILLION RUPIAH)	
	2012		2013		2014	
	MICRO	SMALL	MICRO		MICRO	SMALL
TEXTILE	2 548 268.00	5 503 187.00	2 755 533.00	TEXTILE	2 548 268.00	5 503 187.00
APPAREL	6 656 672.00	20 785 414.00	5 479 223.00	APPAREL	6 656 672.00	20 785 414.00
TOTAL INPUT VALUE	9 204 940.00	26 288 601.00	8 234 756.00	TOTAL INPUT VALUE	9 204 940.00	26 288 601.00
INPUT VALUE GROWTH(%)	2011 TO 2012 GROWTH(%)		2012 TO 2013 GROWTH (%)		2013 TO 2014 GROWTH (%)	
YEAR	2012	2012	2013	YEAR	2012	2012
BUSINESS SCALE	MICRO	SMALL	MICRO	BUSINESS SCALE	MICRO	SMALL
TEXTILE	446.70	362.97	8.13	TEXTILE	446.70	362.97
APPAREL	447.38	70.78	-17.69	APPAREL	447.38	70.78

Source: Indonesian Central Bureau of Statistic (2015)

TABLE 1.5
TEXTILE AND APPAREL INDUSTRIAL OUTPUT VALUE
MIKRO AND SMALL SCALE YEAR 2012-2014

TYPE OF BUSINESS	OUTPUT VALUE (MILLION RUPIAH)		OUTPUT VALUE (MILLION RUPIAH)		OUTPUT VALUE (MILLION RUPIAH)	
	2012		2013		2014	
	MICRO	SMALL	MICRO		MICRO	SMALL
TEXTILE	4 379 799.00	9 964 374.00	5 515 227.00	TEXTILE	4 379 799.00	9 964 374.00
APPAREL	14 364 606.00	37 590 051.00	11 901 070.00	APPAREL	14 364 606.00	37 590 051.00
TOTAL INPUT VALUE	18 744 405.00	47 554 425.00	17 416 297.00	TOTAL INPUT VALUE	18 744 405.00	47 554 425.00
OUTPUT VALUE GROWTH(%)	2011 TO 2012 GROWTH (%)		2012 TO 2013 GROWTH (%)		2013 TO 2014 GROWTH (%)	
YEAR	2012	2012	2013	YEAR	2012	2012
BUSINESS SCALE	MICRO	SMALL	MICRO	BUSINESS SCALE	MICRO	SMALL
TEKSTIL	331.51	420.82	25.92	42.25	36.83	-47.03
PAKAIAN JADI	540.24	119.11	-17.15	88.67	106.05	-36.18

Source: Indonesian Central Bureau of Statistic (2015)

TABLE 1.6
TEXTILE AND APPAREL INDUSTRIAL VALUE ADDED
MIKRO AND SMALL SCALE YEAR 2012-2014 (MILLION RUPIAH)

TYPE OF BUSINESS	2012		2013		2014	
	MICRO	SMALL	MICRO	SMALL	MICRO	SMALL
TEXTILE	1 831 531	4 461 187	2 759 694	TEXTILE	1 831 531	4 461 187
APPAREL	7 707 934	16 804 637	6 421 846	APPAREL	7 707 934	16 804 637

Source: Indonesian Central Bureau of Statistic (2015)

We all know that textile and apparel industry is a labor intensive industry. The development of this type of business cannot be separated from the high population and high work force and high labor force in Indonesia. The priority of this type of enterprise development in Indonesia is based in the need to increase employment and competitiveness of other economic factors such as: wages, land availability and the closeness to the market (considering high number of Indonesian population). Even so, the effort to increase employment by the textile and apparel company is not happening completely, as there is still negative growth from the number of labor in textile and apparel industry (**Table 1.7**).

TABLE 1.7

NUMBER OF TEXTILE AND APPAREL INDUSTRIAL WORKERS
MICRO AND SMALL SCALE YEAR 2010-2014

TYPE OF BUSINESS	NUMBER OF WORKERS (PEOPLE)		NUMBER OF WORKERS (PEOPLE)		NUMBER OF WORKERS (PEOPLE)	
	2012		2013		2014	
	MICRO	SMALL	MICRO		MICRO	SMALL
TEXTILE	273 094.00	140 781.00	374 523.00	TEXTILE	273 094.00	140 781.00
APPAREL	637 057.00	1 001 722.00	378 746.00	APPAREL	637 057.00	1 001 722.00
TOTAL LABOR	910 151.00	1 142 503.00	753 269.00	TOTAL LABOR	910 151.00	1 142 503.00
LABOR GROWTH (%)	2011 KE 2012 GROWTH (%)		2012 KE 2013 GROWTH (%)		2013 KE 2014 GROWTH (%)	
YEAR	2012	2012	2013	YEAR	2012	2012
BUSINESS SCALE	MICRO	SMALL	MICRO	BUSINESS SCALE	MICRO	SMALL
TEXTILE	-7.56	-9.64	37.14	TEXTILE	-7.56	-9.64
APPAREL	99.53	13.34	-40.55	APPAREL	99.53	13.34

Source: Indonesian Central Bureau of Statistic (2015)

As labor intensive enterprises, textile and apparel industry is very sensitive to changes in wages. According to the survey, the average labor cost reached 22% of total production cost in textile and apparel industry. Because of that, wages issue automatically influence the company competitiveness to become part of GVC integration. Condition that can suppress the existence of textile and apparel enterprises can be seen in year 2013 for small scale apparel enterprises. From Tabel 1.7, the number of small scale apparel enterprises workers in year 2013 decreased compared to the same indicator in year 2012, which was -10,99%. But at the same time, labor cost for the same indicator increased 37.86%. This meant that even though there was a decrease in the number of workers in small scale apparel enterprises in year 2013; the labor cost was still increasing. This condition was due to the adjustment of wages in Indonesia that caused the increasing company expenditure for labor cost (**Tabel 1.8**).

TABLE 1.8

EXPENDITURE FOR MICRO AND SMALL SCALE TEXTILE AND APPAREL INDUSTRY LABOR COST YEAR 2010-2014 (MILLION RUPIAH)

TYPE OF BUSINESS	2012		2013		2014	
	MICRO	KECIL	MICRO		MICRO	KECIL
TEXTILE	722 010	1 911 992	735 484	TEXTILE	722 010	1 911 992
APPAREL	3 034 527	8 998 682	2 016 056	APPAREL	3 034 527	8 998 682
LABOR COST GROWTH (%)	MICRO	KECIL	MICRO	LABOR COST GROWTH (%)	MICRO	KECIL
TEXTILE			1.87	TEXTILE		
APPAREL			-33.56	APPAREL		

Source: Indonesian Central Bureau of Statistic (2015)

Because of that this research will specifically explain the current condition of textile and apparel industry micro, small, and medium enterprises in Indonesia in perspective of building its integration with Global Value Chains (GVC) network textile and apparel industry regionally and internationally. Beside that, this study also sees and evaluates the form of drive or policy stimulus by the Indonesian government in driving micro, small, and medium enterprises in textile and apparel industry performance, so that in turn it will be in accordance with the increasing contribution or role of textile and apparel of micro, small, and medium enterprises in GVC. Then, after knowing the condition above, this research will also formulate policy recommendation and action plan to facilitate Indonesian micro, small, and medium enterprises in textile and apparel sector to be integrated into regional and international GVC textile and apparel industry sector.

Based on focus group discussion (FGD) of this research, that present interviewee Ade Sudradjat (Chairman of Indonesian Textile Association), Ina Primiana (micro, small, and medium enterprises observer), Aldrin Herwany (Chairman of West Java Chapter of Indonesian Economist Association) and the representative of Central Bank of Indonesia, that the development of micro, small, and medium enterprises in textile and apparel industry Indonesia to be more involved in GVC network still have various obstacle, such as: (1) infrastructure limitations, such as: harbour, railroad, highway, airport, and warehouses; (2) old transportation facility; (3) long service time in the harbour; (4) high service cost in the harbour; (5) economic connectivity; (6) policy certainty, such as: increase in fuel prices and electricity tarrifs; (7) weakness in input, especially raw material; and (8) weakness of coordination between the ministry and institution and central government and states. Indication that the integration effort of Indonesian micro, small, and medium enterprises textile and apparel industry in GVC are still weak can be seen from: (1) the commodity price produced were relatively more expensive, that made them less competitive; (2) there was a difference or price disparity locally or among province; (3) goods supply and distribution often disturbed; dan (4) poor role or contribution in international trade. With the limitation of Indonesian micro, small, and medium enterprises in textile and apparel industry to have a role in GVC, because consumer aren't sensitive to micro, small, and medium enterprises product that were produced in the economy, consumer only see the comparison of commodity price in the market, so textile and apparel product market are full with imported commodity and even used, illegal apparel. To have a part in GVC, Indonesian micro, small, and medium enterprises in textile and apparel industry must build cooperation with medium and big textile and apparel exporter. Then micro, small, and medium enterprises are also required to innovate product and coordination and reduce various obstacles that hinder micro, small, and medium enterprises development. Policies concerning micro, small, and medium enterprises, can not be general, but must be done spesifically.

B. PROBLEMS IDENTIFICATION

Along with general description that has been described above, then the problems that will be discussed in this research is:

1. How is the current condition of the integration of Indonesian micro, small, and medium enterprises in textile and apparel industry in GVC to the Domestic Textile and Apparel Industry?
2. What are the effects of the strategy and policy of Indonesian Government to stimulate the integration of Indonesian micro, small, and medium enterprises in textile and apparel sector in GVC to Domestic Textile and Apparel Industry?
3. What are the obstacles for textile and apparel sector to compete and has active role in GVC in World Textile and Apparel Industry?
4. What policy and action plan recommendation formulation that should be done to facilitate Indonesian micro, small, and medium enterprises in textile and apparel sector to be integrated into GVC sector textile and apparel industry?

C. RELEVAN PREVIOUS RESEARCH

Some previous researches that considered relevan and became one of the references of this research were:

1. Global Value Chain Condition Analysis of Textile Industry, Textile Product & Apparel

C.1 Review of Research about World Textile Industry, Textile & Apparel Product

Mlachila and Yongzheng (2004) used General Trade Analysis Project (GTAP) to analyze the en of textile quota by a case study in Bangladesh. There were three factors that influence Bangladesh textile and apparel export in 1990s, which were low wages, Foreign Direct Investment (FDI) inflow, and enforced quota in competitor economies. Bangladesh was faced with serious problem concerning competitiveness after the quota system came to an end, because of the weak infrastructure and various unfriendly macro climate.

Stimulation result showed that Bangladesh export would decrease after the elimination of quota and it will affect the Balance of Payment (BOP). WTO (2004) by using GTAP explained the condition of textile, product textile & apparel global industry after ATC ended. China, Viet Nam and India are economies that will dominate textile, product textile & apparel product market in Europa Union, United States, and Canada after the quota system is over. Even China was predicted to take over textile, product textile & apparel product market share up to 50 percent. Apart from that, vertical specialization in textile, product textile & apparel product supply chain is very important and for economies who share geographic resemblances will gain much benefit from the bilateral agreement and lower tariff. From many research about textile, product textile & apparel industry that have been done, general description about the development of textile, product textile & apparel product export development and affecting factors, both nationally or internationally. Furthermore, many researches that predict textile, product textile & apparel industry development post quota in 2005 showed that a economy currency devaluation, the increase of foreign exchange reserve, the increase of population, and indeks clothing price tend to increase textile export volume of a economy.

C.2 Empirical Review of Indonesian Textile Industry, Textile & Apparel Product

Textile industry is one of the largest employment in Indonesia (more than 1.3 million people directly). From that number, more than half (600 thousand people) work in garment textile industry that is also a labor intensive industry. On the other hand, upstream textile industry (fiber to cloth) is a capital intensive industry and full technology. Textile industry is one of the important foreign exchange source.

In period 1998-2002 textile and product textile industry experienced rough time, due to the economic crisis. This period, which can be called surviving period, continued with 2003-2006 period when many businesses try to revitalize machinery. Other obstacle faced is the difficulty to find financing resources and business climate that was not conducive. The next phase started since year 2007 when the government realized of various problems faced by textile and product textile industry that caused textile and product textile industry machinery restructurization in Indonesia. In the mid 2007, Indonesian textile and garment started to restructurize and replace old machines and tools. Government disbursed fund amounted to US\$27 to subsidize textile industry modernization program (Negara, S. D., 2010). The government started to enforce some incentive in order to drive textile and garment business to renew it production machines (Kalidasan, 2009).

Machinery restructurization basically connected to technological support to small scale industries. In the 1970s to 2000s practical experience from all over the economies concerning this was summarized in a scientific article. Romijn (2001) did some research to articles in various journals and summarize it into one understanding about the technological support to small scale industry. According to Romijn (2001), in earlier years of the project when the support (technological support) was given, there were many failures because lack of understanding about technological support conceptually or in its implementation.

In the last few years, technological support program like this gave positive impact to the development of small scale manufacture industry in developing contries by paying attention to feature associated to those successes. The four feature in advanced small scale manufacturing industry are those business that: (i) develop its internal ability to effectively assimilated, using and adapting to technology and manufacturing process, (ii) produce and develop according to its consumer's demand (demand driven), (iii) become support target (or accompaniment) from other business that have the same problems and help them through collective group that can thrive to be NGO, and (iv) accept incentive that suit market principles. Other researches revealed that to increase international competitiveness and increase small and medium business contribution into economy and employment, policy must be focused to technological development and financial infrastructure (Sonia, 2009).

Apart from that, Pracoyo research (1995) concerning textile industry export using time series data in 1983-1992 and Two Stage Least Squares (2SLS) prediction method. Pracoyo adopted demand and supply export model that have been done by Muscatelli, Srinivasan, and Vines (1992). The adaptation result concluded that Indonesian textile export supply was influenced by textile price, raw material cost, wages, tarrifs, and technology.

While from demand side, textile export was influenced by textile price, world textile price, substitute's price (world wool price), other economies income, and consumer taste. It can also be concluded that (1) tariff reduction will drive world trade to be more competitive. 30 percent

tariff reduction will drive world trade to be more competitive, (2) wages remuneration as much as 1 percent will decrease offering quantity by 4.5%, it happened because wages include cost component in production, and (3) technological change, shown by trend changer, driving textile production to be more efficient.

A research using Ordinary Least Squares (OLS) prediction method was done by Wintala (1999). Conclusion drawn from factors analysis affecting Indonesian textile export to United States, United Kingdom and Japan in 1978-1997, that Indonesian textile export volume trend to United States, United Kingdom and Japan is positive and statistically significant. Rupiah devaluation, increase in foreign exchange, increase in population, and clothing price index tend to increase Indonesian textile export volume.

Istojo Research (2002) analyzed industrial structure of TPT Indonesia to World Trade Organization (WTO) year 2005. The method used was industrial characteristic description, five forces model, driving forces, and key success factor. The result obtained were the dependency of textile and product textile industry to supplier and buyer was high and the tight competition between the companies in Indonesian textile and product textile industry. The enforcement of WTO in 2005 added competition and market scramble inside and abroad. The enforcement of WTO would also changed the textile and product textile industrial structure to mass customization that lean on non price factor and fully supported by quick response principle and just in time stock. It was mentioned that companies in textile and product textile industry have to do many manufacture innovation to increase product differentiation.

Agustineu (2004) analyzed factors that influenced textile industry output in West Java using Cobb Douglas model in 1980-2001. The result was capital, raw material, and fuel gave positive influence to the increase of textile industry output in West Java. Labor factor gave inverse influence with other factor mention first. Textile industry in West Java was in the condition of increasing return to scale.

C.3 Textile & Apparel Basic Chain Value System Identification

In the identification phase to determine the Indonesian textile, product textile & apparel value chain system, we could see that configuration of Indonesian textile, product textile & apparel industry was divided into three industrial sectors that were integrated from upstream to downstream. Upstream industry consisted of fiber industry (natural and artificial) and weaving industry both micro, small, and medium enterprises and big industry; medium industry consisted of weaving industry, knitting industry and finishing, then downstream industry consisted of garment industry, micro, small, and medium garment enterprises and other textile product industry (IPTL). The three industrial structures in textile, product textile & apparel value chain system has interrelated connection between one industry to another, in addition to connection with other supply chain component such as industrial consumer or direct consumer.

Referring to data from Asosiasi Pertekstilan Indonesia (2014), around $\pm 60\%$ of Indonesian textile and textile product and apparel export in the form of garment or apparel and other textile products. While the rest are products from upstream and medium industry such as fiber, yarn, and cloth $\pm 40\%$. Micro, small, medium enterprises production allocation for domestic market is still experiencing a shortage, other than domestic per capita consumption was not too high, export market was more profitable. Even though, in the economy condition was worrying because domestic market was filled by imported textile goods, where around $\pm 9\%$ was legal

imported goods, 67 % was illegal import (including used clothing), and about 24 % was filled by local product (BPS, 2013).

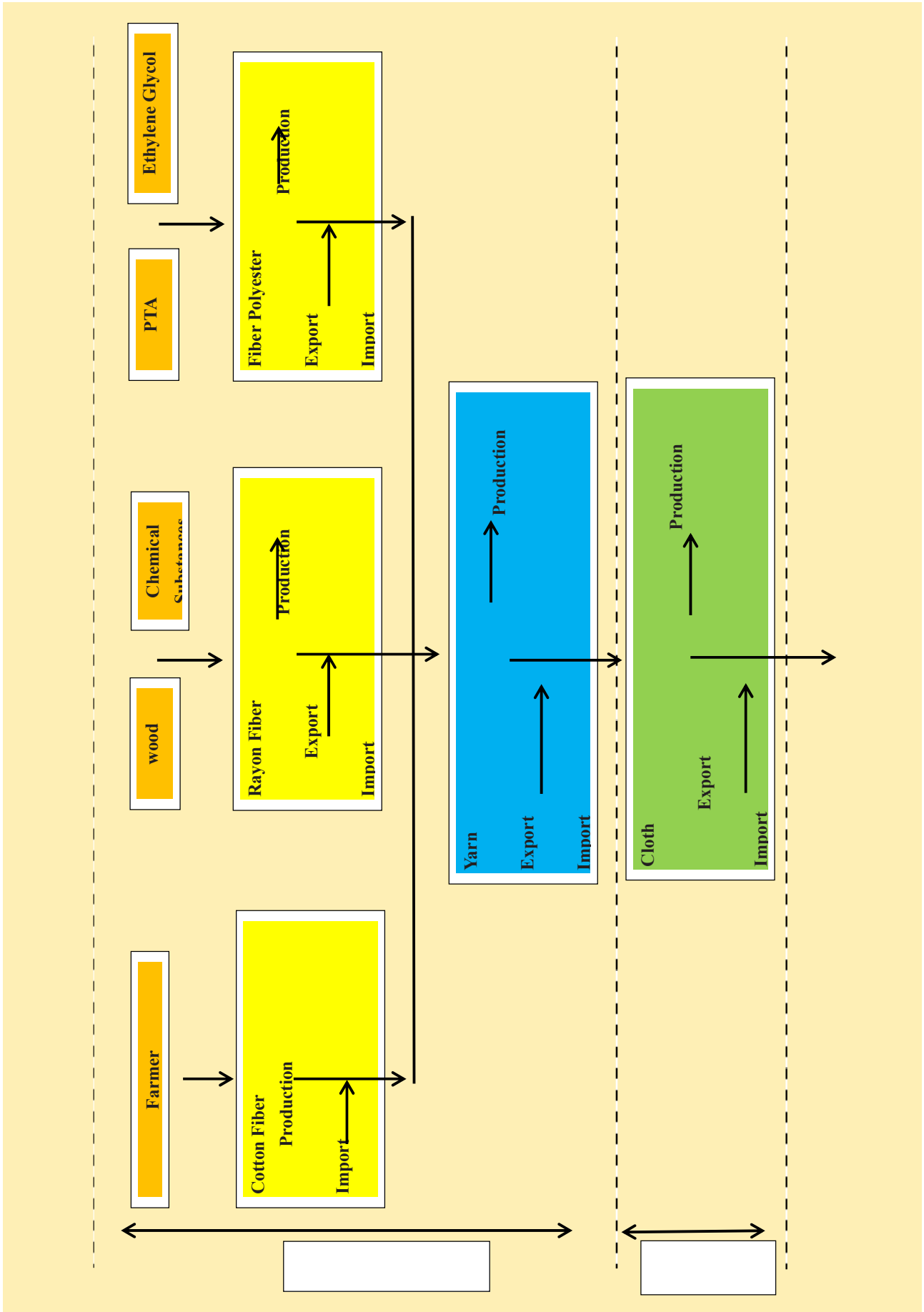
Raw material supply, including cotton fiber was also become a problem, average cotton plantation part to domestic fiber industry in year 2007-2013 was only 0.2 % from total domestic needs (Central Bureau of Statistic,2013). Import become main option to instant solution for this problem. Other than that, import was done not only for fiber such as cotton, rayon or polyester, but also for yarn, cloth, garment and textile product to fill domestic needs due to domestic production that most have been exported.

Based on SWOT analysis, we could know the condition and the need from each value chain element. Generally, the perpetrator of textile, product textile & apparel value chain system, both producer (industry) and consumer (industry and end) needed raw material supply continuity, both in quantity and quality. But, current raw material availability heavily depends on import, especially for natural fiber (cotton) that influence this industry sustainability. Comparison between volume export and import artificial fiber pun (rayon dan polyester) was almost 1:4, means that most of domestic needs was met by imported product. Even so Indonesian textile, product textile & apparel had an advantage in the form of cheap labor and energy cost and large production capacity, whether upstream industry, medium and even downstream. Aside from that, price stability was also the main need for the system, whether raw material price (for producer), and sale price (for consumer).

The large size of domestic market became a big opportunity for textile, product textile & apparel sector, but due to low machinery productivity in all industry sectors and domestic producer orientation toward eksport market, causing textile, product textile and apparel domestic needs was met by 24 % in the economy production and 76 % by imported product. This indeed lowered the domestic textile, product textile and apparel performance.

C.4 Value Chain Model Indonesian Textile, Product Textile & Apparel Sector

Modeling was addressed to represent real system into a copycat to easen the study of the behavior. Therefore a model is needed when the experiment with real system was hampered because it was costly, dangerous or something that was impossible to be done. Model in Indonesian textile and apparel supply chain system was divided into 7 sub models, yaitu: plantation sub model and cotton fiber industry, rayon fiber industry sub model, polyester fiber industry sub model, the upstream waving industry sub model, medium industry sub model, downstream industry sub model and domestic market sub model. The seven sub models form a fully integrated model involving various component and the interacting and interrelationship of the perpetrators of the system. The connectivity of every industrial sector from upstream to downstream with various variables such as raw material source, the amount of production, the amount of export, number of needs, and the amount of import.



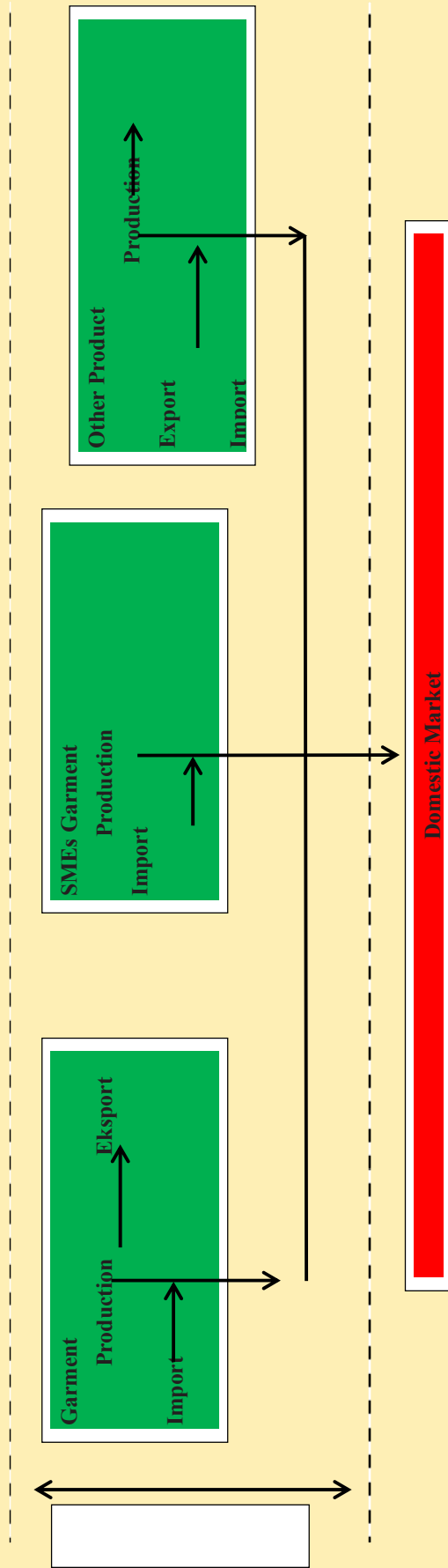


Figure 1.1
Basic Value Chain System Model Indonesian Textile, Product Textile & Apparel Industry Sector

Textile, product textile & apparel value chain basic system modeling above was done using PowerSim software. Based on textile, product textile & apparel basic value chain system model above, there were some information were precise description of Indonesian textile, product textile & apparel value chain system, which are:

- In upstream industry, there were 3 raw material product for Indonesian textile, product textile & apparel sector. In downstream industry that produce cotton fiber, its current production capability in Indonesia was very small, only 0.2 % from total domestic needs (Indonesian Central Bureau of Statistic, 2013), which meant that 99,8% Indonesian cotton fiber needs was met by import. The low production capability was caused by lack of land and low technology in cotton cultivation.
- While for rayon and polyester fiber, Indonesian textile, product textile & apparel sector also met its need by importing because the imbalance of supply and demand in Indonesia.
- The needs of yarn in the downstream industry of Indonesian textile, product textile & apparel sector currently was met by import. This happened as a result that most of domestic product was exported.
- The same condition with the needs of domestic yarn was also happened to cloth, garment, and other textile product whose needs were met by import, as the result of most domestic production has been exported.
- The reason why domestic production from downstream, medium, and upstream industry of Indonesian textile, product textile & apparel sector have been exported was because export market was considered had higher purchasing power than domestic market by the domestic producer.
- To meet domestic market needs, then those goods were imported while adjusting to the purchasing power of the domestic market which make the products consumed by the domestic market were the low quality products.

C.5 Micro, Small, and Medium Enterprises Position in Textile Sector, Textile Product & Apparel

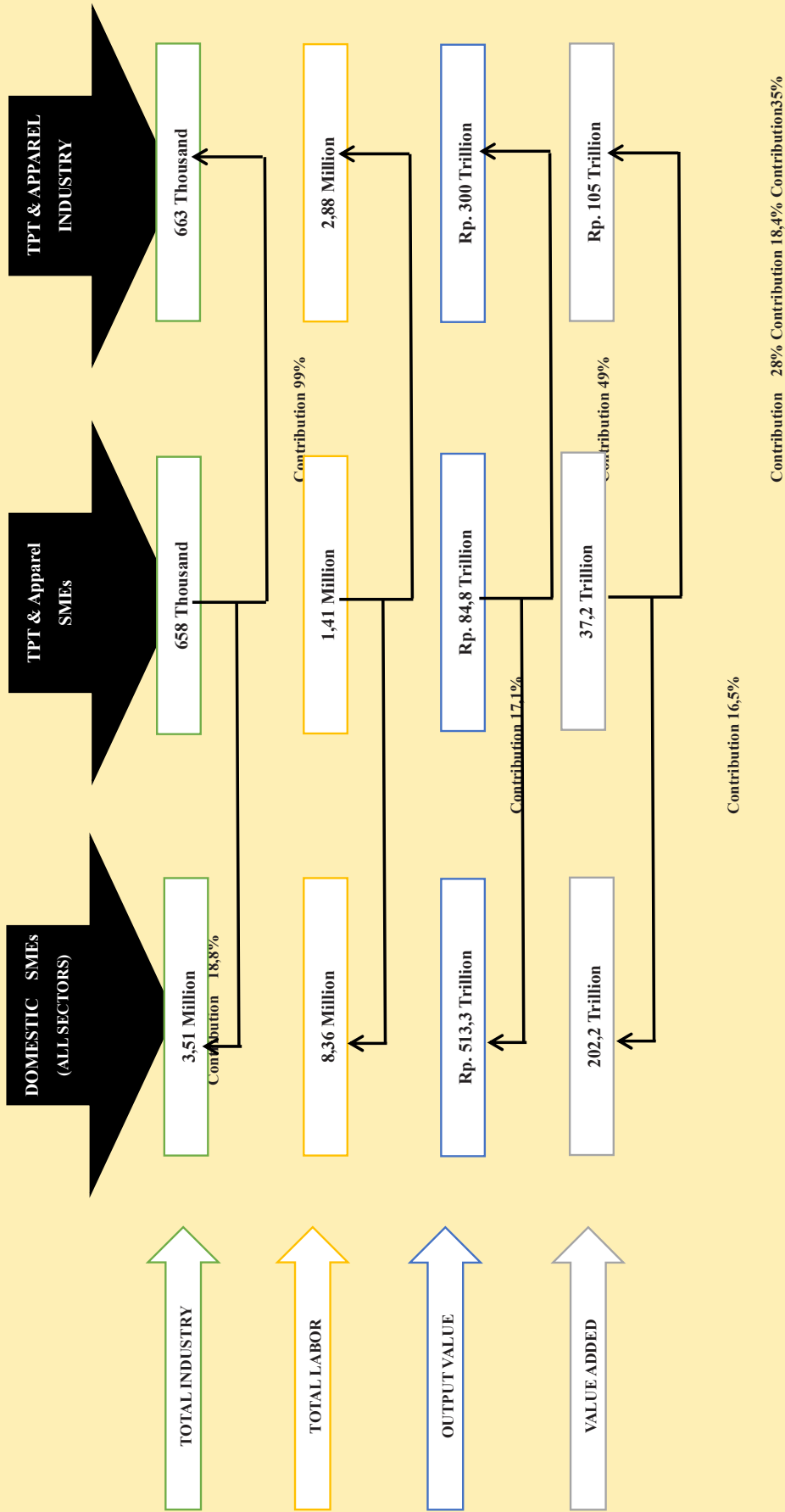
Micro, small, and medium enterprises were one of the crucial mover of the development and growth of economy in many economies in the world including in Indonesia. The reason for this are, first, micro, small, and medium enterprises help to increase employment in Indonesia in order to decrease unemployment. Labor in Indonesia area abundant and big enterprises is not able to employ all the job seekers. The cause is because big enterprises relatively tend to be capital intensive, while micro, small, and medium enterprises relatively labor intensive. Second, typically big enterprises need highly educated workers and enough work experience while micro, small, and medium enterprises, especially small business only need low education workers. Micro, small, and medium enterprises hold an important role in Indonesian in terms of the number of business and the employment. In export, micro, small, and medium enterprises have the potential to increase the export income. But this potential hasn't been used optimally. Only micro, small, and medium enterprises in certain industrial sector have exported.

Behind micro, small, and medium enterprises advantages, there are many problems in this economy especially with the modernization, making micro, small, and medium enterprises must be able to compete to survive in developing its businesses. Especially with the signing of ACFTA agreement, which made micro, small, and medium enterprises have to do more in increasing its product quality. Because many economies in the world compete to market its product and service around the world without any barrier, so that the domestic products must be able to compete with outside products in its own economy.

With the world trade agreement, then trade alliances are required to fight in the competition. This can be done by creating competitive advantage from resource its owned, not only counting to comparative advantage that long has become the strategy for all the economies in the world to compete, but can also achieved by producing high quality products and service.

With the shifting of the world economy to free competition, it can be said that bahwa micro, small, and medium enterprises faced a double squeeze situation, which is situation that come from the internal side in the form of lagging productivity, efficiency and innovation and situation that came from external pressure (Tambunan dan Ubaidillah, 2008). With the two phenomenons above things that need to be noted is the imbalance and discrepancy between the big industry with small and medium industry.

While in TPT & apparel industrial sector, micro, small, and medium enterprises lime mention in general description, gave large contribution to the TPT & apparel industrial sector performance in total. Apart from that, micro, small, and medium enterprises in TPT & apparel industrial sector, showed itself to be one of the most contributed sector compared to every other sector of micro, small, and medium enterprises in Indonesia.



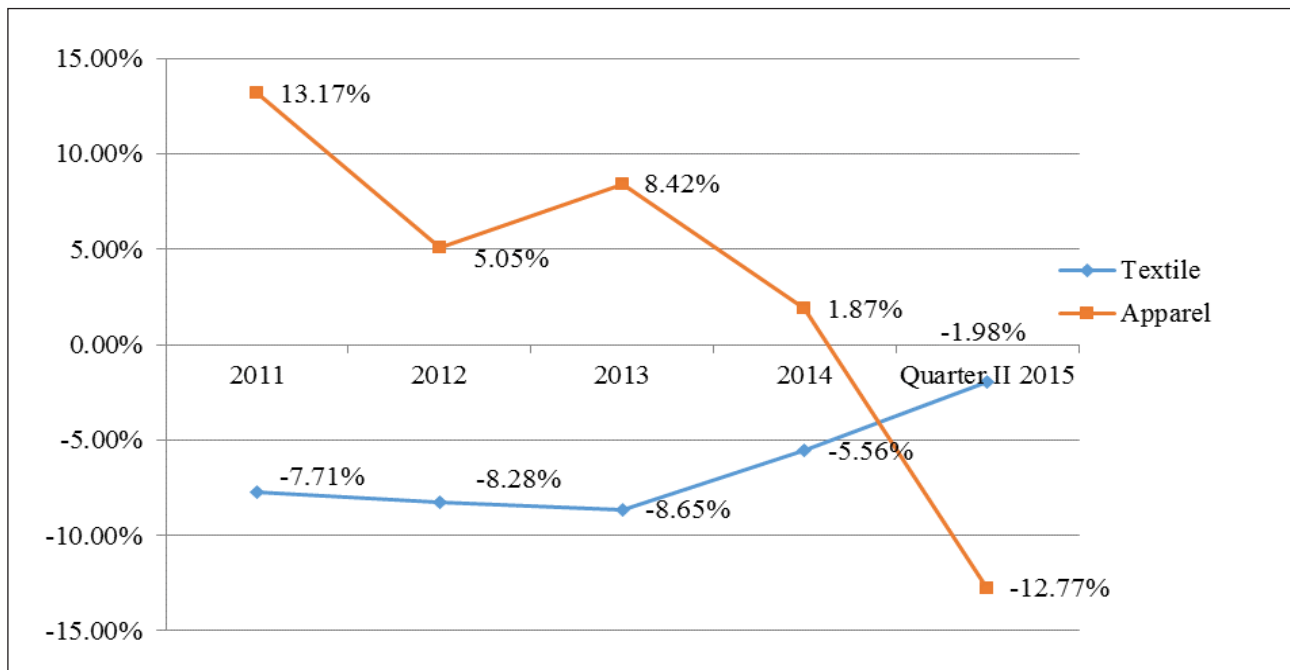
Source: Indonesian Central Bureau of Statistic, 2014
 Figure 1.2
 SMEs TPT and Apparel Profile Year 2014

Based on data in the picture above, we can see that micro, small, and medium enterprises in textile, textile product and apparel industrial sector are able to highly contribute compared to the total value both in total value compared to micro, small, and medium enterprises Nasional (all sector) and textile, textile product and apparel industry. One of the greatest achievement of micro, small, and medium enterprises in textile, textile product and apparel sector relates with its ability to produce value added in the product its produce.

Concerning total industry, based on year 2014 data, micro, small, and medium enterprises in textile, textile product and apparel sector contributed 18,8% of total micro, small, and medium enterprises yang di Indonesia. While of textile, textile product and apparel industrial sector, micro, small, and medium enterprises in textile, textile product and apparel sector are more than 99% of all producer in textile, textile product and apparel industrial sector in Indonesia.

The contribution of micro, small, and medium enterprises in textile, textile product and apparel sector to total employment was quite dominant which contribution achievement reaching 17,1% of all domestic micro, small, and medium enterprises and 49% of textile, textile product and apparel industrial sector in Indonesia. While for the achievement of output value, textile, textile product and apparel industrial sector contribution was also quite good. The contribution achievement was described in contribution to domestic micro, small, and medium enterprises amounting 16,5% and 28% of Indonesian textile, textile product and apparel industrial sector.

The ability of micro, small, and medium enterprises in textile, textile product and apparel sector to produce value added was in a quite dominan condition. The dominan achievement can be seen in contribution to domestic micro, small, and medium enterprises sebesar 18,4% and 35% of Indonesian textile, textile product and apparel sector. The ability of Indonesian micro, small, and medium enterprises in textile, textile product and apparel sector to produce value added was quite good, but stil far from its potential.



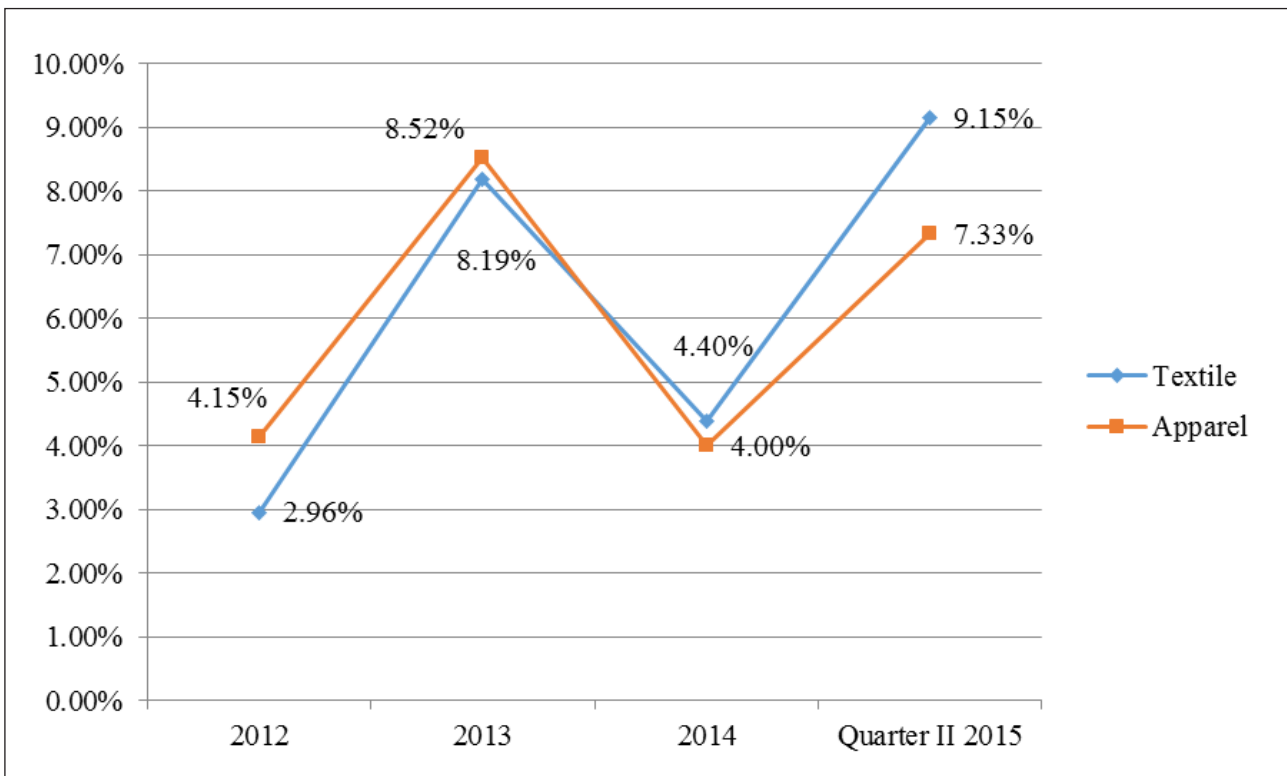
Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.1

Growth of Large and Medium Industrial Production on Indonesian Textiles and Apparel Sector

Referring to the graph 1.1 above, it can be seen that the growth of apparel production of large and medium industries in the textile industry and apparel sector experienced a decrease trend. The largest decrease of the growth of apparel production occurred in 2015. As of the second quarter in 2015, the production of large and medium industrial apparel in the textile and apparel sector has decreased by 12.77%. This occurs as a result of rising exchange rate of the rupiah against the US dollar that occurred since the end of 2014 and continued until 2015. Because of almost all the raw material for making clothes derived from imported products, causing production costs to be incurred clothes large and medium industries in the textile and apparel sector is getting bigger with the increase of the exchange rate.

While on the growth of textile production, during the year 2011 until the second quarter of 2015, large and medium industries in the textile and apparel sector has always recorded a decline in the growth of textile production. It comes as a result of fewer large and medium industries in the textile and apparel sector which produce textile goods. The decrease occurred due to large and medium industries in the textile and apparel sector is no longer able to produce because of not being able to compete in the domestic market has been flooded with imported products.

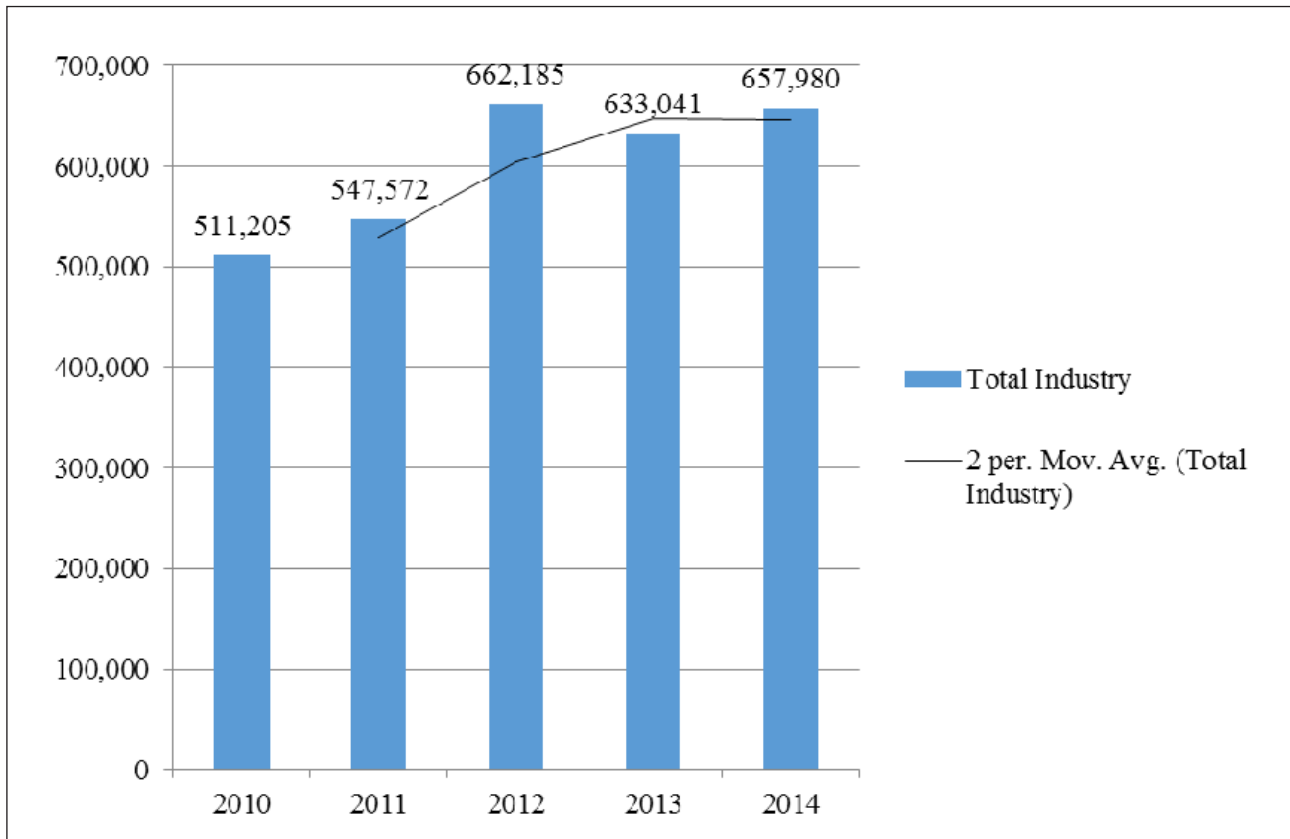


Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.2

Growth of Industrial Production of Small and Micro Enterprises in Textile & Apparel Sector

In contrast to large and medium industries in the textile and apparel sector, the textile and apparel sector SMEs throughout 2012 to Q2 2015 is always recorded positive growth in terms of both production for textile and apparel products. This positive trend emerged as a result of the textile & apparel sector SMEs is dominated by products that have a high market demand such as batik cloth, batik clothes and other garments steady demand for its products in the domestic market.

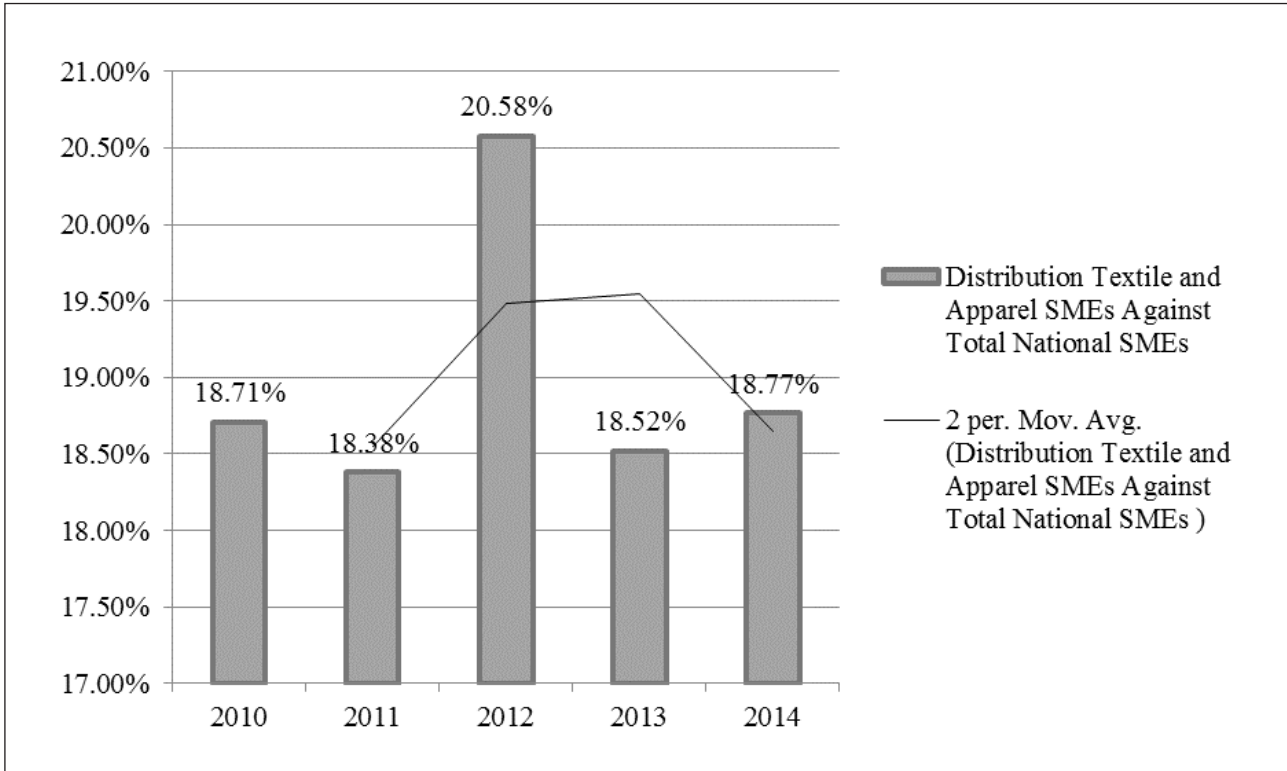


Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.3

Growth of Total Small and Micro Industries in Textile & Apparel Sector

Referring to the chart above, growth in the number of SMEs textiles & apparel sector in Indonesia in 2010-2014 experienced a positive trend. Positive trend of increase in the number of SMEs textile & apparel sector is driven by the quite large domestic market demand for products of the textile and apparel sector SMEs. It gives good prospects for businesses who want to plunge into this sector.

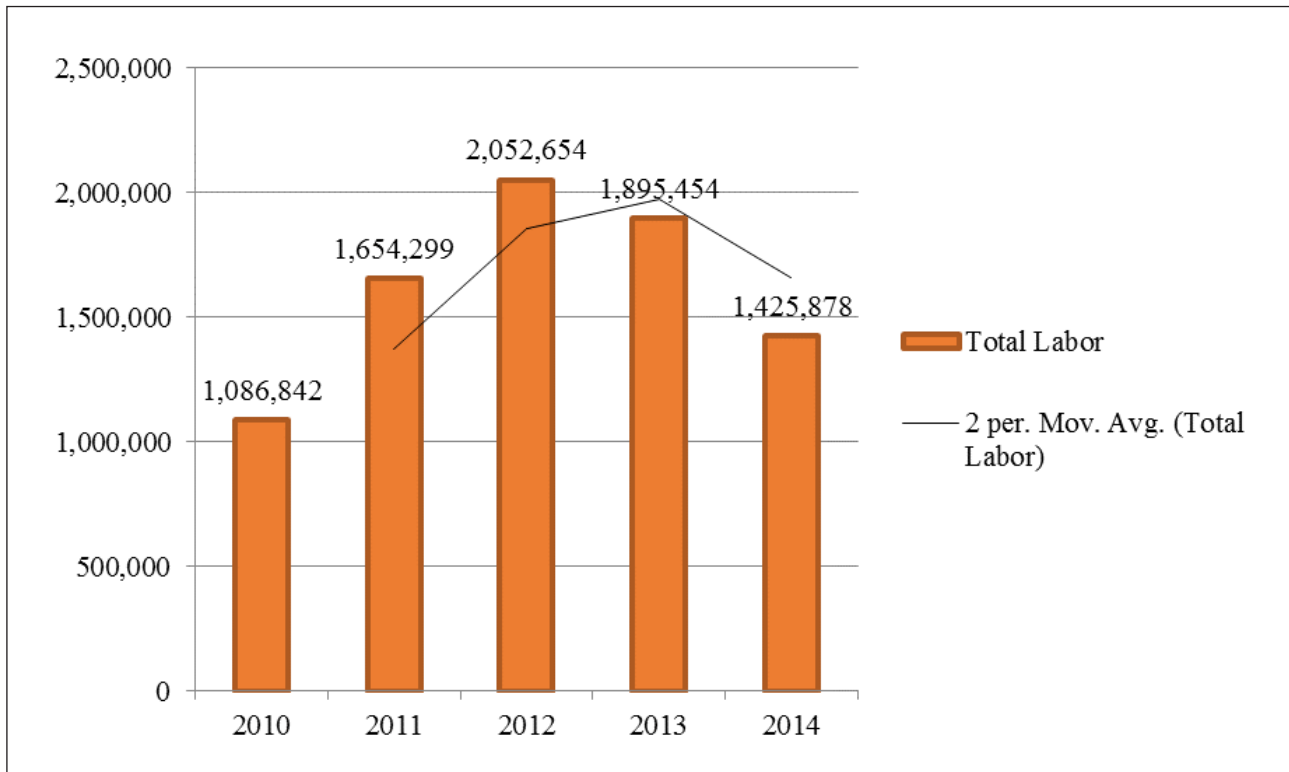


Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.4

Distribution of Total Small and Micro Industries in Textile & Apparel Sector Against Total Domestic SME

Distribution of the number of SMEs textiles and apparel to the total domestic SMEs based on the data above shows that the textile and apparel sector SMEs contribute more sizable and stable against the overall total of SMEs in Indonesia. The stable and large distribution SMEs Sector of textile and apparel to the total domestic SMEs shows that SMEs in the textile and apparel sector is a sector which is quite responsive for SMEs newcomers who want to enter as a manufacturer in this sector.



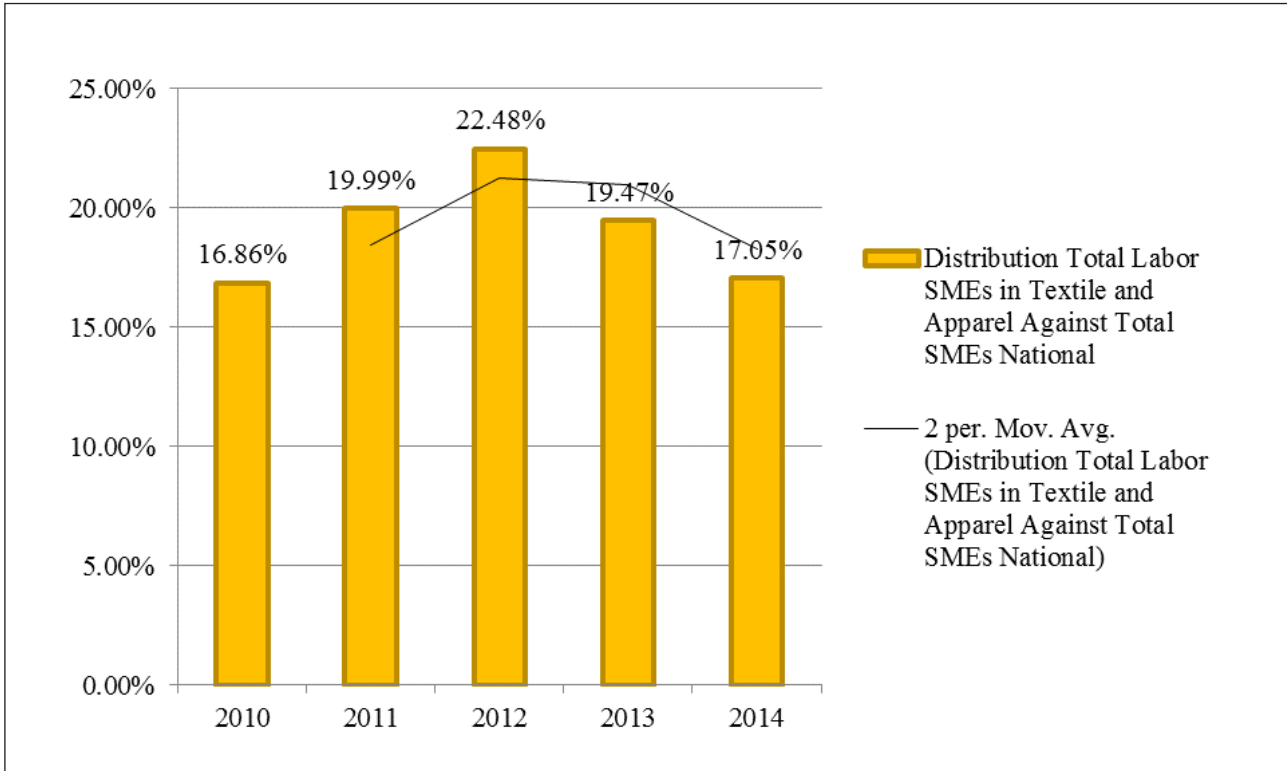
Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.5

Labor number of Small and Micro Enterprises in Textile & Apparel Industry

Referring to the above data, the amount of labor that is absorbed by the textile and apparel sector SMEs are in a fairly positive trend when referring to the development during 2010-2014. But after the year 2012, total employment in the textile and apparel sector SMEs in Indonesia continues to experience a significant decline. If compared with the data growth of MSME sector production of textiles and apparel in 2013 increased production fairly well from the SME sector of the textile and apparel on textile and apparel products. It shows the efficiency improvements made textiles and apparel sector SMEs, because production increased but the number of workers has decreased. This efficiency is due to the presence of machinery investment grants given by the government in 2013.

Whereas in 2014, although the total production of the textile and apparel sector SMEs still grow positively, but growth fell compared to 2013. The decline in production growth was also followed by a down quite a large amount of labor in the textile and apparel sector SMEs by 24,27% compared with the previous year. The decrease arises as a result of deteriorating macroeconomic conditions Indonesia, which began in the third quarter of 2014 which led to a worsening of the business climate, especially in the textile and apparel industry because of high economic uncertainty.

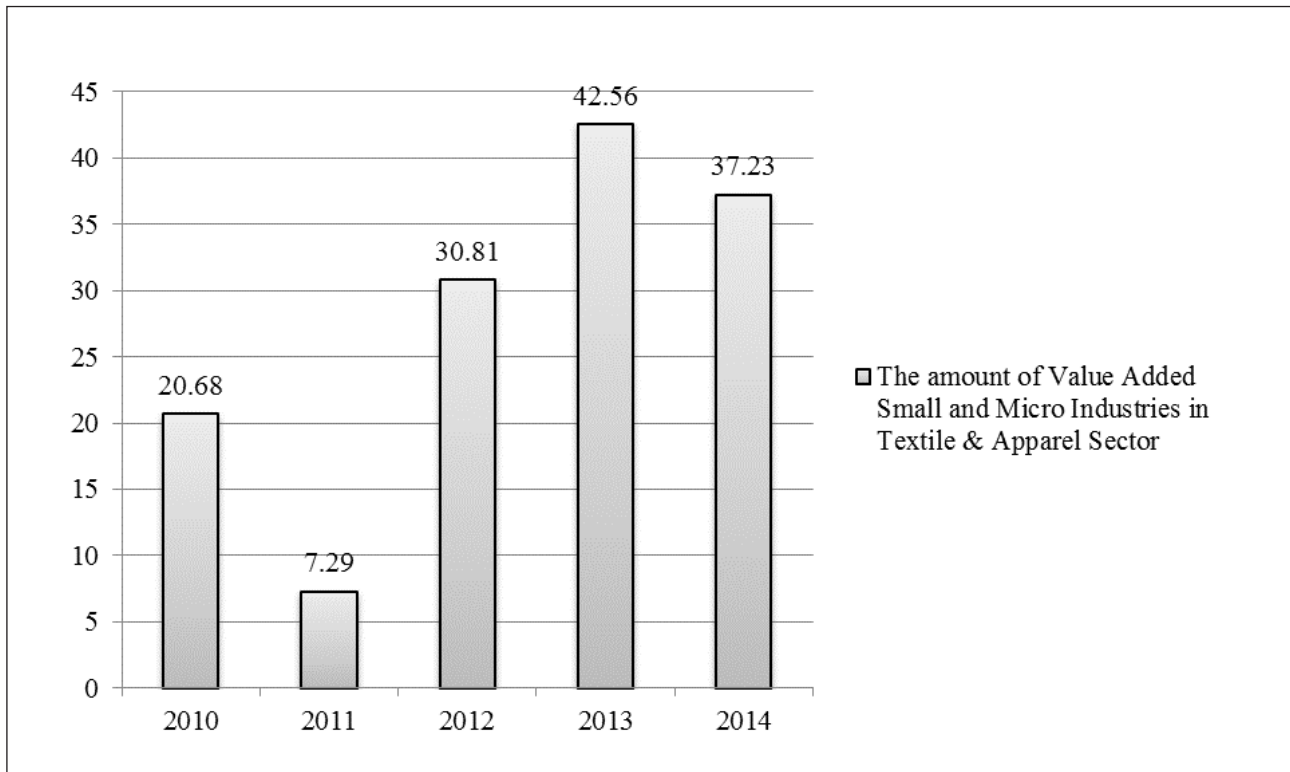


Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.6

Distribution of Total Labor Small and Micro Industries in Textile & Apparel Sector Against Total SME National

SMEs contribution textile sector and apparel for the distribution of the total workforce absorbed by domestic SMEs is also directly proportional to the growth of the labor conditions in the textile and apparel sector SMEs. The reduced contribution of labor distribution of textiles & garments sector SMEs to domestic SMEs in 2013-2014 showed that along with a reduction in employment conducted by SME sectors of textiles and apparel, there are SMEs in the industrial sector were still increased, although economic conditions in Indonesia is experiencing a decline in macroeconomic performance.

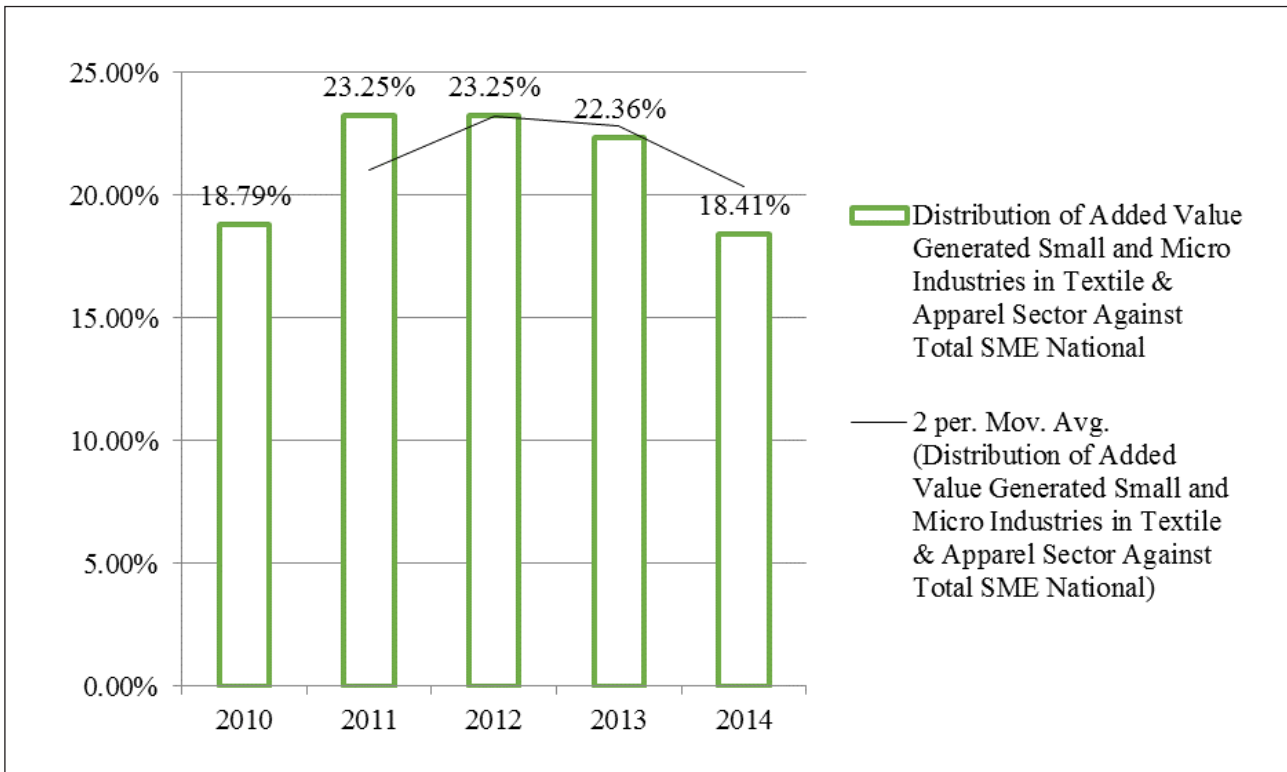


Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.7

The amount of Value Added Small and Micro Industries in Textile & Apparel Sector

In accordance with the above data, the textile and apparel sector SMEs showed a fairly good achievement in generating added value in the production process does. The ability of textiles and apparel sector SMEs in generating added value is driven by the good enough product innovation and design are done by SMEs textiles and apparel sector. Besides the grant for upgrading machine in 2013 also made a positive contribution to the enhanced ability of SMEs textiles & apparel sector funds generate value added.



Source: Indonesian Central Bureau of Statistic (2015)

Graph 1.8

Distribution of Added Value Generated Small and Micro Industries in Textile & Apparel Sector Against Total SMEs Domestic

Distribution of value added textiles and apparel sector SMEs to value added produced by domestic SMEs showed a decreasing trend. The decline occurred after 2012, where Indonesia has decreased the achievement of macro-economic performance indicators. On the other hand, the decline in the textile and apparel sector SMEs shows that there are other industrial sectors SMEs are able to survive in the economic situation of Indonesia were not good enough throughout the year 2014.

Based on the description of the achievement of the performance of the SME sector of the textile and apparel above, it appears that the textile and apparel sector SMEs are able to achieve positive achievements throughout 2010 to 2014. But the achievement that exist today in the SME sector of the textile & apparel, of course, is far from the true potential possessed. Conditions that occur at this time, SME textile & apparel sector still faces many problems that prevent optimal performance.

The results of discussions with Ade Sudrajat, Chairman of the Indonesian Textile Association (API) relating to the strategy of encouraging the participation of SMEs in the textile and apparel Indonesia to further increase their participation in global value chains requires:

1. The establishment of bonded logistics center outside the port, so it can speed up the distribution of inputs (raw materials and semi-finished materials) and able to facilitate SME access in getting the materials needed input.
2. Build and develop upstream industrial products (textiles), so that in the long term to reduce

reliance on imported textile upstream product, in addition to facilitate SMEs to obtain the products from upstream.

3. Build and develop the textile and apparel machinery industry, given the high dependence of the textile and apparel entrepreneurs in Indonesia will import textile machinery and apparel. This step can be started by developing cooperation with universities as well as with businesses in other economies.

4. Develop cultivation of cotton plantations in Eastern Indonesia, given the lack of compatibility climatic and geographical conditions deemed suitable by the cultivation of the cotton crop in sub-tropical climate.

5. Provide subsidized interest rate of investment credit and working capital for SMEs textiles and apparel, for consideration of employment and its impact on non-oil exports.

6. Making connections with the business SME large-scale textile and apparel, with the application of product competency standards, competency standards attitude and long-term business cooperation agreement.

SME development strategy of textile and garment Indonesia in the early stages of intermediation requires the government through the establishment of Market Development Center Input and Output, with a workflow mechanism as Figure 1.3. Operational framework of the accelerated integration of the textile and apparel Indonesian SMEs in global value chains based on the assumption that it is very difficult to encourage SMEs to participate in global value chains with partial approach or strategy approach undertaken by each SME. For that we need an intermediation by the government through the establishment of Market Development Center Input and Output Textiles and Apparel.

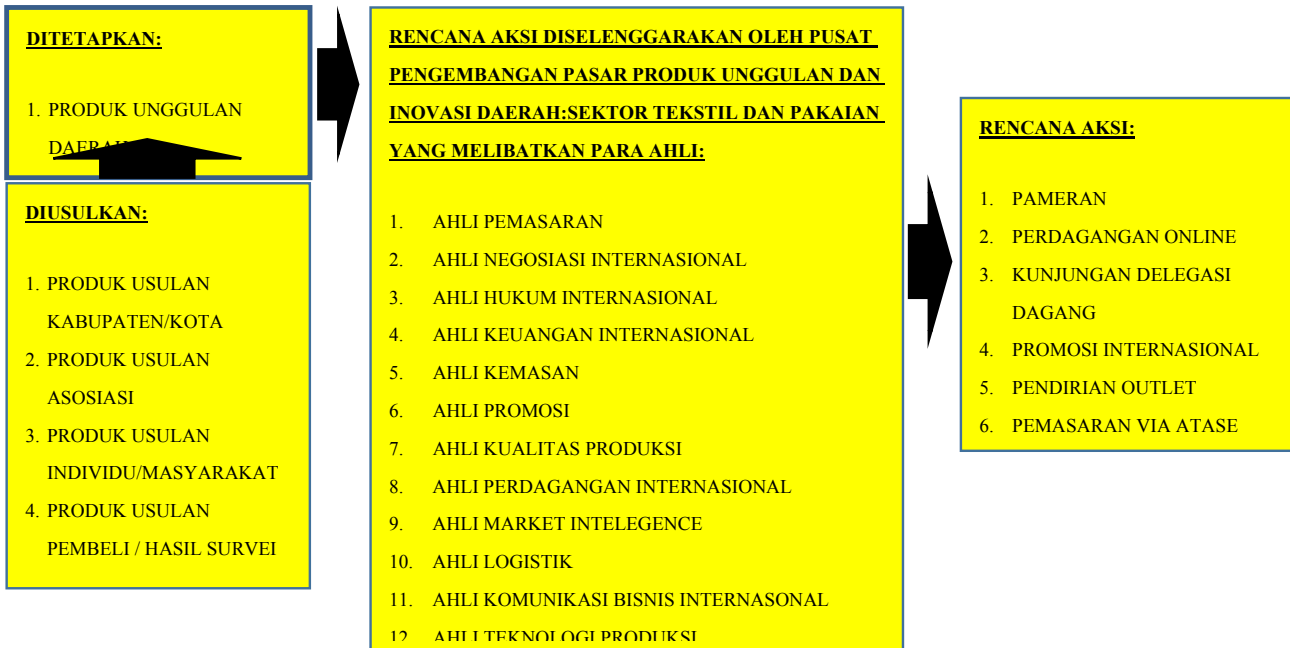


Figure 1.3
Mechanism Process Flow Acceleration involvement of SMEs
Textiles and Apparel Indonesia in the Global Value Chain

Some common problems faced by the SMEs textile and apparel industry, are:

a. Quality standards (quality products)

It is inevitable that this time the products produced by the textile & Apparel sector SMEs is still at the level of product quality is not good enough. The product quality is not good enough is emerging as a result from the lower level of awareness of SMEs Textile and Apparel sector that quality standards for the products they produce are an important part to increase the value of the products it makes.

Currently in Indonesia there has been a quality standard that is used as a reference for the quality of domestic production, namely SNI. However, look at the current conditions that occur in the SMEs textile and apparel industry, quality standardization obviously has not been a first priority. The absence of standardization-related quality of product quality often makes the products produced SMEs textile and apparel industry become unfit export. This happens because the world market usually apply high standards for products coming into the economy and product Indonesian SMEs textile and apparel industry with the current condition, most are not able to pass through this barrier.

b. Equipment / technology

One of the main problems commonly faced by the entire industry joints in Indonesia today is the low application of latest technology in the industry. The lack of application of technology in the industry is a bad news for the industry in any economy. For the latest application of technology, then at that time the industry is wasting a lot of its resources because of inefficiencies experienced.

Technology is the heart of the industry of a economy. With increasingly advanced technology, the industry will work faster, produce more, manage resources more efficiently, and ultimately was able to optimize its income.

In addition to its role is so great in the industrial sector, the technology also requires big commitment to the industry to be able to apply any technological advances that continue to evolve over time. The amount of commitment and sacrifice that must be made the industry was illustrated with the least resources to be invested by an industry to do upgrading technology. The investment made in the technology industry certainly does not stop at buying a technology industry to apply, but these investments also include the maintenance of existing technologies, so the efficiency is created from the application of technology can be retained.

The amount of investment in technology is clearly a complicated issue for all SMEs in Indonesia, including the textile sector SMEs and Apparel. The amount of fees to be invested would be an obstacle for SMEs textile and apparel industry to be able to have the latest technology to be able to compete in export markets.

c. Raw material

In general, the perpetrators of the supply chain system & Apparel textile industry in Indonesia, both producers (industry) and consumers (industrial and end) require continuity of supply of raw materials, both in quantity and quality. Availability of raw materials that are highly dependent imports, particularly for natural fibers (cotton) greatly affects the viability of this industry. Comparison between the volume of exports and imports of artificial fibers was (rayon and polyester) is almost 1: 4, meaning that domestic demand is still largely met by imported products.

Great dependence of the textile and apparel industry on imported raw materials, are also experienced by SMEs textile and apparel industry. Dependence on imported raw materials, led to many risks for SMEs textile and apparel industry because the price of imported raw materials are very sensitive to changes in exchange rates.

Indonesia, in recent time are faced with the high value of the rupiah against the dollar. The high exchange rate will result in more and soaring prices of raw materials to be purchased by SMEs textile and apparel industry. Rising raw material prices will certainly have a significant impact on the growing production costs to be incurred SMEs textile and apparel industry.

Thus, based on the above figures, the dependence on imported raw materials is clearly one of the main factors that make SMEs textile and apparel industry is not efficient in conducting its production activities.

d. Marketing

Stagnant and monotonous marketing strategy undertaken by SMEs textile and apparel industry contributed over the retention of the distribution of manufactured goods produced by SMEs textile and apparel industry. In addition to still lack the knowledge and experience of the SMEs textile and apparel industry to be able to formulate a good marketing strategy, still less inequality of access to information on the flow of promotional tools provided by the government contributed to retained SMEs textile and apparel industry to be able to distribute its products.

Although at this time there have been quite a lot of exhibitions to promote products of the textile industry production, only a handful of SMEs textile and apparel industry that can utilize the facilities. Furthermore, these exhibitions was currently getting less significant impact for the promotion of SME products because less interesting visitors.

e. Capital / costs

If the technology is at the heart of industry, then the capital resources are blood into energy in order to make the industry can operate and innovate. The lack of capital owned by SMEs textile and apparel industry, providing a considerable impact on the competitiveness of the limited ability possessed. The lack of capital is constraining SMEs textile and apparel industry to adopt the latest technology, improving the quality of products produced and thus increase the production capacity to meet the demand of the world market requirements.

f. Innovation and product diversification

The lack of innovation and product diversification has also become one of the factors that hamper SMEs textile and apparel industry to be competitive in the global market. The lack of innovation and diversification owned by SMEs textile and apparel industry, seen from one direction mostly SMEs textile and apparel industry in developing its business. Today many SMEs textile and apparel industry which directs its business in total to be able to do mass production.

Optimism to be able to have a large production capacity, on the one hand is a good thing for SMEs textile and apparel industry. However, based on field observations conducted on SMEs textile and apparel industry located in West Java, Indonesia, found a phenomenon that most of the SMEs textile and apparel industry carry out production in large quantities, usually the products it produces does not have enough quality good and have added value in the eyes of consumers.

In addition SMEs focused the textile and apparel industry in mass production led to the final product innovation a priority for manufacturers. Besides diversification of products based on designs and models finally became limited and not growing.

g. The role of government agencies

The role of government agencies at this time in order to facilitate SMEs textile and apparel industry is quite good compared to previous times. However, the efforts made by the government in fact is not sufficient to provide a significant impact on increasing the competitiveness of SMEs owned by the textile and Apparel industry in Indonesia.

Currently the ways that the government do to stimulate SME & Apparel textile industry to be more competitive, less often targeted according to the needs of SMEs textile and apparel industry today. Besides the role of government agencies, nearly largely confined to the policy-making and rulings of certain programs without accompanied with good implementation and monitoring of policy and programs created.

D. POLICY

Referring to the latest circumstance and constraints that Indonesian Textile and Apparel SMEs have faced, the author recommends some policies and action plans that may be implemented both by the Government of Indonesia and APEC in facilitating the integration of SMEs into Global Value Chain (GVC). The recommended policies and action plans include:

- a. Initiating textile raw material centers that focus on domestic product and give incentive to consumers and producers that actively involve in the centers;
- b. Protecting domestic market from illegal import of raw material;
- c. Providing inducement to help domestic natural fiber producers meet their needs, such as sufficient cultivation field, appropriate seed cotton price, as well as high quality seed;

- d. Providing intensive guidance, training and assistance for the Textile and Apparel SMEs, to help them be bankable and visible;
- e. Developing software of brief financial report that can be easily operated, and suit accounting standard applied by Bank and other investors.
- f. Providing Textile and Apparel SMEs access to investors so that investment in the trading sector can grow appropriately and help the SMEs reach capital adequacy
- g. Reducing required collateral level and providing low-interest loan to the Textile and Apparel SMEs.
- h. Improving quality and value-added of the SMEs' product by introducing domestic uniqueness;
- i. Applying technologies for Textile and Apparel products that have been advanced at Indonesian universities
- j. Actively involving designers and experts in designing cultural-based products that will be produced by the SMEs. This involvement is aimed at improving product innovation and diversification that will help the SMEs generate product value-added;
- k. Privatizing government-managed agencies that specialize in product development, particularly in product quality and design;
- l. Regularly organizing domestic product exhibition at district, provincial, and domestic level. Textile and Apparel SMEs with high achievement are given opportunities for promoting their products in particular World Exhibition. This hierarchical opportunities aims to maintain the SMEs' sensitivity to product market trend in different levels of market;
- m. Encouraging local governments to initiate Cultural Festival which can attract tourists and, in turn, become great opportunity for Textile and Apparel SMEs to promote their local-culture-based products;
- n. Providing the SMEs effective access to world prominent e-commerce sites so that they can gather world market information regarding industrial progress in Textile and Apparel.
- o. Encouraging the Textile and Apparel SMEs to keep developing their business and helping them be metamorphosed to a larger business entities through business development assistance.

All the above recommended actions are to improve the participation of Textile and Apparel SMEs in the GVC

E. SUMMARY AND RECOMMENDATION

There are some findings on the current situation of Textile and Apparel industry value chain in Indonesia, i.e.:

- In the downstream industry, there are three types of raw materials for Textile and Apparel sector, i.e., cotton fiber, rayon fiber and polyester. Production capacity of cotton fiber in Indonesia is extremely small, i.e., 0.2% of total domestic demand (Indonesian Statistics Beureau, 2013). This means that 99.8% of the demand is fulfilled through export. The low production is due to limited cultivation field and inadequate technology for cotton fiber cultivation.
- Similarly, the industry also imports rayon fiber and polyester to fulfill domestic demand in the Textile and Apparel industry, due to significant gap between domestic supply and demand of the materials.
- The Textile and Apparel industry also fulfills demand for cotton through export, as most of the domestic production is exported. This situation also applies to fabric, garments and other textile products.
- Despite high domestic demand, products of downstream, mid-stream, and upstream industry

of Textile and Apparel have been exported. This is due to the fact that price of those products in the export market is much higher than that in the domestic market.

- To fulfill domestic demand, government imports similar commodities with lower level of quality. Price of the commodities is suitable for domestic market. However, domestic market consumes lower quality products;

Performance of Indonesian Textile and Apparel SMEs is quite promising, in general. This is indicated by size and contribution of the industry, employment, output and value added, as well as positive and stable industry growth. Despite the promising performance, the SMEs still face some obstacles, including:

- h. Low product quality standard
- i. Less adequate technology and instruments applied in the production process;
- j. High dependency on import of raw materials;
- k. Insufficient knowledge, experience, and access to product marketing facilities;
- l. Inadequate access to capital and investment;
- m. Low innovation and product diversification;
- n. Government incentive has been wrongly addressed.

Below are some proposed policies and action plans to overcome the above mentioned obstacles:

- p. Initiating textile raw material centers that focus on domestic product and give incentive to consumers and producers that actively involve in the centers.
- q. Protecting domestic market from illegal import of raw material.
- r. Providing inducement to help domestic natural fiber producers meet their needs, such as sufficient cultivation field, appropriate seed cotton price, as well as high quality seed;
- s. Consistently providing intensive guidance, training and assistance for the Textile and Clothes SMEs, to help them be bankable and visible.
- t. Developing software of brief financial report that can be easily operated, and suit accounting standard applied by Bank and other.
- u. Facilitating Textile and Clothes SMEs to access investors.
- v. Reducing required collateral level and providing low-interest loan to the Textile and Clothes SMEs.
- w. Improving quality and value-added of the SMEs' product by introducing domestic uniqueness.
- x. Applying technologies for Textile and Clothes products that have been advanced at Indonesian universities.
- y. Actively involving designers and experts in designing cultural-based products that will be produced by the SMEs.
- z. Privatizing government-managed agencies that specialize in product development, particularly in product quality and design.
- aa. Regularly organizing domestic product exhibition at district, provincial, and domestic level. Textile and Clothes SMEs with high achievement are given opportunities for promoting their products in particular World Textile and Clothes Exhibition..
- bb. Encouraging local governments to initiate Cultural Festival which can attract massive tourists.
- cc. Providing the SMEs effective access to world prominent e-commerce sites.
- dd. Encouraging the Textile and Clothes SMEs to keep developing their business and helping them be metamorphosed to a larger business entities through business development assistance.

F. CLOSING

This part concludes report of the research of the Integration of Small and Medium-sized Business in Textile and Apparel Industry: A case study of Indonesian SMEs. The author is aware that this work requires inputs for improvement and being better study. Finally, the author expects that the results can be of great benefit to any SMEs involving in the Textile and Apparel Industry in Indonesia, and in APEC economies.

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PROMOTING THE PARTICIPATION OF SMES IN
TEXTILE AND APPAREL GLOBAL VALUE CHAINS

CASE STUDY: MEXICO

Elena Rose Atkinson

Alberto Saracho-Martínez

Executive Summary

This document, commissioned by the Asia-Pacific Economic Cooperation, describes the textile and apparel industry in Mexico, diagnoses the integration of small and medium enterprises (SMEs) into global value chains (GVCs), lays out the supply and demand of government policies and programs, examines specific barriers that Mexican SMEs face upon attempting to join GVCs, and finally, offers recommendations and action plans.

Description of the Mexican industry: Mexico has historically relied on relatively cheap labor to be its main value added throughout the fiber-yarn-textile-apparel GVC, skewing its participation in this GVC toward the last stages of garment/apparel assembly. While this provided stable employment opportunities, over-reliance on this single stage of production incentivized keeping labor costs low, and effectively removed any incentive Mexico had to upgrade, create full-packaging capabilities, or establish strong local value chains. Although this strategy kept Mexico ahead of most competitors during the 90s, today Mexican SMEs must be able to differentiate their products on factors other than pure cost. Currently, most domestic firms and traditional maquiladoras remain unable or unwilling to fill full-package orders, raising the question of whether Mexico will be able to gain segments of international textile supply chains and enter into more downstream activities or full-package sourcing.

Trade Relationship with the United States: The Mexican fiber-yarn-textile-apparel value chain and networks are defined by major American production and assembly firms, and linkages and networks established with these firms are based in intra-firm relationships, as well as different arrangements between formally independent firms. The Mexican textile and apparel industry is almost completely reliant on the United States: from 1992 to 2000, 97% of Mexico's apparel exports went to the US. The passage of NAFTA solidified this dependency: within three years of NAFTA's implementation, Mexico had become the United States' second-largest supplier of textile and apparel goods (behind China). The U.S. accounted for 97.7% of Mexican apparel exports in 1995, and declining to 94.0% in 2005. Canada and the EU-15 (the 15 European Union members in 2003) economies are the only two other markets that receive more than one percentage point of Mexican apparel exports.

Description of the Mexican fiber-yarn-textile-apparel value chain: There are few Mexican companies that are able to perform activities across the value chain, and few that market or brand their finished goods. Along the fiber-yarn-textile-apparel value chain, the Mexican industry is heavily loaded toward the exportation of garments, with a trade deficit of textiles and a slight deficit of yarns; apparel is the only segment of this value chain where Mexico consistently runs a trade surplus. Mexico has historically imported almost all of the inputs at the beginning of the value chain: including machinery, dyeing/coloring material, cotton and polyester fibers, and yarn.

Firm size distribution: As of 2009, there were 11,500 textile- and apparel-related firms in Mexico, with 9,380 in apparel and 2,120 in textiles. In the apparel sector, 73.5% of all firms are considered "micro" in that they employ between 1 and 10 workers, and only 2.3% of firms are considered "large" (over 250 employees).

Major Players: Major players in the yarn-textile-apparel value chain in the private sector include established American and Mexican department stores and retailers, as well as denim companies, who have been constant purchasers of Mexican textile and apparel products steadily over the

past 20 years. Recently (within the past year), companies such as Target, H&M and the Inditex group have begun to look into sourcing from Mexico.

The major players of the public sector are the Ministry of Economy as well as its specialized units, namely the INADEM and ProMexico. In Mexico, the Ministry of Economy (SE, in Spanish, Secretaría de Economía) is the government department in charge of economic affairs, and almost all of the policies regarding the insertion of SMEs into GVCs fall under the jurisdiction of the SE.

Major business organizations include the Mexican National Chamber of Commerce of the Clothing Industry (CANAIIVE), the Chamber of Commerce of the Textile Industry (CANAINTEX), the Chamber of Commerce for the Textile Industry in the states of Puebla and Tlaxcala (CITEX), CANACINTRA (The National Chamber of Commerce of Industry Transformation), and COMCE, a private-sector organ.

Government strategies and policies: The Mexican government has historically been neoliberal, and in favor of trade liberalization, which lead to lackluster and fragmented government support for the restructuring of the textile and apparel industry. Between the passing of NAFTA until relatively recently, the federal government neglected the crucial period for interventions aimed at smoothing the transition and adapting production to compete with other more competitive economies.

A recent presidential directive, comprised of seven different initiatives to support the fiber-yarn-textile-apparel value chain, was announced in 2014. The directive includes an industry registry corroborated with physical visits (implemented in 2014), the promotion of Mexican-grown cotton (2014), the implementation of an automatic anticipated notice of importation (2015), the continual auditing of known importers of undervalued merchandise (2015), offer of credits to modernize machinery (2015), a list of reference prices (2016), and a pause on the tariff elimination schedule (until 2018). A flagship of the current administration's efforts to support the industry is the Center for Textile Innovation currently under construction. However, there is concern that the slow pace of the design phase, coupled with the lack of support from private sector actors, may place the success and impact of this center in jeopardy.

Government agency activities: ProMexico, under the SE, attracts investment, connects providers, hunts for suppliers, and brings together businesses through business roundtables, trade shows and joint ventures; however, their activities generally lack organization and transparency.

The INADEM, also under the SE, provides the lion's share of programs for micro, small and medium enterprises in Mexico, although none are specifically for the textile/apparel industry. The Mexican government makes 40 government funds available that could possibly provide direct or indirect monetary support, although none exclusive to Mexican textile/apparel SMEs were identified.

Mexico has two development banks: Bancomext and Nacional Financiera (abbreviated NAFIN or Nafinsa). Bancomext's credits are mostly direct lending, but also offer guarantees, and indirect lending through financial intermediaries (including discount credit lines and factoring). NAFIN grants financial resources and guarantees, and offers fiduciary services to private sectors.

Demand for government support: The type of support that SMEs most often request is monetary. SME business owners usually request this money in order to purchase machinery/equipment to modernize, to build physical infrastructure (such as small factory installations or workshops), and to finance increases in production. There is also clear need for organization and collaboration among Mexican textile and apparel SMEs, although what is not so clear is who should spearhead these efforts.

Barriers to trade and investment: The largest barriers for SMEs inserting themselves in GVC are under-invoicing, tax and duty evasion, counterfeiting and intellectual property infringement, and cargo theft and retail shrinkage. All of these situations create an uneven playing field, where Mexican SMEs attempting to “play by the rules” are unable to compete on the basis of price.

Possibly the largest barrier for SMEs, and not only in the textile and apparel industry, is the lack of affordable and competitive capital and financing. Although government programs are attempting to address this problem, these programs are not adapted to textile/apparel SMEs, who require more flexible and rapidly adapting cash flow solutions.

Finally, the mindset and human aspects of the industry can present barriers in the form of misaligned human capital, lack of innovation, and an incredibly competitive industry that does not foment collaboration.

Recommendations: Mexican government policy should take a long-term approach based on economic intelligence and aiming for structural changes, not protectionism and subsidies. Policies should focus on the entire industry, not on individual companies, and should take a holistic, comprehensive methodology that includes packages of funding, policies, and regulation.

Transitioning toward full package sourcing with the support of improved human capital, government policy that incentivizes innovative financial arrangements, competitive development bank lending, public-private financial alliances, and leveraging of the “Center for Innovation” and joint ventures are crucial for the Mexican textile and apparel industry to avoid falling further behind other economies.

The lessons learned and recommendations from this case study may be valuable for the Asia-Pacific Economic Cooperation, Mexican public and private stakeholders, and other decision makers as they attempt to assist SMEs regain market share and better incorporate themselves into the global market.

CONTENTS

1. Introduction	89
a. General Description of the Industry in Mexico	89
b. Current State of the Industry	95
c. Major Players	101
d. Firm Size Distribution	105
f. Challenges Specific to SMEs in the Industry	108
2. Government Strategies and Policies	109
a. Overall Government Strategy and Politics Directed toward the Textile Industry	109
b. Layout of Government Programs for the Textile Industry	110
c. Government Program Datasheet	114
d. Demand for Government Instruments	117
e. Mismatch between Supply and Demand of Government Instruments	117
3. Barriers to Trade and Investment	118
a. Tariff Barriers	118
b. Non-Tariff Barriers (Including Certifications and Standards)	119
c. Under-invoicing, tax and duty evasion	119
d. Counterfeiting and Intellectual Property Infringement	120
e. Cargo theft and retail shrinkage	120
f. Capital and Financing	121
g. Human Capital	121
h. Innovation	122
i. Lack of communication/cooperation	122
j. Summary of Barriers	123
4. Recommendations	123
a. Policy Recommendations	123
b. Action Plans	124
c. Conclusions	126
5. Bibliography	126

Abbreviations y acronyms

Bancomext	<i>Banco Nacional de Comercio Exterior</i> (National Bank for Exterior Commerce)
CMT	Cut-Make-Trim
GATT	General Agreement on Tariffs and Trade
GVC	Global Value Chain
IMMEX	<i>Industria Manufacturera, Maquiladora y de Servicios de Exportación</i> (Manufacturing, Maquiladora and Exportation Services Industry)
INADEM	<i>Instituto Nacional del Emprendedor</i> (National Institute of the Entrepreneur)
INEGI	<i>Instituto Nacional de Estadística y Geografía</i> (National Institute of Statistics and Geography)
MNC	Multi-National Corporation
NAFIN	<i>Nacional Financiera</i> (National Development Bank), also abbreviated Nafinsa.
OEM	Original Equipment Manufacturing
PITEX	<i>Programa de Importación Temporal para Producir Artículos de Exportación</i> (Temporary Importation Program to Produce Articles for Exportation)
SAT	<i>Servicio de Administración Tributaria</i> (Tax Administration Service)
SAGARPA	<i>Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación</i> (Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food)
SE	<i>Secretaría de Economía</i> (Ministry of Economy)
SEDESOL	<i>Secretaría de Desarrollo Social</i> (Ministry of Social Development)
SME	Small and Medium Sized Enterprises
WTO	World Trade Organization

Classification of Micro, Small and Medium Enterprises to be used throughout the document

Classification	Number of Employees	Revenue (Mexican pesos per year)
Micro	Fewer than 15	Under 30 million
Small	From 15 to 100	Between 30 and 400 million
Medium	Between 100 and 250	Between 400 million and 1.1 billion
Large	More than 250	Above 1.1 billion

Note: The current exchange rate in 2015 is approximately 17 Mexican pesos to the US dollar.
Source: INEGI 2009

1. Introduction

As the world is progressively more globalized, production processes become increasingly fragmented, translating into a fast-growing trade in intermediate inputs and services (Blyde 2013). Participating in Global Value Chains (GVC) is a way for smaller firms in lesser developed regions to participate in international trade without necessarily having to develop a complete range of vertical capabilities (Bamber et al 2014). However, without policies that help to construct productive capacity, inclusive growth, and the adaptation and upgrading of capabilities, this integration most often does not translate into positive development gains. In order to take advantage of GVC participation, these chains must be included in economic development domestic strategies, capabilities must be improved, linkages must be strengthened with local economies, and more and better quality employment opportunities should be created (National Strategy of Small and Medium Entrepreneurship Development, n.d.).

Nevertheless, the formation of GVCs does not rely solely on government actors, but rather is heavily dependent on market trends and commercial enterprises. Multi-national corporations (MNCs) have become the major players in managing GVCs, although small and medium sized enterprises (SMEs) can be important suppliers of input goods and services. Nonetheless, SMEs face more barriers than large corporations upon attempting to insert themselves into GVCs. It has been observed that certain SMEs and certain regions have had more success than others in inserting themselves into GVCs; industry experts are therefore interested in exploring and measuring key factors that influence the ability of developing economies to participate in given GVCs (Bamber et al. 2014).

Recognizing this need for further research, the Asia-Pacific Economic Cooperation has commissioned the present case study of the participation of Mexican SMEs in GVC of the textile and apparel industry. This study will include an introduction to the textile and apparel industry in Mexico, along with a diagnostic of the current state-of-play of SME integration into GVCs, the supply and demand of previous and current government policies and programs, specific barriers that Mexican SMEs face upon attempting to join GVCs, and finally, a series of recommendations and concrete action plans.

a. General Description of the Industry in Mexico

Mexico has historically relied on relatively cheap labor to be its main value added throughout textile and apparel GVCs. This skewed Mexico's participation in the fiber-yarn-textile-apparel value chain toward the last stages of apparel assembly. While this international offer of cheap labor attracted stable employment opportunities for Mexican citizens, over-reliance on this single stage of production effectively removed any incentive Mexico had to attempt to create full-packaging capabilities or strong local linkages or GVCs.

Low added value, and over-dependence on foreign inputs and sales in foreign markets led to Mexico becoming less competitive than China and other Asian economies that were able to establish strong local and global value chains, or deliver full-packaging services. The current state of the Mexican textile and apparel industry can only be explained after understanding a series of historic policies and programs that shaped the industry into what it is today.

i. Historical Panorama of Trade Programs and Agreements 1965-2010

The Mexican textile-apparel industry is principally dedicated to the exportation of apparel,

overwhelmingly to the United States. Additionally, Mexico is primarily dedicated to cut-make-trim (CMT) activities, which consists of the labor-intensive assembly of inputs imported from other economies. These inputs, again, are overwhelmingly imported from the United States. This situation arose from a combination of domestic and international trade policies as well as economic events over the last five decades, as seen in Figure 2: Trade Programs and Agreements.

Program or Agreement	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015
Border Industrialization Program		1965							2006			
PITEX							1990		2006			
IMMEX										2006		Present
807 (*807a) (*9802)						1986*	1989*					
NAFTA								1994				Present
Multi-Fiber Agreement				1974				1994				
WTO Agreement on Textiles and Clothing								1995		2005		
GATT (Mexico from 1986)						1986						Present
GATT (World textile industry from 2005)											2005	Present

Source: Created by the authors based on textual revision.

Individual programs and agreements are described below in more depth, as each program has contributed in an important way to the current situation of Mexican SMEs in GVCs.

Border Industrialization Program

The first trade policy that shaped the Mexican textile and apparel industry to this day was the Border Industrialization Program, or Maquiladora¹ Program. This program started in 1965 in order to ameliorate the high unemployment rates resulting from the termination of the Bracero program in 1964 (Rice, cited in Lopez-Acevedo and Robertson 2012), although it was also expected to attract foreign investment and increase exports.

This program allowed Mexican manufacturers to temporarily import raw materials and machinery without paying duties, as long as the final product was exported again. At the beginning of the program, maquiladora operations were highly controlled by government regulations. For example, they could only operate along the border near ports of entry and custom facilities, and the percentage of output that could be sold domestically was highly regulated (only 20% in 1983, 50% in 1990, and finally 100% after the passage of NAFTA) (Truett and Truett (1984, 1993, and 2007) cited in de la Cruz 2011). Over time, benefits of this program were extended: besides being able to sell domestically, the tax on value added was exempted, and with certain restrictions, the income and asset taxes could be exempted (Blyde 2013).

This program set the stage for a production model heavily based on human labor, without the need for capital or material inputs. Although this offered relatively stable employment opportunities in the short term, the almost complete reliance on American inputs and an American consumer base did not provide any incentives for Mexico to create full-packaging capabilities or strong local linkages or GVCs. This situation also relied on Mexican labor to remain cheap, which distracted away from any efforts to improve the education level of the workforce.

¹The name “maquiladora” is used to refer to a foreign-owned manufacturing plant in Mexico that imports and assembles duty-free components for export. Maquiladora is used alternately with “maquila”; maquila means “processing fee” in Spanish.

807 Program

The Mexican textile and apparel industry is almost completely reliant on the United States: from 1992 to 2000, 97% of Mexico's apparel exports went to the US (Frederick and Gereffi 2011). As the US is both a supplier of inputs as well as the final consumer, it is important to analyze certain American trade policies.

Across the border, and in parallel to the Maquiladora Program, U.S. firms benefitted from the 807 program (now called clause 9802). This program provided preferential access to US firms that imported apparel, as long as the fabric used for the apparel was cut in the United States. (Lopez-Acevedo and Robertson 2012, Bair and Dussel-Peters 2006). Firms were only required to pay duty on any value added.

In 1986, the 807 clause was amended to become 807A, further benefitting economies in the Western Hemisphere, including Mexico, by giving them "Guaranteed Access Levels" (essentially limitless quotas) if the economies export apparel assembled from fabrics both cut and formed in the United States (Bair and Dussel-Peters 2006, p. 206, U.S. Congress, Office of Technology Assessment, 1992). 807A was expanded to Mexico's maquiladoras in 1988, and became clause 9802 in 1989 (Rosen 2002).

The relevance of this program was that it occurred in parallel with the Mexican Maquiladora Program, establishing complementary trade policies that incentivized the creation (and even cutting) of textiles in the United States, assembly of apparel in Mexico, and then re-shipment of the finished apparel for sale back across the border. These twin policies established a network of maquiladoras, especially along the northern border states of Mexico, which were able to rapidly import inputs, assemble garments, and then export finished products.

PITEX

A similar Mexican initiative, created in 1990, to foster cross-border production sharing was PITEX, or the Program of Temporary Inputs to Produce Export Goods. PITEX allowed for duty free imports of intermediate goods and machinery as long as the final product was exported. The benefit of this program was that maquiladoras were allowed to sell higher percentages of products to the domestic market (Lopez-Acevedo and Robertson 2012). However, the drawback of this program was that it did not offer the other associated tax exemptions that the Maquiladora program allowed (Blyde, 2013).

In 2006 there were 3,620 firms registered in the PITEX program, and included all of the motor vehicle assembly plants and most of their suppliers of parts. PITEX firms tended to be located in the interior of Mexico, as a portion of their sales was directed toward the domestic market, whereas the maquiladora plants were more clustered along border states. In July 2006, 3,179 companies had Maquila programs and 3,339 had PITEX programs. According to the authorities, the companies benefiting from these two programs accounted for 65 per cent of Mexico's total exports and 82 per cent of its exports of manufactures, in addition to employing 54 per cent of the workers in the manufacturing industry (Goodrich n.d.).

Although under the PITEX program, manufacturing plants were allowed to sell more products domestically, Mexico was still not the main target market. As with the Maquiladora Program, these conditions drew focus away from the creation of full-package production or the establishment of local linkages, as well as from the search for domestic markets.

IMMEX

In 2006 the Mexican government combined the maquiladora program and PITEX into the IMMEX regime (or the Manufacturing Industry, Maquiladora and Export Services Program) (Secretaría de Economía, 2015). Although IMMEX is similar to PITEX in that it allows for the same exemption of the value added tax from the PITEX program, the IMMEX regime also allows for the same conditions as the maquiladora program-duty-free temporary importation of inputs, raw material, parts/components, and machinery as long as the final product is exported (de la Cruz, Koopman and Wang, 2011).

IMMEX is still in operation today, and in 2008 there were 6,185 firms registered. There are no economic analyses of the costs and benefits expected under the IMMEX Program or those under the Maquila and PITEX programs which preceded it. That being said, external market pressures and bi- and multi-lateral agreements have effectively overshadowed the impact that IMMEX has on shaping the market. One of the most important multilateral agreements for Mexico was the North American Free Trade Agreement, described below.

NAFTA

The passage of the North American Free Trade Agreement (NAFTA) was the most dramatic and watershed moment in Mexican exports, especially in the textile-apparel industry, and particularly in maquiladoras. In the United States, the 807/807A/9802 program was absorbed in 1994 into NAFTA provisions, and in fact, NAFTA trumped the majority of previous programs in both Mexico and the US (and Canada). NAFTA allowed Mexico to export apparel quota- and duty-free to both Canada and the United States, provided that the yarn, fabric, and apparel assembly originated or occurred in one of the three economies. This in turn led to upstream investments in the apparel value chain, primarily in the cotton fabric and yarn sectors (Lopez-Acevedo and Robertson 2012). NAFTA also led to an increase in both employment and maquiladora plants (see Graph 1: Maquiladora Plants and Employment). Assembly production activities reached their peak in the period between 1995 and 1997 (García de Leon 2008), which seemed to indicate that Mexico had encountered its comparative advantage in the labor-heavy links of the textile and apparel value chain. 17% (2.35 billion dollars) of the trade surplus that Mexico had with the United States came from Mexican exports of textile products and assembly activities. Additionally, macro-clusters located in the La Laguna region, Yucatan, and Tehuacan in Puebla emerged as specialists in apparel assembly (García de Leon 2008).

Within three years after NAFTA's implementation, Mexico had become the United States' second-largest supplier of textile and apparel goods (behind China), with an increase in its share of the US import market from 7 percent in 1995 to 11 percent in 2002. US exports of textiles and apparel to Mexico more than doubled from 1994 to 1998, from \$2 billion to \$4.4 billion, further increasing to \$6.1 billion in 2000 (Smith, Spooner and McClymont 2005).

Although at first this growth seemed beneficial, at the time critics argued that NAFTA would "consolidate Mexico's position as the US' low-wage periphery within a regional division of labor, and eventually result in the 'maquilización' [sic] of the economy" (Castañeda 1993, cited in Bair and Dussel-Peters 2006). While the impact may not have been so drastically detrimental to Mexico, NAFTA continued the patterns established by previous programs that incentivized low labor costs and did not support the strengthening and deepening of local value chains and full-package activities.

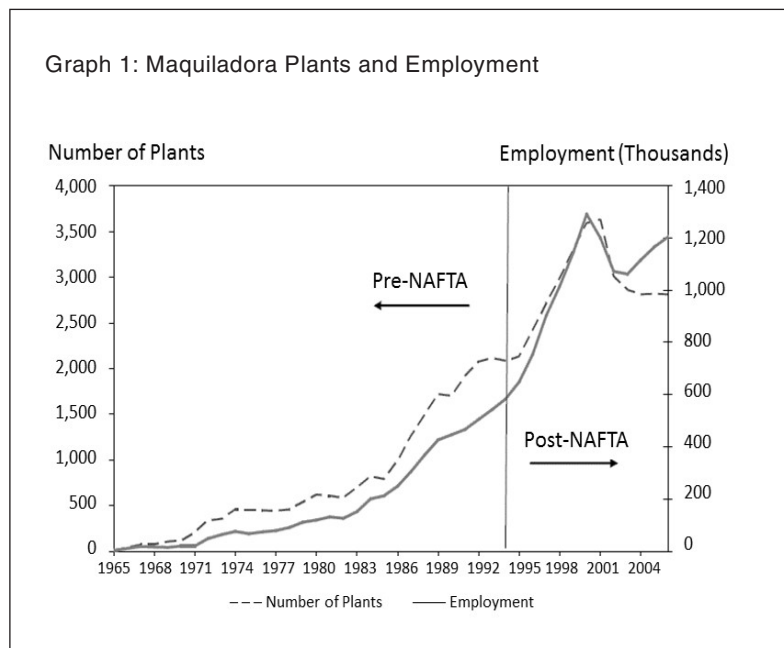
MFA-ATC-GATT Transition

The passage of NAFTA occurred at the beginning of the phasing-out of the Multi-Fiber Arrangement (MFA). The MFA was a framework of bilateral agreements and unilateral actions which imposed quotas on developing economies' yarn, fabric and clothing exports in order to protect the industries of developed economies threatened by rapidly increasing imports, especially from developing regions (World Trade Organization, 2015).

These caps on exports led to high-producing developing economies, such as Hong Kong (China), Korea, Chinese Taipei, and later China, sourcing production in neighboring economies with low wages and underutilized quotas. As high-producing economies reached their limits under the quota system, they would quickly sub-contract operations to these neighboring economies, which included Bangladesh, Sri Lanka, and Viet Nam (Gereffi 1999, cited in Frederick and Gereffi 2011). Throughout the MFA, the end markets (the US and Europe) remained stable, while production and assembly activities varied according to which economies had met their maximum quota levels or which had still-underutilized quota levels. This fast-paced sub-contracting pushed these Asian developing economies toward more full-package production operations, as it was essential that companies could both assemble and export the finished product quickly before their economy's quota was met.

Between 1995 and 2005 the MFA was phased out through the World Trade Organization (WTO) Agreement on Textiles and Clothing (ATC). The ATC transitioned the sector into normal General Agreement on Tariffs and Trade (GATT) rules over the course of those ten years; specifically, the quota system was removed and importing economies are no longer allowed to discriminate between exporters (World Trade Organization, 2015).

Mexico experienced declining global market share during the MFA phase-out/implementation of the ATC, as other more competitive developing economies gained market share (Frederick and Gereffi 2011). The fact that these other developing economies, especially Asian economies, were able to quickly deliver full-package products was an important factor, as Mexico still almost solely relied on labor-intensive assembly activities for exportation to the US.



ii. Mexican Growth 1994-2000s

As the phasing out of the MFA and the transition lead by the WTO ACT occurred at the beginning of the implementation of NAFTA, Mexico enjoyed a special boom and advantage over quota-constrained economies (Lopez-Acevedo and Robertson 2012, p. 353). Most sensitive US imports were only phased in at the end of the WTO ACT, essentially granting Mexico a ten-year advantage over other US apparel exporters (Lopez-Acevedo and Robertson 2012, p. 355).

Due to this advantage, Mexican apparel exports grew during the late 90s, to a peak value in 2000 of 8.9 billion dollars. And, whereas in 1990 Mexico had been seventh among leading exports to US markets in 1990, by 2000 Mexico ranked first (Bair and Dussel-Peters 2006). However, Mexico lost its competitive edge as other developing economies were able to insert themselves into developed markets. Most notably, upon joining the WTO in 2001, limits were lifted on Chinese products, and China was allowed more open access to the U.S. market (Lopez-Acevedo and Robertson 2012, p. 357). Additionally, Caribbean Basin economies were granted expanded market access to the United States under the U.S.-Caribbean Basin Trade Partnership Act. Traditionally, Mexico and Caribbean Basin economies have competed for the same market share, as they both primarily engage in cut-make-trim activities and have deficiencies in many of the same areas (Frederick and Gereffi 2011).

iii. Losing Ground in the 2000s

Of importance is the fact that the United States is almost the sole consumer of Mexican exports: the U.S. accounted for 97.7% of Mexican apparel exports in 1995, and declining three percentage points to 94.0% in 2005 (Lopez-Acevedo and Robertson 2012, p. 355).² While this specialization in the American market has benefitted in some ways, Mexico is highly affected by its neighbor's market fluctuations. There is a quote, widely attributed, that says "When the United States sneezes, Mexico catches a cold." There is no better example than the recent recession in 2009, the worst economic crisis since the Great Depression of the 1930s. Plant closures and worker layoffs in industrialized economies lead to a decrease in customer demand, which in turn resulted in shrinking markets for export-oriented economies in the developing world (Gereffi and Frederick 2010, p. 158). During this recession, Mexico is reported to have lost an estimated 36-80 thousand jobs in the 2008-2009 period alone (Forstater 2010). From a high of possessing 14.6% of the American market share in 2000, by 2009 Mexico only possessed 5.4% (Lopez-Acevedo and Robertson 2012, p. 359).

iv. Impact of Past Policies on the Current Situation

Critics of these past policies argue that they have locked Mexico into assembly activities and have limited Mexico's possibilities to expand their export market beyond the United States (Lopez-Acevedo and Robertson 2012). When economies, such as Mexico, stay in low value added activities, they have minimal opportunities for upgrading, few linkages to domestic manufacturers or suppliers, and strong incentives to keep labor costs low (Matthews 2002 and Sklair 1993, cited in Bair and Dussel-Peters 2006). Although the "race to the bottom" strategy of keeping wages low and relying on labor-intensive activities to be the sole added value kept Mexico ahead of most competitors during the 90s, today Mexican SMEs must be able to differentiate their products on factors other than pure cost (Robinson 2010).

An alternative to simple assembly activities is what is known as "full-package productions". Full-package manufacturers are responsible for a range of activities that may span from purchasing inputs needed for a particular garment, contributing to design, producing samples or prototypes, pattern grading or marking, laundering and finishing garments, and occasionally shipping directly to retail outlets (Bair and Dussel-Peters 2006, p. 207). Full package production is preferable from a development perspective, as it increases local inter-chain linkages, stimulates larger fixed capital investments, increases an economy's competitiveness, and allows exporting firms to acquire knowledge from lead firms (Bair and Dussel-Peters 2006, p. 207).

Immediately after the passage of NAFTA, it seemed that Mexico was poised to become the

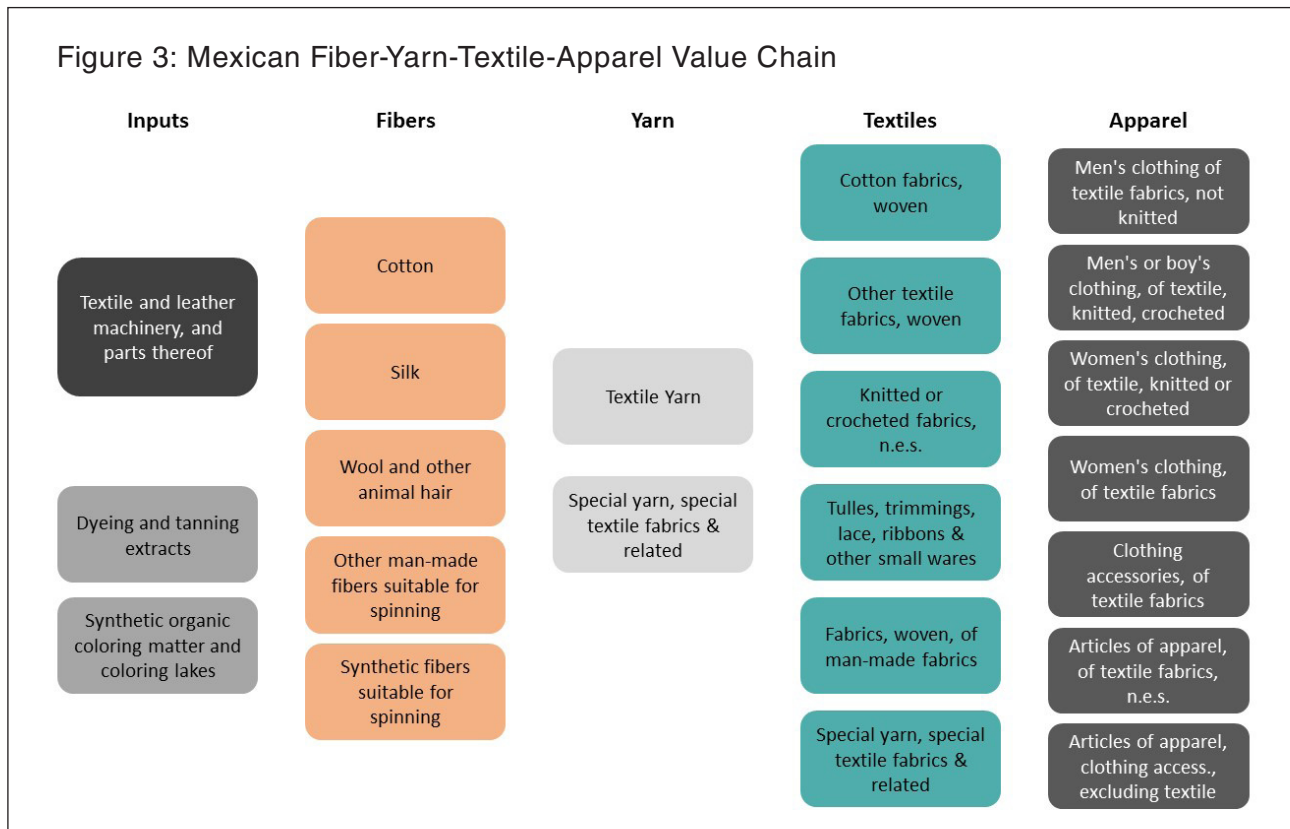
² Canada and the EU-15 (the 15 European Union members in 2003) economies are the only two other markets that receive more than one percentage point of Mexican apparel exports (Lopez-Acevedo and Robertson 2012, p. 355).

new full-package sourcing solution in North-America. This was because rules of origin allowed local Mexican inputs to be used for apparel exports to the U.S., and because foreign investors were investing in developing Mexico’s raw material base (Bair and Dussel-Peters 2006, p. 207). However, currently most domestic firms and traditional maquilas remain unable or unwilling to fill full-package orders, reporting that this is due to a lack of access to affordable credit (Bair and Dussel-Peters 2006, p. 211, Guevara-Tapia 2015, Camarillo-Quevedo 2015). In fact, recent research has raised the question of whether Mexico has been able to start gaining segments of international textile supply chains (Blyde 2013).

b. Current State of the Industry

i. Mexican Fiber-Yarn-Textile-Garment Value Chain

The value chain will be defined using the products defined by the United Nations Conference on Trade and Development (UNCTAD). The present study includes all components that are either imported or exported in non-negligible amounts, and that form an essential part in production of textile and/or apparel final products (Figure 3: Mexican Fiber-Yarn-Textile-Apparel Value Chain).



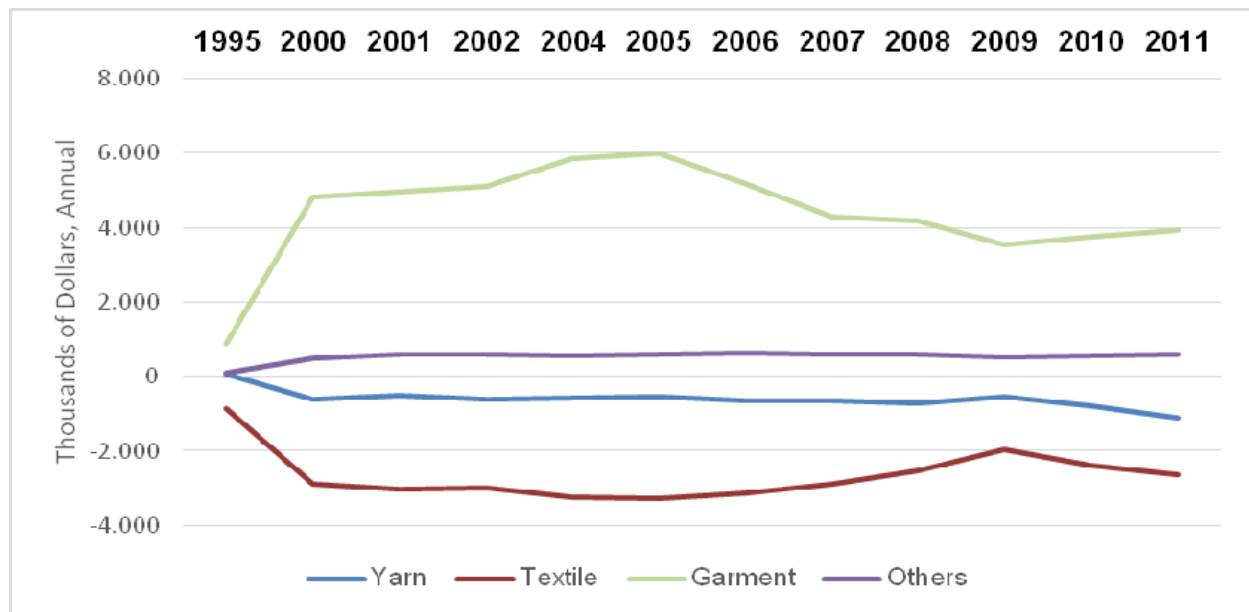
Along the fiber-yarn-textile-apparel value chain, the Mexican industry is heavily loaded toward the exportation of garments, with a trade deficit of textiles and a slight deficit of yarns. As seen in Graph 2: Trade Balance of the Yarn-Textile-Garment Chain.

(Mexico with the World Economy), the deficit of textiles has remained steady during the past 15 years, as has the surplus of manufactured garments.

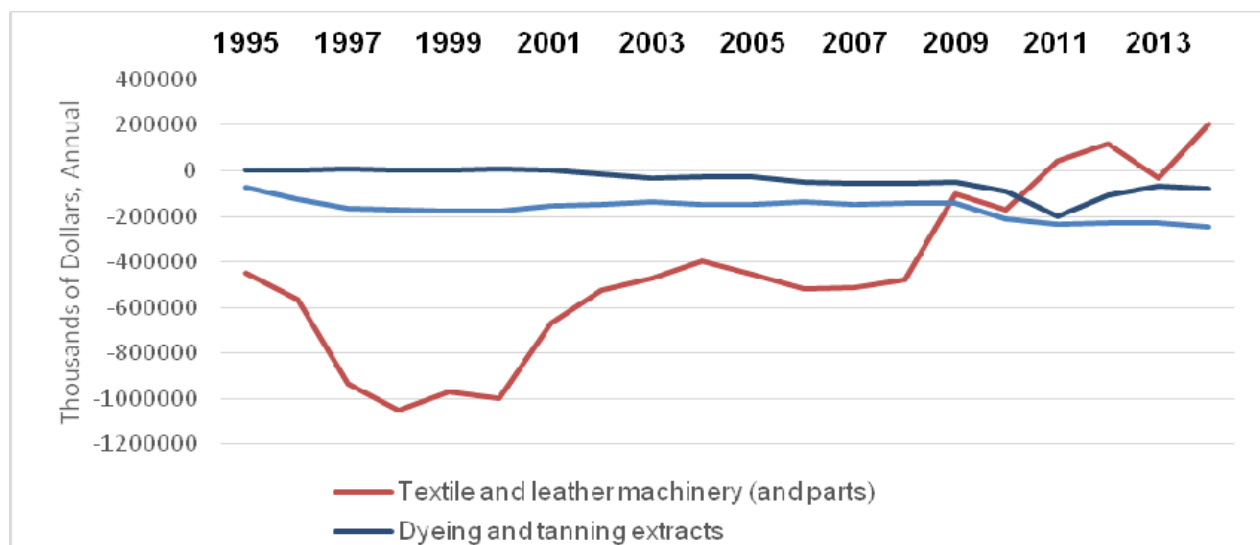
For the most basic inputs, machinery and dyeing/coloring material, Mexico has historically imported almost all of the machinery used in the production of yarn, textiles and apparel. However, although importation has remained fairly constant from the early 2000s until the present day,

Mexico has begun to export more machinery since. The highest jump from 139 million dollars in 2007 to 845 million in 2012, as seen in Graph 3: Trade Balance with the US, Inputs. However, investment in textile machinery is still relatively lackluster when compared to other economies in the global market. Mexico ranked 12th in shipments of short-stable spinning machines, 18th and 19th for single and double jersey knitting machine shipments, 22nd for shuttleless looms, and 32nd for electronic flatbed (Anson and Brocklehurst 2010, Brocklehurst and Andon 2010, cited in Frederick and Gereffi 2011).

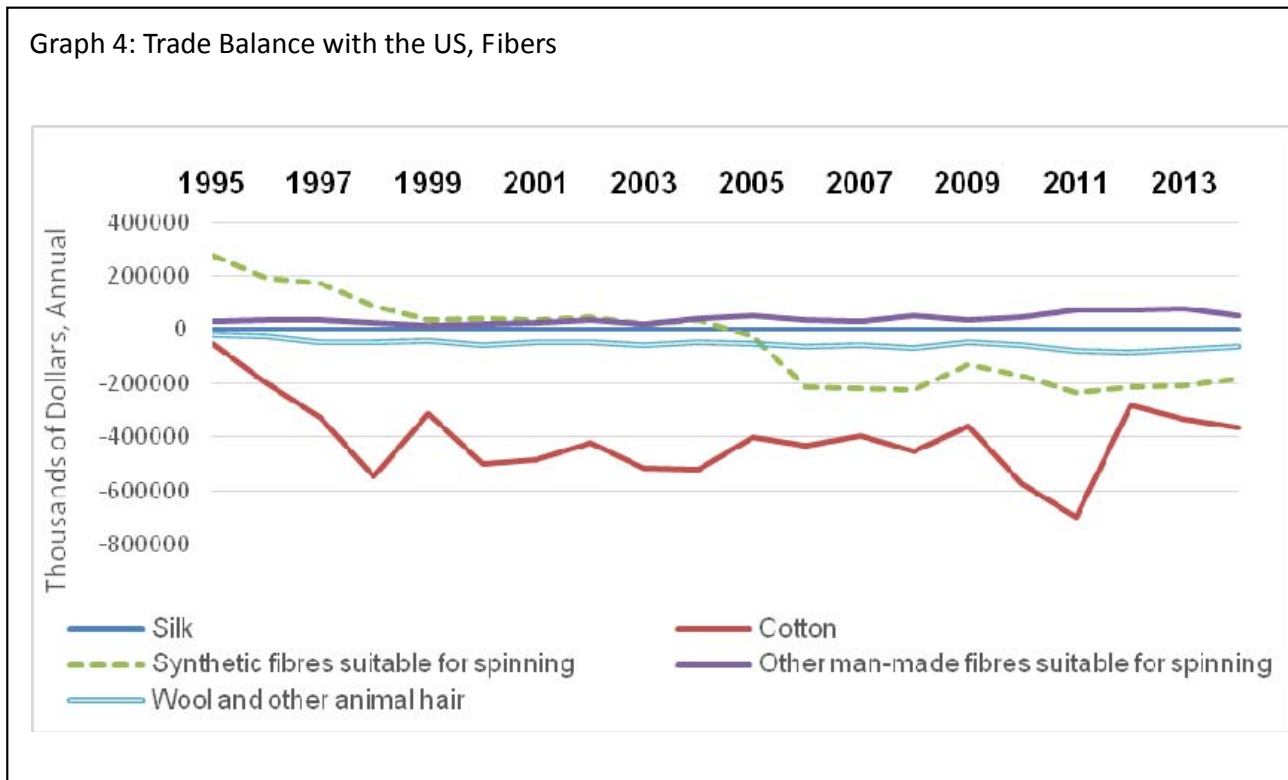
**Graph 2: Trade Balance of the Yarn-Textile-Garment Chain
(Mexico with the World Economy)**



Graph 3: Trade Balance with the US, Inputs



Especially for SMEs, it is difficult to penetrate the fiber industry, as this segment of the value chain depends on relationships with suppliers of raw material. In terms of natural fibers, some cotton is produced in Mexico, but the most (possibly the majority) is imported from the United States (Camarillo-Quevedo 2015, Becerril 2015). However, market inefficiencies arise, because Mexico on average consumes 1,800,000 bales of cotton a year, and produces 780,000. However, of those 780,000, Mexico exports more than 30% of it, and then imports 1,300,000 bales (Becerril 2015). As seen in Graph 4: Trade Balance with the US, Fibers, cotton is in fact where the largest trade deficits arise for Mexico in the fiber trade.



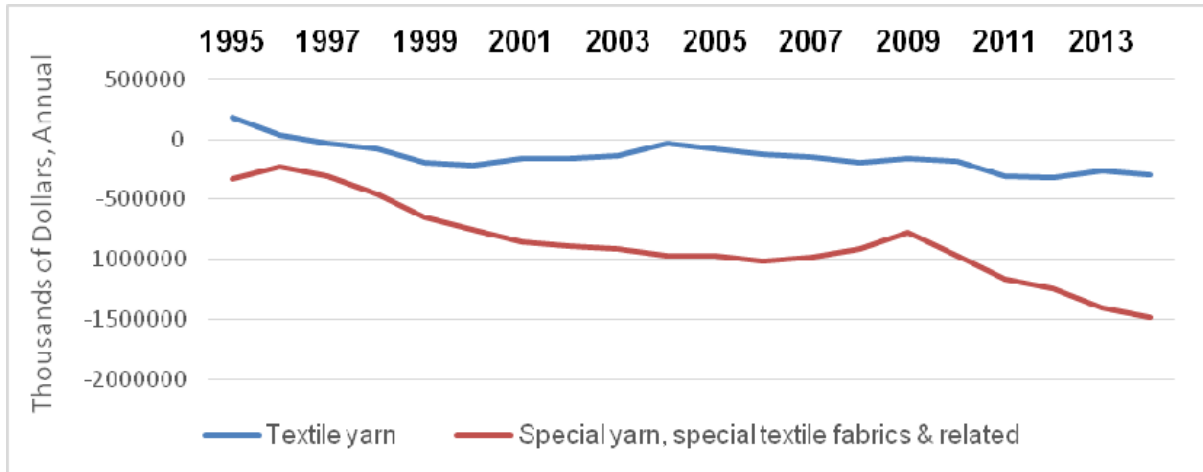
The majority of Mexican apparel products exported to the US are made of cotton (58% by value in 2009), and historically Mexican producers have benefitted from subsidies provided to American cotton farmers. However, this is a strategy focused on “insulating producers from competition in the short-term rather than investing in long-term competitive capabilities” (Frederick and Gereffi 2011). As other economies, especially India, increase their competitiveness through improved ginning and logistics practices, the United States cotton market may fall behind, taking Mexican apparel producers with them.

Polyester is, for all intents and purposes, only commercialized by one major company in Mexico; other specialized fibers are also imported (Camarillo-Quevedo 2015). By value, in 2010, 65.5% of textiles imports are synthetic or artificial, 31.7% is cotton, and only 2.8% are wool (Instituto Nacional de Estadística y Geografía, 2014). Synthetic and artificial yarn are able to be produced much more cheaply in Asia from Middle Eastern products, which has led to Mexico ceasing to produce these kinds of yarns (Becerril 2015).

Yarn is produced in Mexico, but only by very few companies, and synthetic yarns are almost all imported by one major company. Both yarn imports and exports have been growing steadily since the passage of NAFTA, although imports have been growing faster than exports (reflected in Graph 5: Trade Balance with the US, Yarn). The production of fibers and yarn has been

moving away from Mexico and more toward economies like Guatemala and Colombia where it is cheaper (Guevara-Tapia 2015). In 2011, out of a total of 2.21 billion dollars in yarn importations, 1.57 billion dollars are imported from the United States, 135 million USD from China, and the rest are fairly evenly distributed across other global regions (Instituto Nacional de Estadística y Geografía, 2014).

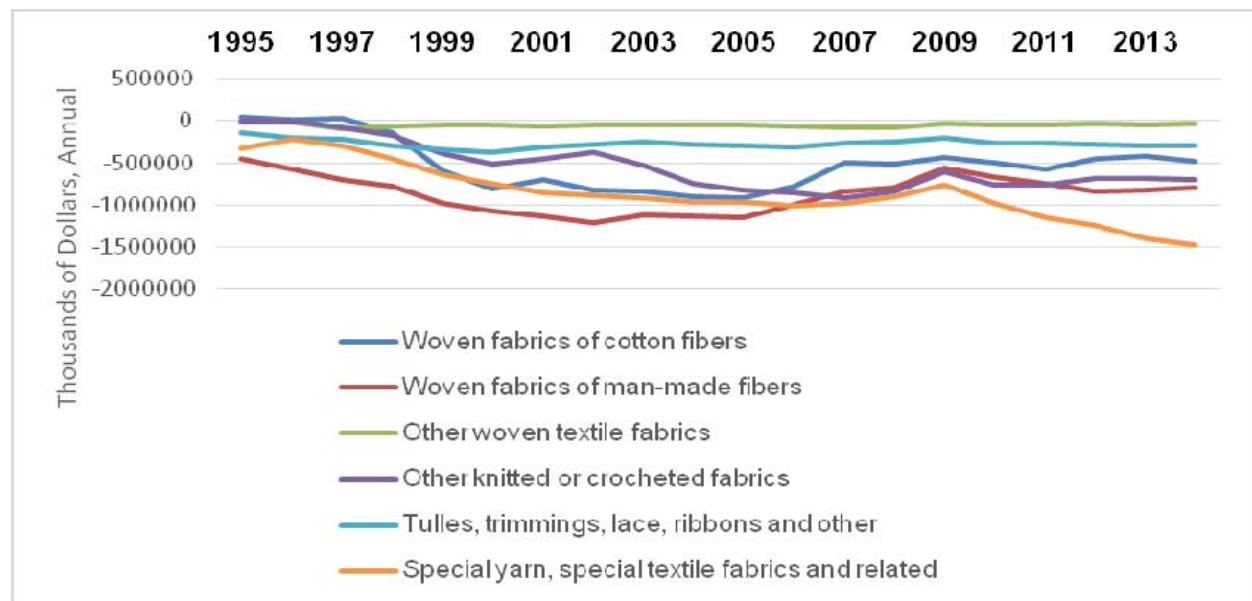
Graph 5: Trade Balance with the US, Yarn



In the middle of the chain, in order to participate in the textile industry, companies require large amounts of capital in order to acquire machinery. In addition, it takes a relatively long time for textile activities to start to see profits (Gereffi and Memedovic 2003, cited in Gereffi and Frederick 2010). That is why the perception is that there are almost no micro or small businesses in the textile industry: the majority are medium-sized (Camarillo-Quevedo 2015). However, many companies have been able to establish themselves, although a great deal of textiles still imported. Whereas before, the US was the largest supplier of textile imports to Mexico (79% in 1995, declining to 63% in 2009), China has begun to take over. In 1995 China did not figure among the top five suppliers, but by 2009 it represented 18.3% of Mexico's textile imports (Lopez and Robinson 2012).

Most types of fabric are produced in Mexico, with the exception of silk (Camarillo-Quevedo 2015). Fabrics/textiles can either remain in Mexico or be exported in an indirect manner, either as inputs for other products or as part of a finished product. Clothing and home textiles are the most commonly exported finished products (Camarillo-Quevedo 2015).

Graph 6: Trade Balance with the US, Textiles



Source: Designed by the authors with data from UNCTAD Trade Statistics

Finally, the garment industry is the segment that is most labor-intensive. This means that it requires the least amount of capital, has low fixed costs, and starts to see profitability in the short term (Gereffi and Frederick 2010, Cherem-Entebi 2015). As seen in Graph 7: Trade Balance with the US, Apparel, apparel is the only segment of the fiber-yarn-textile-apparel value chain where Mexico consistently runs a trade surplus. This is due to the historical trade policies previously described (Section 1.a.0., i. Historical Panorama of Trade Programs and Agreements 1965-2010), that attempted to market Mexico as an attractive source of semi-skilled low wage labor, especially for American operations. Although assembly activities have been a consistent source of income and employment in the short- and medium-run, Mexico has been almost too confident and reliant on this segment of the fiber-yarn-textile-apparel GVC. It is yet to be seen if Mexican textile enterprises can enter into more downstream activities or full-package sourcing, as the industry still faces many challenges.

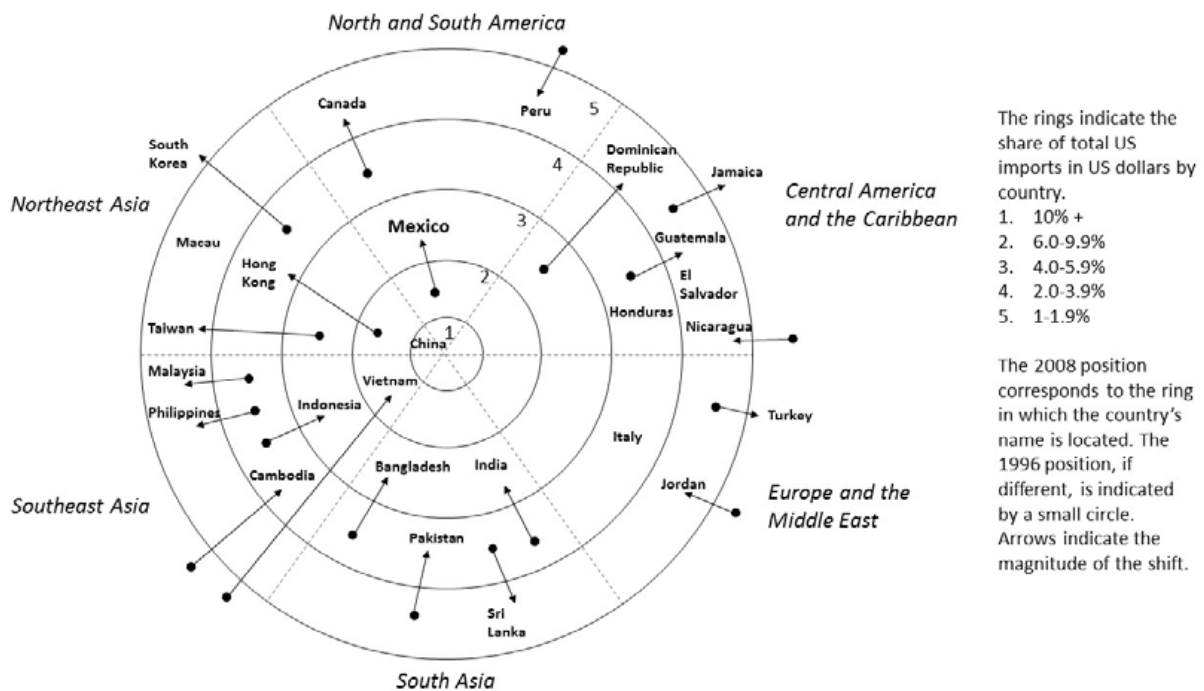
ii. Overarching Concerns in the Mexican Textile and Apparel Industry

One of the most important concerns for the industry in Mexico is informality. It has been estimated that around 58% of the market is informal or does not fulfil regulations in some way (Juan-Ayub 2015). Informal and even illegal practices are varied and can range from: contraband products, undervalued merchandise, apparel sales outside of approved sales institutions, and trade in stolen goods (Juan-Ayub 2015).

On the other hand, some industry experts consider the principal concern to be dumping or illegal importation of products subsidized by foreign governments (Cherem-Entebi 2015). Unfair trade practices encompass the behaviors of both foreign importers or exporters who under-invoice, and domestic Mexican companies that do not abide by billing/invoice/tax regulations (Camarillo-Quevedo 2015, Cherem-Entebi 2015).

Mexico is passing through a critical moment of economic transition. Although the government has recently undertaken actions to protect the industry from informality/illegality and unfair trade practices, with the passage of the Trans-Pacific Partnership (TPP), the Mexican market will begin to see even more importation of cost-competitive products (Camarillo-Quevedo 2015). A current battle for the industry is to find Mexico's niche and price point (Cherem-Entebi 2015), as Mexico is faced with higher labor costs and lower productivity than Asian competitors (USITC 2004 cited in Frederick and Gereffi 2011).

Figure 4: Shifts in US Market Share, 1996-2008



Source: Gereffi and Frederick 2010, with data from the United States International Trade Commission

If not, Mexico risks losing even more ground in their primary market, the United States, as other economies move in. As it is apparent in Figure 4: Shifts in US Market Share, 1996-2008, China has overwhelmingly been the winner of the American market share, while Mexico has experienced the most dramatic decline during the same period (Frederick and Gereffi 2011). Similarly, Mexican production has not diversified. Mexican cotton woven trousers are the main products destined for the US, making up 41% of US apparel imports from Mexico in 2009. However, China is competing with Mexico in four main categories: both men's and women's cotton woven trousers, and both cotton and synthetic fiber sweaters/sweatshirts (Frederick and Gereffi 2011). China has been able to adapt-of the top ten exports to the US in 1996, only five of them were still the same in 2009. Mexico, on the other hand, has become too comfortable with the products that it exports-of the top ten exports to the US, eight were the same in both 1996 and 2009 (Frederick and Gereffi 2011).

c. Major Players

i. Private Sector

It is difficult to locate precisely which private sector companies are the largest and most important, especially in terms of sales, market share, and other financial indicators.³ This is because the Mexican textile and apparel industry is characterized by mistrust (Bair and Gereffi 2001), a situation aggravated by the recent insecurity.⁴ However, Table 2: Major Private Sector Players Across the Value Chain comprises the largest and most visible private sector players with the largest reported revenue and most activity in trade fairs. Many important commercial entities, such as Zaga, are groups divided into sub-corporations, with each sub-division performing specialized activities; these groups are therefore more difficult to identify through firm size and income variables.

Regarding foreign companies that have invested and produced in Mexico, their apex was in the years after NAFTA. For example, immediately after NAFTA passed, Parkdale Mills started investing in yarn spinning, Guildord Mills built new textile plants, and Cone Mills and Galey & Lord began acquiring existing production capacity through joint ventures (Bair and Dussel-Peters 2006). However, several of the companies that invested in Mexico in the post-NAFTA period have now filed for Chapter 11 protection in recent years, including Burlington Industries, Guilford Mills, Galey & Lord, Cone Mills Corporation and Dan River (Bair and Dussel-Peters 2006).

Table 2: Major Private Sector Players Across the Value Chain

Machinery and Inputs	Fibers	Yarn	Textile	Assembly	Clothing Retail
Alchemist Chemical S.A. de C.V.	Super Cotton S.A. de C.V.	Hilaturas Los Ángeles S.A. de C.V.	INNOFA MÉXICO, S.A. de C.V.	Fábrica María	The Original Mexican Jean Company S. De R.L. De C.V.
Tella Needles [Source: Itma.com 2015]	Dupont Kevlar	Hilos Modiz	Textiles La Poblana S.A. de C.V	Shelby Manufacturing de México, S.A. de C.V.	Fit Apparel, S.A. De C.V.
Aire y Proceso Industrial S.A. de C.V.	Goulston Technologies	Hilados Jiutepec	Eurotécnica Textil	Trajes Mexicanos S.A. de C.V.	Mariscal Moda Hombre, S.A. De C.V.

³ Many of the industry experts who were interviewed declined to name specific companies; therefore all information regarding firms comes from Exintex, ITMA, and Magic Show registries of participants. Additional information comes from the business information system, SIEM (Sistema de Información Empresarial Mexicano), where we obtained the information of firms reporting more than 250 employees.

⁴ Business owners are distrustful with good reason: to contextualize, the SIEM system has a warning on their website that, “There have been reports of people visiting the companies we have listed here and impersonating chamber of commerce representatives in order to extort these companies.”

WESTEK Equipos y Servicios S.A. de C.V.	Hidra Textil S.A. de C.V.	Grupo Portatex, S.A. de C.V	Vivi Industrias S.A. de C.V	Koos Mexico, S.A. de C.V.	Bonmoro, S.A. De C.V.
Conitex Sonoco	Grupo Gomelast	Sinatex S.A. de C.V.	Grupo Comercial Alco S.A. De C.V.	Industrias Apparel, S.A. de C.V.	Preslow, S.A. De C.V.
Durst: Textile Printing		Triton Industrial S.A. de C.V.	Trend Clothiers S. de R.L. de C.V.	Impulsora Comercial Jas Leo, S.A. De C.V	
Groz-Beckert			Royal Soft S.A. De C.V.	Gd Apparel, S.A. De C.V.	
		POIN S.A. de C.V.		Dickies de Parras, S. de R.L. de C.V.	
				Movis S.A. De C.V.	
				Confecciones Raygal S.A. De C.V.	
				Santory Internacional, S.A. de C.V.	
				D'nieto Uniformes Empresariales	
				Trajes Internacionales, Sa De Cv	
				Marel De México, S.A. De C.V.	

Note: S.A. de C.V. is a common ending for names of businesses in Mexico; it corresponds to "Sociedad Anónima de Capital Variable", roughly equivalent to an anonymous company or partnership. S. de R.L. de C.V. stands for "Sociedad de Responsabilidad Limitada de Capital Variable" and corresponds to a public limited company.

Source: Information comes from Exintex.com 2015 unless otherwise noted, and is corroborated by companies' websites and SIEM.

Established American and Mexican department stores and retailers, such as Walmart, Sears, and Liverpool have been constant purchasers of Mexican textile and apparel products steadily over the past 20 years. Denim companies, such as VF (encompassing the Wrangler and Lee brands of jeans), Levi's (both Levi's and Docker brands), as well as the Mexican menswear brand Yale, have consistently been major players both in apparel design, assembly, and retail. In more recent years. Since 1997, the American company Carhartt has invested in plants in Guanajuato and Durango, and now employs over 2,000 Mexican employees. Recently (within the past year), companies such as Target, H&M and the Inditex group have begun to look into sourcing from Mexico (Achar-Samra 2015).

In summary, there are few Mexican companies that are able to perform activities across the value chain, and few that market or brand their finished goods. Most firms participate in textile or apparel assembly stages using imported goods, and then export the finished product. However, global trends in requirements for suppliers will see Mexican firms increasingly pressed to deliver full-package production, or at least the ability to source their own inputs and establish deeper and stronger downstream connections. It remains to be seen if these current Mexican major players will be able to keep pace with the needs of the major foreign firms that have traditionally operated in the economy.

ii. Public Sector

The major players of the public sector are the Ministry of Economy as well as its specialized units, namely the INADEM and ProMexico. In Mexico, the Ministry of Economy (SE, in Spanish, Secretaría de Economía) is the government department in charge of economic affairs, including manufacturing and exportation. Almost all of the policies regarding the insertion of SMEs into GVCs fall under the jurisdiction of the SE, as they are entrusted with “formulating, conducting, regulating and controlling general policies regarding industry, and internal and external commerce” (Ley Orgánica De La Administración Pública Federal 1976). The Minister of Economy is a member of the federal executive cabinet appointed by the President.

Within the SE there are 18 different specialized units; among them are the INADEM and ProMexico. INADEM stands for the Instituto Nacional del Emprendedor, or National Institute of Entrepreneurs, and is a decentralized administrative unit. The INADEM's objective is to design, execute and coordinate domestic policy on support for micro, small and medium business owners, especially regarding innovation, competitiveness and promotion in domestic and international markets. The INADEM is a recent creation: it was formed in January of 2013 by presidential decree as part of President Peña Nieto's political economy strategy to support SMEs and entrepreneurs.

Another subdivision of the SE is ProMexico, the public trust fund that promotes international trade with, and investment in, Mexico. ProMexico has 48 offices in 31 economies to support investment, the exportation of Mexican goods and services, and the internationalization of Mexican companies. This fund is slightly older than the INADEM, having been founded, also by presidential decree, in 2007.

Certain state governments have become involved with promoting the textile sector, most notably the government of the state of Hidalgo. The state has declared that textiles are one of their “vocations” (Achar-Samra 2015) and implemented a program called “Woven Hidalgo” that attempts to strengthen the state's supply chains and make SMEs more competitive. The governments of Mexico State and Puebla have made efforts to promote textiles, although their

programs are not as publicized and readily available.

iii. Business Organizations

As the Mexican fiber-yarn-textile-apparel value chain is characterized by its fragmentation, the chambers of commerce are often where businesses can be brought together for cooperation and collaboration on specific projects. These chambers are also often the mouthpieces for the policy needs of the industry, pressuring politicians, and lobbying.

The Mexican National Chamber of Commerce of the Clothing Industry (CANAIVE, for its name in Spanish: Cámara Nacional de la Industria del Vestido) is almost 70 years old and consists of nine state delegations, 13 domestic sections and 16 working groups. Its objective is to promote the clothing industry on a domestic and international scale, represent and defend the sector's general interests, and be a collaborative and counselling body for the government design and execution of policies and programs that contribute to development in Mexico (CANAIVE, 2015).

The Chamber of Commerce of the Textile Industry (CANAINTEX, or in Spanish, Cámara Nacional de la Industria Textil) is the chamber of commerce that deals with these same preoccupations but solely on a domestic scale, and more limited to the textile industry.

CITEX is the Chamber of Commerce for the Textile Industry in the states of Puebla and Tlaxcala, and aims to guide and support their members with obtaining favorable local, state and federal policies, applying for support programs, holding trade fairs, and promoting cooperation between their members on specific projects. They also work to link their members with local universities in Puebla and Tlaxcala.

Of secondary importance, but still a very major player for domestic policy, is the National Chamber of Commerce of Industry Transformation, or CANACINTRA, one of the oldest chambers of commerce (founded in 1941). They represent 13 different industrial sectors, and although textiles/apparel is not one, they are represented under the category of "diverse industries".

Finally, COMCE is a private-sector initiative to create an organ dedicated to the promotion of foreign trade, foreign direct investment, and technological development, and works mostly through Bilateral Business Committees. COMCE works closely with ProMexico, especially when promoting international business missions, and attending to foreign businesses that attempt to invest in Mexico. The main activities that COMCE engages in are the planning and hosting of special business events, value added collective agreements, technical support and consulting.

iv. Universities

Mexico has a decent offering of undergraduate programs focused on textile design and engineering spread throughout the national territory. The exact number varies depending on the definition of the program, especially if the program is related to fashion design as well. The largest programs are presented in Table 3: Supply of University-Level Textile Design Programs.

Although these programs are well-established with high technology research and business training for their students and alumni, the industry still does not appreciate their importance (Cherem-Entebi 2015), nor take them into account when making policy decisions. The problems arising from inefficiencies in human capital in the industry will be described in more depth later in this document (Section 3.0. g. Human Capital).

Table 3: Supply of University-Level Textile Design Programs

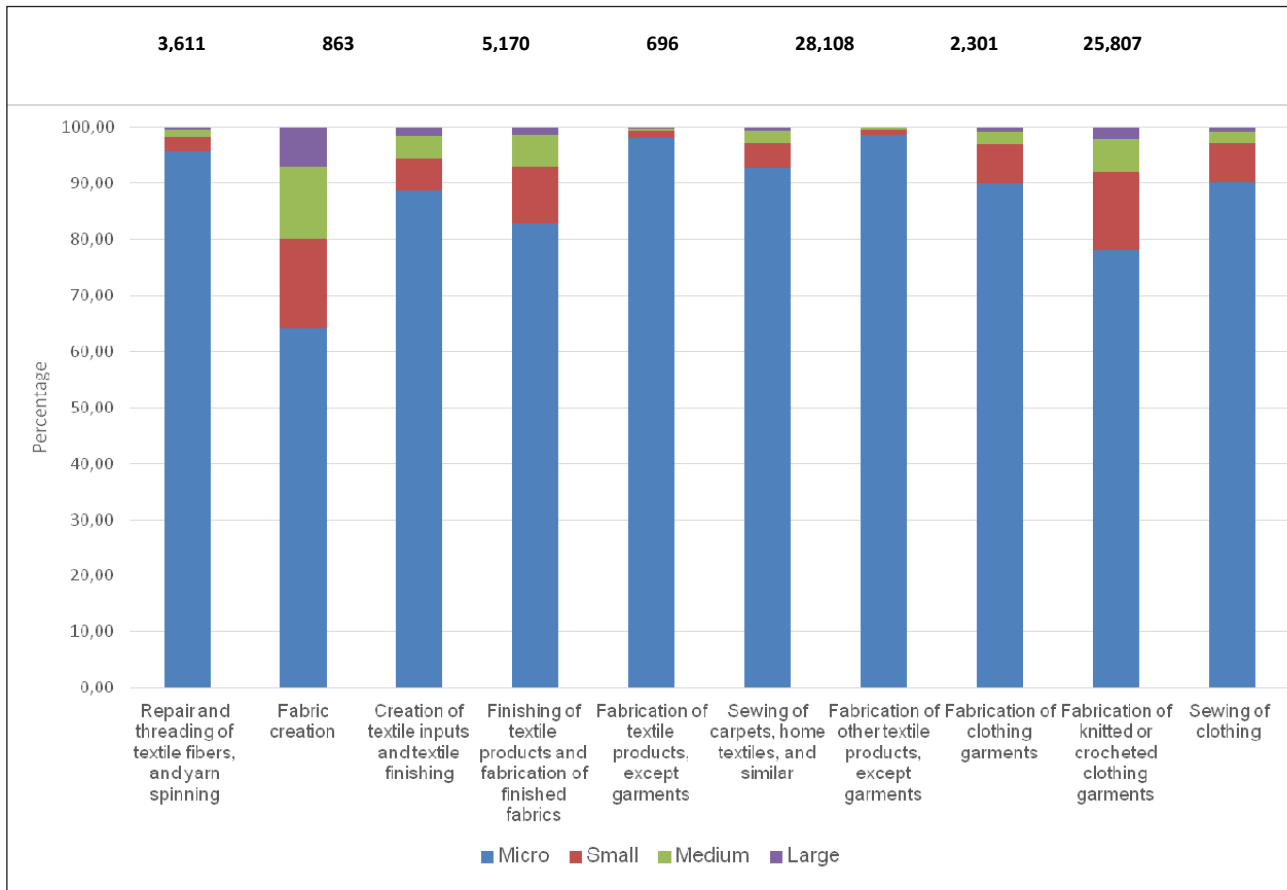
Name of University	Type of Degree	Name of Program
Universidad Iberoamericana	Bachelor's Degree	Textile Design
Universidad Autonoma de Tlaxcala	Bachelor's Degree	Textile Design
Instituto Politecnico Nacional	Bachelor's Degree	Textile Engineering
Universidad Autonoma de Aguascalientes	Bachelor's Degree	Textile and Clothing Design
School of Design of the National Institute of Fine Arts	Specialty (one year post-graduate course of study)	Textile Design
CENTRO	Bachelor's Degree	Textile and Fashion Design

d. Firm Size Distribution

As of 2009, there were 11,500 textile- and apparel-related firms in Mexico. The large majority of these firms (9,380 firms, or 81.6%) are in apparel, with the rest (2,120 firms, or 19.4%) in textiles. In the apparel sector, 73.5% of all firms are considered “micro” in that they employ between 1 and 10 workers, and only 2.3% of firms are considered “large” (over 250 employees) (Lopez-Acevedo and Robertson 2012).

While micro enterprises dominate in terms of absolute number of firms across the entire yarn-textile-apparel value chain (Cherem-Entebi 2015), interviews with experts revealed that large enterprises dominate, in terms of market share and influence, in yarn and textile manufacture and supply (Camarillo-Quevedo 2015). What is clear is that the manufacture of textile products, both non-apparel and apparel, is where the majority of firms are located, and that these activities are overwhelmingly performed by micro and small enterprises. For detailed values, see Annex 2: Firm Size Distribution in 2014 by Activity.

Graph 8: Firm Size Distribution Across the Value Chain
(Percentage of Micro, Small, Medium and Large Firms, by Number of Firms Registered)



Source: Instituto Nacional de Estadística y Geografía, 2014e. Suppliers

As Mexican SMEs attempt to insert themselves into GVCs by performing assembly activities, three characteristics stand out. The first is that American major production and assembly firms are the principal leaders and agents in structuring these kinds of chains and networks. This introduces a fundamentally different element when compared to full-packaging producers in East Asia, where large retailers and brand marketers had historically prevailed (García de Leon 2008). The other characteristic is that linkages established through these networks and chains were based in intra-firm relationships (through subsidiary plants), as well as different arrangements between formally independent firms (including operations under license, the use of contractors, and sub-contracting out to local firms). The third characteristic that differentiates Mexican value chains from Asian ones is that Asian value chains typically adapt more quickly and are able to restructure firm relationships and levels of hierarchies depending on global trends (García de Leon 2008).

Suppliers in Mexico can be divided into three main categories, subsidiaries, contractors and subcontractors. Subsidiaries of foreign companies receive foreign capital, primarily from the United States, and are total or partial branches of foreign companies. These subsidiaries typically finish garments as part of the MNC (García de Leon 2008). Contractors companies can either operate with foreign capital, typically American or Korean, or be joint ventures of Mexican and foreign capital. Contractors operate under commission for another company, which provides the materials and inputs. The contractor either operates in their own installations or is an intermediary that subcontracts processes out (García de Leon 2008). The majority of Mexican firms are subcontractors, although some subcontractors operate with foreign capital,

typically American or Korean. These firms are independent companies that perform assembly activities for other firms, using inputs from other firms (García de Leon 2008).

i. Suppliers in a Buyer-Driven Value Chain

The apparel industry is the quintessential example of a buyer-driven value chain, where the assembly of a product does not have as much value as the design, branding and marketing of the product. This leads to a power asymmetry between the purchaser of the final product and manufacturers and producers further upstream in the supply chain. Lead firms, such as Walmart or Suburbia (in the domestic Mexican market (Guevara-Tapia 2015)), are large retailers who mostly outsource manufacturing to a global network of suppliers (Gereffi and Frederick 2010). Products are sold in department or discount stores that carry private label, exclusive, or licensed brands that can only be purchased in that retail store (Gereffi and Frederick 2010).

Mass merchants or retailers that operate under private label brands own or license the final product brand, but in almost all cases, do not own manufacturing (Gereffi and Frederick 2010). These purchasers buy clothing and apply their own branding labels right before sale. The composition of cost of these products is usually about 10% into design and 90% into design and production. The Mexican private label stores Walmart, Suburbia, and Soriana are the largest purchasers of Mexican-produced clothing (Guevara-Tapia 2015). In the United States the largest private label brand merchants are Walmart, Target, Sears, Macy's, JCPenny, and Kohl's (Gereffi and Frederick 2010).

Brand manufacturers such as the Inditex group (that includes Zara, Pull and Bear, and Bershka) own their brand name as well as manufacturing. They typically coordinate supply of intermediate inputs, such as cut-make-trim activities in their production networks (Gereffi and Frederick 2010). However, Mexico is not a large supplier to these manufacturers, as they tend to purchase more from economies like Morocco, or to a lesser extent, Turkey. However, Mexico does produce a few garments for these stores, as well as for department stores (Guevara-Tapia 2015).

During Mexico's growth in the 1990s, domestic brands made up the majority of American apparel sales. For example, in 1993 only 25% of American apparel sales were of private label goods (Gereffi 1997, cited in Frederick and Gereffi 2011), but by 2009 private labels and domestic brands switched positions. In 2009, 16% of all wholesale apparel sales were from domestic brands, and 84% of apparel was of small brands and private label goods with specialty retail stores as their primary apparel distribution channel (Standard & Poors 2010 cited in Frederick and Gereffi 2011).

ii. Decision Making by Purchasers

It is very difficult for SMEs to sell to large companies, as these corporations have stringent standards, with demands for cheaper products, higher quality and shorter lead times. Since they are very large MNCs, they have purchasing offices all over the world and are able to make sure they are getting the absolute lowest price (Camarillo-Quevedo 2015). In this environment it is hard, for example, for a Mexican company to compete with one in Bangladesh. Increasingly, trade intermediates, such as Li & Fung, handle decision making. In 2003 Li & Fung acquired Firstworld Garments, which sourced apparel for major Mexican mass-market retailers such as Comercial Mexicana, Gigante, El Palacio de Hierro, and Suburbia (Yuk-min 2003). As companies and purchasing decisions become more consolidated, the competition for foreign investments and contracts with lead firms intensifies, leaving many suppliers with little leverage in the chain (Gereffi and Frederick 2010). Only medium and large businesses, or SMEs with a lot of capital,

are able to insert themselves into these supply chains (Camarillo-Quevedo 2015).

VF (Wrangler and Lee brands) is slowly shifting production to Asian companies such as Bangladesh that can produce comparable products at lower prices. Levi's (Levi's and Dockers) has closed all of its owned manufacturing plants and has shifted to a brand marketer model (Lopez-Acevedo and Robertson 2012). Most newer private label brands have established sourcing networks in Asia rather than regional suppliers, because they did not have preexisting relationships with US textile or apparel manufacturers (Lopez-Acevedo and Robertson 2012).

iii. Purchasers and SME Suppliers

Larger companies are able to be competitive due to the advantages of economies of scale, and this strategy extends to their contracting of suppliers. Large companies, or their sourcing intermediaries, demand that suppliers provide extremely high volumes of products, and simply put, SMEs do not have enough capacity to produce the volume of products that international purchasers want. Although certain large purchasers or tractor companies, almost always grocery stores or their intermediaries, are willing to buy from smaller retailers, normally in textiles and clothing the purchasers require large quantities. In this way, SMEs are all but locked out of being a supplier to a large company, unless they associate with other SMEs or are able to obtain a great deal of capital (Camarillo-Quevedo 2015).

Similarly, SMEs suffer from restricted cash flow and liquid capital even if they are able to become a supplier to a large company, due to payment terms. Large companies, such as Walmart, typically pay suppliers 60-180 days after receipt of goods. For SMEs operating with tight cash flow margins, these payment schedules can be detrimental to further business plans. (For more detail on how factoring programs, while a potential solution, do not currently help this situation, see 3.f.f. Capital and Financing).

In Mexico, as in the rest of the world, suppliers are normally found through catalogues or at fairs, such as the EXINTEX or ITMA (Bujalil-Palafox 2015). Both the INADEM and ProMexico support SMEs' participation in fairs, and offer to sponsor their registration fees or sponsor their booths if they are an exhibitor. However, participation is still lacking; out of hundreds of exhibitors at the ITMA trade show for garment technology, only one Mexican company was registered (ITMA.com 2015).

This asymmetry of suppliers and providers can also run in the opposite direction when SMEs attempt to purchase inputs. There is a dearth of highly specialized suppliers downstream; large producers of inputs do sell to smaller companies, it is often at a higher cost, and/or they are not selling exclusive products. This particularly affects SMEs that attempt to create value through highly differentiated products, SMEs must use the same inputs as other SMEs. This lack of exclusivity, especially in textiles, prints, and other detailed design elements, takes away from SMEs' attempt at design differentiation (Bujalil-Palafox 2015).

f. Challenges Specific to SMEs in the Industry

As mentioned in sections above, the subject of informality and unfair competition, both domestic and internationally, is paramount in the Mexican textile industry. Unfair competition impacts SMEs disproportionately, and does not offer a level playing field for SMEs to get off the ground (Juan-Ayub 2015). Unfair competition is pervasive: in 2005 it was estimated that 58% of all clothing sold in Mexico entered its borders as contraband, largely originating in China (Juan-Ayub 2015, BMI 2009 cited in Frederick and Gereffi 2011). Illegal practices are varied and can

range from: contraband products, undervalued merchandise, apparel sales outside of approved sales institutions, and stolen goods.

Other important challenges arise from sub-optimal human capital, which lead to a lack of innovation and communication/cooperation between firms.

In summary, when Mexican SMEs attempt to insert themselves into GVCs, they cannot find quality supplies at a good price in order to compete in a legal manner in the world market (Camarillo-Quevedo 2015). Barriers to investment and trade with Mexican SMEs are described in depth in section 0, 3. Barriers to Trade and Investment.

2. Government Strategies and Policies

a. Overall Government Strategy and Politics Directed toward the Textile Industry

Although in theory, upon liberalizing and opening up an economy to globalization, that economy naturally finds their comparative advantage, the reality is that markets may need government support to adapt and restructure. The Mexican government has consistently been in favor of trade liberalization, but the government support for the restructuring of the textile and apparel industry has been lackluster and fragmented. Between the passing of NAFTA until relatively recently, the federal government neglected the crucial period for interventions aimed at smoothing the transition and adapting production to compete with other more competitive economies. This is in contrast to many Asian economies that promoted firm-specific and product/cluster-specific supply-chain cities (Applebaum 2008 and Gereffi 2009, cited in Frederick and Gereffi 2011). Although many of these clusters resulted from sourcing decisions by private firms, the government played a key role in providing beneficial policies (i.e. lack of red tape) and investing in necessary infrastructure improvements to facilitate exports (Frederick and Gereffi 2011).

The most important effort, albeit cursory, was a fund was created to assist the Mexican industries of textiles, clothing, footwear and shoes as compensatory quotas against China were phased out. The fund was called the Fondo Reconversión (Reconversion Fund) and made 20 million pesos available per year, an amount considered too small to realistically have an impact.⁵ This fund began operating in 2008, but due to changes in administration in 2009, it was unable to clearly define its operations nor achieve clear results (Secretaría de Economía 2010). An evaluation of the program's impact was attempted, but was not able to be completed due to lack of measurable indicators and advances attributable to the fund (CONEVAL 2010).

Historically, Mexico has had a lack of government support with few major programs to assist the textile and apparel sector (USITC 2004 cited in Frederick and Gereffi). In previous administrations, the textile industry was not as much of a priority for government actions; in fact, certain industry experts consider that the strategy might even have been to create an environment where only the strong survived. Besides the presidential directive (described below), there is no specific federal government assistance program for the textile and apparel industry per se, nor any central planning or guiding document that outlines the strategy for this sector.

In 2010, "Mexico Fits" was an initiative of the Textile Chamber of Commerce, together with government support, that attempted to better link sourcing along the fiber-textile-clothing production chain (Maksymiv 2015). Although it was very well publicized at launch, and supported by various public and private sector actors, no information has been updated nor made available to the public within the past two years (Mexicofits.com.mx 2015), with conflicting stories as

⁵ About 1.8 million US dollars, at the average 2008 exchange rate.

to what happened to the initiative. Some have reported that the past administration of the CANAITEX did not support it, and that it will soon make a comeback. According to other industry experts the program never was interrupted. In either case, a lack of continual collaboration and of clear communication and publicity has hindered the impact this initiative could have had. These communication and collaboration issues are cross-cutting and widespread throughout the industry, and are described further in Section 3.0. i. Lack of communication/cooperation.

i. Presidential Directive December 2014

The current administration has begun to work more closely with the textile industry in order to enforce measures against illegality; the industry agrees that these measures are very important and are key for establishing a “level playing field” for the Mexican textile industry.

The first and most visible crackdown has been on illegal and/or phantom importation firms. A textile industry registry of approved importers, requiring physical visits to the place of business, was put into place in February 2015 to clamp down on irregular importation practices and phantom businesses (Camarillo-Quevedo 2015, Cherem-Entebi 2015).

Also enacted in 2015 was an automatic anticipated notice of importation, similar to those required by Mexican steel and shoe industries. This notice must be submitted to authorities at least five days before importing any foreign fibers or textiles, and must come together with its invoice, certificate of origin of the suppliers, and shipping and merchandise insurance.

Another initiative, set to come into force in 2016, is the list of reference prices for raw materials and made-up textile pieces. This list will include minimum and standard prices for each type of garment in order to compare the value of customs declarations against industry norms.

Additionally, the tariff elimination schedule has been placed on hold until 2018 for 80 finished clothing and textile products. Instead of being lowered to 20 percent, the tariff for economies that do not have a free trade agreement with Mexico will remain at 25 percent.

Other government agencies are collaborating with the presidential directive. The SAT (Servicio de Administración Tributaria) will continuously audit any importer found to be importing undervalued merchandise. NAFIN, or the National Financiera development bank, will offer credits for up to 450 million pesos (about 27 million dollars) for businesses to modernize their machinery, and Bancomext, the development for external commerce, will offer financing for exporting businesses. The agricultural agency, SAGARPA, is also promoting the purchase of cotton produced by Mexican farmers in the domestic textile industry (Patiño 2014).

This initiative has been long-coming, and has been well-received within the industry. CANINTEX reported that the percentage of illegal practices dropped from 58% to between 8-10%. The state of Puebla announced that textile production rose 15% in the seven months after the implementation of the importer registry (Hernandez 2015). However, there is still much left to be done, as there are still certain companies that unfairly take advantage of loopholes (Juan-Ayub 2015). As certain elements of the directive will take place throughout 2016 and after, conclusive results and details on the impact of the program as a whole are not yet available.

b. Layout of Government Programs for the Textile Industry

i. ProMexico Activities

ProMexico, the trust fund and subdivision of the Ministry of Economy described above, is

divided by sector, with a designated “expert” in the textile industry. This expert attempts to attract investment, connect providers, hunt for suppliers, and bring together businesses through business roundtables, trade shows and joint ventures.

Specifically for the textile industry ProMexico attempts to assist foreign or domestic tractor companies substitute Mexican supplies for overseas supplies. They also have created an internal platform (alternately called “Mexico Business Fashion” or “SujuTextil”) with the specifications and certificates of validated suppliers. ProMexico ensures that the validated suppliers in the platform are established and legitimate businesses that are able to fill the needs of larger purchasers.

In order to bring businesses together, ProMexico holds Business Roundtables where suppliers and purchasers spend 30 minutes together in a “speed dating” dynamic. ProMexico also supports Mexican businesses to attend international expos, and seeks out international joint ventures with developed economies in order to attract human and financial capita.

Another initiative has been the B2B website, which attempts to register Mexican SMEs suppliers and connect them with overseas purchasers. However, the website is still not as informative and well-laid out as it could be, and no numbers are made available as to how many businesses have actually been connected this way.

It should be mentioned that the ProMexico’s projects for the attraction of foreign direct investment were evaluated by INDEP, a third-party non-governmental organization. ProMexico’s projects were rated as “opaque” because they do not declare a target population, nor whom they have helped (INDEP 2015). While ProMexico is a valuable government agency, and certainly essential for strengthening GVCs, their activities lack organization and transparency.

ii. INADEM Programs

The INADEM, provides the lion’s share of programs for micro, small and medium enterprises in Mexico, although none are specifically for the textile/apparel industry. The INADEM utilizes calls for bids in order to provide numerous and varied subsidies, described in detail in Box 1: INADEM Calls for Bids.

Other related, yet smaller, programs have been subsidies that help the textile sector create or insert themselves into GVCs, high impact financing with a guarantee fund from NAFIN, PROIND (although this is more geared toward equipment), and basic business incubation for traditional industries to innovate, together with universities, and stay in business. The INADEM is currently piloting a strategic change plan, denominated Competitiveness, based on World Bank methodology, for micro-regions or clusters. 11 states participated in the pilot, which lasted from 2013-2015. Each state selected two priority sectors (the textile sector was chosen by Puebla), and groups were sponsored to travel internationally to observe best practices. The groups, including a project leader and representatives from the state government, travelled and searched for strategies to generate differentiated value, based on the observed international best practices. This program lasted between 10-12 months, and at the end the methodology was transferred to the state government, who then adopted it into state action plans. This program was received very positively by state governments, and will tentatively be scaled up domestically within the next two years.

BOX 1: INADEM CALLS FOR BIDS

1.1 Desarrollo de Proveedores (Development of Providers):

Aims to promote SME providers with large anchor purchasers, and, using an approved methodology, also seeks to incentivize the large tractor company to purchase from SMEs. In order to receive support to insert themselves into GVCs, SMEs must fulfill one or more requirements: receive consulting services, obtain certifications, participate in training courses, increase design/innovation elements, receive technology transfers, run a prototype, improve equipment, increase productive infrastructure, utilize new commercial and sales strategies, install management software, obtain intellectual property rights and/or hire management groups.

1.2 Competitividad Sectorial y Regional (Sectorial and Regional Competitiveness):

Fosters economic promotion strategies to increase the productivity of businesses and strengthen state-level policies. The component denominated “Promotion of Regional Development” strengthens productive insertion strategies proposed by a group composed of at least 10 companies from at least two different industries. Between 2013 and 2014, 3,292 businesses and 87 projects have been helped, including the Center for Design in Hidalgo.

1.3 Escalamiento Productivo (Productive Scaling-Up):

Provides tools for SMEs to increase productivity and sales through specific projects. Businesses must choose three types of support out of 12 possibilities, including topics such as productive infrastructure, equipment, and advanced management principles. The INADEM supports this program through their Red de Apoyo al Emprendedor and gives online and offline workshops and rapid training sessions. Between 2013 and 2015 more than 500 businesses were supported through this program; this year 135 million pesos will be made available.

1.6 Articulación Estratégica de Agrupamientos Empresariales (Strategic Aggregation of Business Clusters):

Is directed for already existing firms registered in the Mexican registry of integrative businesses and for clusters that foster SMEs. In order to apply, businesses must be already established, and combine business, government and academic elements. This program has already helped six clusters.

1.7 Impulso de la Competitividad Logística (Promotion of Logistical Competitiveness):

Develops logistical capacity for SMEs through two modalities: A) Software, certifications, machinery/equipment, training, logistics consulting; and B) Development of web platforms to link supply and demand of logistics services.

Source: Lopez-Salazar 2015 and INADEM website

While the INADEM has had a positive impact on SMEs,⁶ it still do not have a specific action plan or strategy geared directly toward the textile and apparel industry.

iii. Government Funds

The government has a series of ongoing funds dedicated to small businesses, but they are fragmented and often without readily accessible and transparent information (Observatorio Nacional del Emprendedor, 2015). These findings were corroborated with interviews; business owners reported that it is difficult, if not impossible, to find applicable funding and apply for programs (Cherem-Entebi 2015). A lack of communication and imperfect information typically leads to only the largest and most well-connected firms finding out about these funds and their intricate application and registration processes.

A sub-analysis identified 40 government funds that could possibly provide direct or indirect monetary support to textile/apparel SME, although none exclusive to these SMEs were identified. The results for 2013, the most recent year with data, were analyzed, and if the program had been evaluated (as in 26 of the cases), this information was also analyzed. 10 of the funds were from the SE, five from the Ministry of Labor and Social Welfare and SAGARPA each, four from SEDESOL, and one or two programs offered by the rest of the government agencies. 19 were direct monetary support for SMEs, and 21 provided indirect support. Many programs do not report their target population, or whom they helped, nor budget allocated or spent; only two programs reported that they had met their objective.

An additional analysis included the calculation of an index to measure the availability of information on the program. This index took into account the information on the program website, application schedule, and clarity of regulation, the definition of the target population, contact information, transparency, updated information, and consistency of results. The average accessibility index for all programs was 60 out of possible 100.

Of these possible 40 government funds, the 23 funds most relevant to Mexican textile/apparel SMEs are summarized and presented in the Annex 3: Evaluation of Government Programs. Most importantly, none of the ongoing government programs or available funds are designed specifically with the textile or apparel industry in mind.

iv. Para-State Banks

Bancomext is the Mexican development bank and credit agency in charge of financing international trade. They directly support around 3,500 exporting companies with export sales of more than USD 5 million, and the rest of the Mexican exporting companies are attended through the network of 46 financial intermediaries prequalified by Bancomext. Bancomext's credits are 69% direct lending (corporate lending, sectorial specialization and inventory financing), 21% guarantees (letters of credit, buyer's credit, guarantor) and 10% indirect lending through financial intermediaries (including discount credit lines and factoring).

Nacional Financiera (NAFIN) is the other major development bank, and is entrusted with the promotion of saving and investment through project management, financial programs, coordination of capital investment and increasing productivity. NAFIN grants financial resources and guarantees, and offers fiduciary services to private sectors. The bank also has an "Affiliation with Productive Chains" program that includes automatic discounts, payment spreads, and factoring.

⁶ Their Fondo Nacional Emprendedor received the highest rating, out of all programs evaluated by the INDEP, in the index composed of the variables of program "goals", "design", and "coverage".

v. Center for Textile Innovation

A flagship of the current administration's efforts to support the industry is the Center for Textile Innovation currently under construction (Paz 2014). The Center's functions will be to offer technologies necessary for the production of smart garments, the creation of series of best practices so Mexico can fulfil quality standards for international contracts, oversee intellectual property issues regarding apparel design and brands, incubate small start-up companies, and create specialized human capital to meet Mexico's demand (Investigación y Desarrollo 2014). In addition, the Center would have the capacity to provide training sessions and seminars to entrepreneurs in the textile industry on how to read tendencies, perform market analysis, add value, and increase productivity and competitiveness (Investigación y Desarrollo 2014). However, there is concern that the slow pace during the design phase, coupled with the lack of support from private sector actors, may place the success and impact of this center in jeopardy.

c. Government Program Datasheet

Problem	Affects	Policy Response	Impact
Lack of access to loans/financing	Lack of affordable and/or competitive credit and financing hits SMEs especially hard, as they are trapped in smaller operations, unable to grow enough to receive more favorable lending terms.	The response has been largely based the development bank NAFIN's Credito PyME, and the INADEM's Fondo PyME. SMEs also enjoy backing from the INADEM if they wish to solicit a commercial loan.	A lack of enforcement has led commercial loans to not respect INADEM's backing, which leads to SMEs having to solicit credit at market value, effectively rendering INADEM's backing moot.
Weak domestic value chains	Weak domestic value chains affect the entire Mexican textile industry, including small and large businesses, as it creates market inefficiencies where large businesses import the very same products that Mexican SMEs are producing.	SAGARPA will begin a program to support domestic textile producers purchasing Mexican-grown cotton ProMexico holds Business Roundtables where small suppliers meet with purchasers for 30 minutes. INADEM's Development of Providers Program provides training for SMEs to insert themselves into value chains, and promotes SMEs with large tractor companies.	Data are not available on SAGARPA's and the INADEM's program, but ProMexico reported favorable results and that SME participants increased sales after their first Business Roundtable. Although these activities are beneficial to the participants during the encounter, it is all but impossible to scale this model up to the thousands of SMEs throughout the economy and make this model the sole source of value chain strength.

Problem	Affects	Policy Response	Impact
Lack of organization/collaboration	This lack of organization and collaboration primarily affects SMEs, who are unable to fulfil the supplier requirements in order to sell to larger companies. Associating with other SMEs would provide opportunities to enter new markets.	The major government players in the sector, SE, INADEM, and ProMexico connect SMEs with purchasers and with each other, although these actions are not coordinated and do not form part of a larger federal policy strategy. ProMexico and INADEM sponsor SMEs attending international trade shows. INADEM's Strategic Aggrupation of Business Clusters helps already-existing groups, and they must combine public and private sectors with academia. The Center for Design Innovation is being designed to foster collaboration and organization between firms in the textile industry, although there is concern that the private sector is not participating as much as it should be in the creation of the Center.	While these programs certainly help collaboration and organization among SMEs, the government could do much more in terms of being a convener. A convener is typically a well-known public leader with credibility and stature who brings a diverse group of people together to resolve a problem collaboratively. Some consider that any collaborative effort should come from the private sector to assure that the relationships are longer-lasting and financially sound. Others advocate that the chambers of commerce should lead the collaboration between their members. In either case, the lack of consensus regarding who is responsible for organizing SMEs continuously holds the industry back.
Undervalued imports	This issue affected SMEs attempting to integrate into domestic and world markets and as they scaled up. It especially hit those companies that were attempting to fulfill legal obligations as well as compete with	The presidential directive included four components aimed at reducing undervalued imports: the list of reference prices, the textile and clothing importation registry, the automatic anticipated notice, and ongoing audits by the SAT for registered undervalued	Although certain aspects of the presidential directive have not yet been implemented (for example the list of reference prices), the industry has reported a noticeable increase in production since the initial stages of the directive went into operation. The pause on the Tariff Elimination Schedule

Problem	Affects	Policy Response	Impact
<p>Market being opened too quickly</p> <p>Outdated Machinery and Equipment</p>	<p>imports on the basis of price.</p> <p>The Mexican market was opened fairly quickly between the passing of NAFTA and the entering into force of the GATT rules.</p>	<p>importers</p> <p>The only visible policy response to the opening of the market and the need for restructuring was the Fondo Reconversión from 2008-2011, and it was too small to realistically have an impact. The perception during the market liberalization was that the government hoped that Mexico would find its comparative advantage naturally, and that only strong companies would survive globalization.</p> <p>Recently, with the presidential directive, the policy response has been to gradually slow Mexico's incorporation into the global economy. A pause has been placed on the Tariff Elimination Schedule until 2018.</p>	<p>has been well-received, although it is understood that this is not a long-term solution. While Mexico has been very committed to globalization and market liberalization, the federal policy response has not provided the concomitant support necessary to restructure the textile and apparel sectors.</p>
	<p>Lack of innovation affects SMEs that attempt to scale up from hand or traditional sewing to more large-scale production models.</p>	<p>450 million pesos have been provided through NAFIN to modernize machinery.</p>	<p>Data are not available on the impact of this program. However, there is concern in the industry that too much focus is being placed on machinery being the sole source of "innovation", instead of innovating business practices and networks.</p>

Source: Authors' design based on interviews and textual research

d. Demand for Government Instruments

i. Credit and Financing

The type of support that SMEs most often request is monetary (Cherem-Entebi 2015, Guevara-Tapia 2015, Juan-Ayub 2015). SME business owners usually request this money in order to purchase machinery/equipment to modernize, build small physical infrastructure (such as factory installations or workshops), as well as to finance an increase in production (Lopez-Salazar 2015).

The vast majority of industry experts agree that capital is a strong barrier for SMEs as they attempt to insert themselves into GVCs. The first requirement is capital for investment in machinery, although there is a need for financing mechanisms specific to the dynamic nature of the textile industry (Juan-Ayub 2015, Cruz 2010).

Facilitating credit should come with a caveat, according to some. A segment of the interviewees expressed concern that unless capital comes together with a more comprehensive and innovative mindset, small and medium sized business owners will continue the same business and production model, only at a slightly larger scale (Guevara-Tapia 2015, Bujalil-Palafox 2015). This will detract from the essential restructuring and innovation desperately needed by the larger Mexican textile industry.

ii. Collaboration and Organization

There is a clear need for organization and collaboration among Mexican textile and apparel SMEs, although what is not so clear is who should spearhead these efforts. Some argue that the government could provide shared industry information and market intelligence, taking advantage of the Center for Design Innovation (Cherem-Entebi 2015). Others argue that coordination should arise from domestic or state chambers of commerce (Guevara-Tapia 2015), and some experts hold that private investment is the only way to maintain long-lasting and financially sustainable coordination efforts (Bujalil-Palafox 2015).

Recent policy trends recommend that government actors should participate in these collaboration efforts as a convener. A convener brings together interested parties to find effective solutions together, although, most importantly, the convener does not seek to impose their own solutions. When government leaders are conveners or co-conveners of collaborative processes, the outcomes of these processes are more likely to receive support and to be formally adopted and implemented (Policy Consensus 2015).

One way to foment collaboration is to support the participation of Mexican firms in domestic and international trade fairs and expos, as the INADEM and ProMexico do. This support to participate in trade fairs and expos is demanded by SMEs (Lopez Salazar 2015). It is interesting to note that while SMEs request assistance in participating in international trade activities, the competitive nature and mistrust present in the sector within Mexico remains an important barrier to true collaboration domestically.

e. Mismatch between Supply and Demand of Government Instruments

As an economy, Mexico is doing well in supporting SMEs, but many programs are not focused on the needs of SMEs specifically in the textile industry. Textile and apparel SMEs have very different characteristics and needs, due to the highly changing nature of fashion and trends (Juan-Ayub 2015). Companies may have to change design, manufacture and production strategies up to six times a year to stay current in the fashion industry, and credits must adapt

to this environment (Juan-Ayub 2015, Cruz 2010).

A cross-cutting issue is the lack of communication between government agencies that provide support through programs and the actual potential target population that is meant to receive the support. This lack of communication from government agencies places an additional burden on the chambers of commerce, as they are delegated the responsibility of communicating timetables and requirements of government programs to their members. It goes without saying that firms that do not belong to a chamber of commerce are at an even greater disadvantage. Typically larger and more well-connected firms have an advantage in communication during through the application process, at the detriment to SMEs.

In Mexico, commercial banks often offer more attractive financing options than NAFIN and Bancomext, especially in terms of red tape. The development banks also tend to be less flexible, slower, and more bureaucratic than commercial banks (Navas-Aleman, Pietrobelli and Kamiya 2014), even though theoretically it should be the opposite. Small firms, especially those that operate with some degree of informality or that are not current on tax filing and payments, avoid using development banks as a source of financing. This situation leads SMEs to seek financing elsewhere, even internationally, showing a misalignment between the Mexican private sector and federal policy.

This is not to say that government actors, especially the INADEM, have not attempted to obtain financing for SMEs. INADEM has implemented projects where they provide backing or collateral for SMEs when they apply for commercial loans. However, these commercial banks do not usually respect the backing and collateral and end up charging the same rate as they normally would have. There is a need for sanction and enforcement mechanisms that would force commercial banks to respect the support that INADEM provides (Lopez-Salazar 2015).

An interesting dynamic arises in the mismatch between supply and demand of business training programs. These training programs are not reported to be demanded by SMEs, yet most of the government programs described above build training into requirements to receive support. It appears that the misalignment occurs because small business owners are very familiar with the day-to-day operation of their firm, and may even feel like they have too much work (Guevara-Tapia 2015). However, government officials consider that these business owners “cannot see the forest for the trees” and lack a comprehensive and global vision (Achar-Samra 2015). It is difficult to know if government programs are being patronizing upon placing training requirements as a prerequisite for assistance, or if these training programs are actually a necessity that business owners fail to comprehend. Given that many government programs are based on existing evidence-based methodologies, it is probable that the latter situation is true. INADEM’s approach of offering a “menu” of requirements and allowing small business owners to choose the most appropriate ones seems to be an effective solution to this problem.

3. Barriers to Trade and Investment

Barriers affecting Mexican SMEs’ insertion in GVCs are obviously varied, but the largest reported barrier to Mexican SMEs is that, simply put, they are not competitive (Camarillo-Quevara 2015). The reader may notice that we have touched upon many of these points earlier in the document, as they are pervasive throughout the economy and the entire yarn-textile-apparel value chain.

a. Tariff Barriers

Apparel protectionism has declined over the past few years, with more apparel-importing

economies removing barriers to clothing trade than ever before (Federick and Gereffi 2009a and b, just-style.com 2009a, cited in Gereffi and Frederick 2010). However, while industry experts agreed that there are “almost no tariff barriers in assembly activities” (Achar-Samra 2015), there are still tariff barriers in inputs. This, coupled with an oligopoly in certain inputs, such as polyester, is a strong barrier for the downstream strengthening of Mexican value chains.

Overall, international restrictions on apparel trade are still relatively limited (Gereffi and Frederick 2010). As the United States is Mexico’s almost sole export market for apparel, the fact that all tariffs between the two economies (and Canada) were eliminated in 2008 essentially means that there are no tariff barriers to Mexican exports.

That being said, while there are no tariffs on Mexican exports, there are tariff barriers in the sense of subsidies provided to foreign producers, such as subsidies on American cotton. When these products are imported into Mexico, they can be perceived as “dumping” and create difficulties when SMEs attempt to compete on the basis of price.

To summarize, there are still barriers to obtaining certain inputs, but once a garment is assembled, there are very few barriers to exportation. Mexican firms, producing without explicit government support, still find it difficult to compete on the basis of cost against foreign producers that receive government subsidies.

b. Non-Tariff Barriers (Including Certifications and Standards)

While, by definition, the majority of non-tariff barriers are variable by economy and can change rapidly, they are seen as a constant when doing businesses. That is to say, none of the business owners interviewed reported non-tariff barriers as being an impediment for SMEs to integrate themselves in GVCs. When asked about specific non-tariff barriers in specific economies, two of the interviewees reported especially tough barriers in Brazil.⁷ However, companies have been able to break through these barriers by setting up operations in that economy (Achar-Samra 2015).

Many Mexican SMEs do not place priorities on obtaining international certifications, even though these certifications may be necessary to insert themselves into GVCs (Achar-Samra 2015). Mexican SMEs may also face barriers and difficulties getting their factories or workshops up to international standards in terms of employment conditions (including compensation, hours of labor, child labor and/or discrimination), and environmental aspects (Lopez-Salazar 2015). Non-tariff barriers are common when doing business, yet they are easily overcome as long as regulations are up-to-date, transparent, and readily accessible. Once Mexican SMEs understand the value of complying with international standards and receive available training and consulting services, they can easily fit into GVCs.

c. Under-invoicing, tax and duty evasion

Although both tariff and non-tariff barriers were not perceived to be important inhibitors in SMEs’ insertion into GVCs, the undervaluing of imports was declared to be a crucial issue. Foreign companies exporting to Mexico routinely declared that their products were worth much less than their true value in order to pay lower taxes. This is a special concern for SMEs, as many foreign producers receive foreign government subsidies, and without countervailing duties, Mexican SMEs are unable to compete on the basis of price.

⁷ Given that exports to Brazil are negligible in comparison to exports to the United States, these non-tariff barriers do not pose a significant impediment to the industry as a whole.

Two of the most common strategies that were found in Mexico to declare lower taxes were misclassification, where a higher-taxed product was classified as a lower-taxed variety, and under-invoicing, when a foreign importer enters an artificially low value on the commercial invoice and supplies a second invoice apart from the shipment for the difference between the commercial invoice value and the true transaction value.

Both of these practices are being tackled through the presidential directive that includes a list of reference prices, a textile and clothing importation registry, an automatic anticipated notice of import, and ongoing audits by the SAT for registered undervalued importers. This coordinated effort is expected to assist with lowering the barriers that have traditionally been caused by tax and duty evasion.

d. Counterfeiting and Intellectual Property Infringement

Counterfeiting and piracy involve a range of activities that infringe intellectual property rights over trademarks, copyrights, patents, design rights, and other registered or non-registered branding and designing activities. The World Customs Organization estimated that the global trade in counterfeit products was worth \$250 billion and growing steadily (OECD 2009). As counterfeit operators do not comply with government regulation, this leads to loss of customs and excise duties, corporate and personal tax revenues for government, as well as higher cost of law enforcement and judicial proceedings (Modern Ghana 2009).

Counterfeiting and piracy also affect SMEs who are attempting to differentiate based on design. This is because Mexican consumers may prefer a “brand name” (albeit counterfeit) item, instead of an unknown product designed by an unbranded entity. This situation pulls attention away from Mexican designers (Guevara-Tapia 2015).

e. Cargo theft and retail shrinkage

In 2013-2014, Latin America’s cost of retail crime was the highest among the regions of Europe, Asia, and North America, with Mexico incurring the highest cost of retail crime (2.53% of revenue). In Mexico, 42% of retail shrinkage is caused by shoplifting, 29% by dishonest employee theft, 22% by administrative and non-crime losses, and 7% by vendor or supplier fraud (Ernie Deyle and The Smart Cube, 2015).

This is not to say that Mexico does not attempt to curb these losses. In fact, during 2013-2014, Mexico’s spending on retail loss prevention reached 1.22% revenue, and it had the highest rate of spending on retail loss prevention among Latin American economies. Mexican employees spend far more time counting inventory, 14.2% of their time, compared to 5.0% in Argentina and 8.3% in Brazil (Ernie Deyle and The Smart Cube, 2015).

Security is especially important for SMEs; whereas large companies can absorb a loss of merchandise into other expenses, a smaller business that loses merchandise can be devastated economically (Guevara-Tapia 2015). Smaller businesses are more likely to be un- or under-insured against theft that might occur during transportation.

It is clear that the current security situation in Mexico, coupled with shoplifting and dishonest employees, disproportionately affects SMEs who operate on small profit margins. No clear government policy was found that protects SMEs from cargo theft and retail shrinkage, and there are no reports of specific future planned actions.

f. Capital and Financing

Many industry experts consider that the lack of capital is a grave challenge for Mexican SMEs in the textile industry (Cherem-Entebi 2015, Camarillo-Quevedo 2015). Due to the changing nature of the industry over the past 20-30 years, very large amounts of capital, together with international connections, are now absolutely fundamental to begin a company or scale up (Cherem-Entebi 2015). The recent recession brought the issue of financial stability to the attention of buyers, and firms are now having to prove their financial stability in order to become suppliers. SMEs and local firms have been particularly hard hit by these requirements, as well as by the general decline in credit availability. (Barrie and Ayling 2009; Driscoll and Wang 2009, cited in Gereffi and Frederick 2010).

Although state and para-state funding programs do exist, on both a federal and state level, as mentioned above, these programs are often inaccessible for SMEs due to lack of information and communication. Another problem is financing: companies are often able to find funding to grow, but not enough to insert themselves into GVCs. SMEs also have greater difficulties in accessing credits and selling to larger companies. Although factoring programs do exist, they involve a great deal of effort in terms of requirements and paperwork, and at the end the interest rates are not favorable. SMEs, who often have to pay interest rates around 14%, are at a disadvantage vis-à-vis larger companies who pay interest rates of 1%.

Additionally, SMEs are most commonly trapped in capital flow bottlenecks along the supply and sale chains, which becomes a problem when they are not able to purchase more inputs or sell to certain clients to keep their business flowing. NAFIN and other organizations do offer credits, but they often do not flow along the same channels of the GVCs (Juan-Ayub 2015).

The lack of capital and competitive financing programs is one of the largest barriers for SMEs to insert themselves into GVCs. While the government is aware of the situation, and making great attempts at supporting SMEs in this aspect, efforts are still not coordinated and adapted to the textile and apparel industry.

g. Human Capital

While Mexico enjoys a large supply of low- and semi-skilled workers, there is a dearth of skilled designers, engineers, and management personnel at the middle to high range of specialization.

Semi-skilled workers are the most required at a factory level, especially for assembly and cut-make-trim activities. These kinds of workers are plentiful in Mexico (Juan Ayub 2015), and easily trained. However, turnover can be extremely high, even as high as 10% per week (Bair and Gereffi 2001), which greatly complicates any kind of training or skill improvement implemented in the workplace.

At the middle level of employment, such as in dying or printing activities, low salaries complicate the retention of experienced workers (Bujalil-Palafox 2015). While technical training programs do exist, they are starting to see less student volume, possibly because of the rise of interest in fashion design programs (Bujalil-Palafox 2015).

The lack of human capital is probably seen most acutely in the segment of textile design, where more textile engineers are required. University programs of study are in place, but there is not a high enough volume of students passing through these programs (Camarillo-Quevedo 2015). In general more visibility is needed regarding what a textile designer is capable of, and where

they fit into a textile value chain (Bujalil-Palafox 2015).

The biggest requirements in the topic of human resources in the Mexican textile industry are training sessions or conferences for small and medium-sized business owners, as Mexican apparel firms lack strong management capabilities (USITC 2004 cited in Frederick and Gereffi 2011). Even in areas where design has improved, more business training and the creation of business plans are required for SMEs to insert themselves into GVS (Achar-Samra 2015). However, these business training sessions are often imposed by government programs as a prerequisite for receiving assistance, which can be seen as patronizing.

Cross-cutting the issue of human capital in the textile industry is the fact that salaries are very low, especially at entry- and mid-level positions. This is a problem when attempting to recruit students to textile design programs, and when attempting to retain quality human capital in factories and throughout the entire value chain (Bujalil-Palafox 2015).

h. Innovation

In the opinion of industry experts, innovation, especially from a comprehensive and holistic perspective, is a barrier for SMEs (Bujalil-Palafox 2015). In the interior of Mexico, many small producers wishing to sell domestically physically visit their potential purchasers directly at brick-and-mortar stores (Guevara-Tapia 2015). If Mexican producers do not begin to innovate in expanding sales techniques, as the rest of the world will begin to sell more and more of their products online, Mexico will fall behind. (Cherem-Entebi 2015).

It is important to keep in mind that any innovation strategy must involve comprehensive and all-encompassing problem solving and analysis. The only way to innovate is to be able to first understand and analyze a problem before beginning to search for an innovation. For example, an entrepreneur can begin to sell his/her products online in a new and innovative format, but if it is the same low quality product with the same quality yarn as before, he/she will not have success (Bujalil-Palafox 2015). Other industry experts consider that Mexican SMEs do have a strong source of potential contracts, but that they do not accept offers to fill new orders because they already feel overwhelmed (Guevara-Tapia 2015). Unless these companies are able to innovate and fill orders in a “smarter” way, they will remain in the same production model.

i. Lack of communication/cooperation

Lastly, firms along the entire yarn-textile-apparel chain in Mexico are generally wary and distrustful of each other and of outside actors (Guevara-Tapia 2015). This can be due to various factors such as the current security situation in Mexico, fear of tax enforcement and audits, or simply lack of interest in engaging with firms that are seen as competition.

Previous attempts to create organizations or collectives (in addition to existing chambers of commerce), have come up against local or company-centered guilds who are opposed to collaborating with competing firms (Guevara-Tapia 2015). Chambers of commerce have been able to organize or rally SMEs together to work on specific projects, but this is typically on a project-by-project basis (Camarillo-Quevedo 2015). SMEs do not usually join together out of their own accord (Bujalil-Palafox 2015, Camarillo-Quevedo 2015).

While textile clusters do exist, for example “Textile City” in Puebla, or “Confection City” in Morelos, there is still not a strong enough link between these clusters and producers. Industrial parks or clusters can provide infrastructure, but they have not gone beyond that to bring the

companies together to foster a business and investment environment attractive enough for foreign investment (Camarillo-Quevedo 2015). Especially in this context of industrial parks, either state or federal government agencies should accentuate and exploit their role as a convener.

j. Summary of Barriers

To summarize the barriers to trade and investment that SMEs face upon attempting to insert themselves into GVCs, both tariff and non-tariff barriers are not as important as other structural issues. As the global markets become increasingly “flat”, tariff barriers are eliminated. Problems only arise with tariffs on inputs, and when importers do not pay countervailing duties. While non-tariff barriers can be an impediment, as long as regulations and standards are clearly communicated and readily available to small business owners, they are not a strong barrier for SMEs, especially since government programs exist to walk SMEs through certification processes.

What are clear barriers for SMEs inserting themselves in GVC are under-invoicing, tax and duty evasion, counterfeiting and intellectual property infringement, and cargo theft and retail shrinkage. All of these situations create an uneven playing field, where Mexican SMEs attempting to “play by the rules” are unable to compete on the basis of price.

Possibly the largest barrier for SMEs, and not only in the textile and apparel industry, is the lack of affordable and competitive capital and financing. Although government programs are attempting to address this problem, these programs are not adapted to textile/apparel SMEs, who require more flexible and rapidly adapting cash flow solutions.

Finally, the mindset and human aspects of the industry can present barriers in the form of misaligned human capital, lack of innovation, and an incredibly competitive industry that does not foment collaboration.

4. Recommendations

a. Policy Recommendations

In general, the Mexican government must begin to see the textile industry as a priority, given the high impact that the sector has on employment, with concomitant improvements in social aspects (Lopez-Salazar 2015). Instead of waiting for natural market forces to weed out the weaker firms, it would serve the government to begin to provide credits with preferential conditions, fiscal incentives, government subsidies, and incorporate local textile/clothing SMEs into government purchasing decisions (Padilla-Perez and Alvarado-Vargas, 2014).

i. Package Contractor (OEM) Sourcing

Over recent years, marketing, branding, and design have become more important for lead firm’s profitability and power than production and manufacturing activities. Buyers also desire to reduce the complexity of their own operations, keep costs down, and increase flexibility and responsiveness to customer demand (Gereffi and Frederick 2010). This means that suppliers must be able to increasingly incorporate design and “intangibles” into their production offerings if they wish to enter into global value chains (Gereffi and Frederick 2010). Mexico has not been able to incorporate additional local content into their supply chains, and the share of domestic added value to products has stagnated or even declined (Blyde 2013). China, on the other hand, has become more competitive by substituting foreign inputs for domestic ones, and not

by changing the composition of firms or industries (Blyde 2013).

Original Equipment Manufacturing (OEM) is also called Free-On-Board (FOB) in the industry, although this is technically an international trade term describing goods that are delivered onboard a ship at no cost to the buyer. OEM is “a business model that focuses on the manufacturing process. The contractor is capable of sourcing and financing [fabric] and trim, and providing all production services, finishing and packaging for delivery to the retail outlet.” (Gereffi and Frederick 2010, p. 174).

Mexico, along with Sri Lanka, is considered a “niche supplier” within the category of package contractor (OEM) sourcing. The recommendation of Gereffi and Frederic (2010) is to move away from simple cut-make-trim (CMT) activities and foster OEM by investing in machinery and logistics technology, as well as attracting private investment. The CMT model is becoming obsolete, and any economy with any capability beyond CMT should prioritize investments in this area (Gereffi and Frederick 2010, p. 175).

ii. Human capital

Although Mexican universities are considered to have a sufficient supply of textile programs, when compared to China,⁸ it is clear that Mexican universities should be prioritized as a source of human capital and innovation. However, these strategic alliances with universities should not neglect the importance of technical and vocational education, as technical workers are often central to ensuring standards compliance, operating large equipment or ensuring that the factory meets quality requirements. Leveraging buyers to train local staff can be a more efficient means of knowledge transfer because their information is usually more current than government training programs and training is tailored to the needs of lead firms (Bamber et al. 2014).

As Mexico transitions to more full packaging operations, policies must assure the quality of technical education and then move into developing more managerial and design talent (Gereffi et al. 2011, cited in Bamber et al. 2014). However, these categories are not mutually exclusive. As technical skills are taught, soft skills such as management, product development, design, and market research should be incorporated (Gereffi and Frederick 2010, p. 186).

iii. Bring back the “spirit” of the development banks

The main policy lines of action that could have an important impact on SMEs are easing NAFIN and Bancomext banking applications and procedures. Additionally, the federal government should assure that credits, factoring, and other financial support is more competitive than commercial banks, and with less requirements. Most importantly, commercial banks must be monitored, and enforcement mechanisms must be put in place to ensure that they respect the collateral and backing that government organizations provide SMEs.

b. Action Plans

i. Center for Innovation in Textile and Apparel Design

The creation of the Center for Innovation in Textile and Apparel Design is a strategic window of opportunity for the government to act as a convener and seek solutions for market failures. The largest market failures in the industry are imperfect or asymmetrical information, externalities, and imperfect competition (Padilla-Perez and Alvarado-Vargas, 2014), all of which can be solved

⁸ Currently there are around 300 fashion design programs in China that produce an estimate of 6,000 graduates per year; these fashion design programs are also steadily aligning their curriculums with Western design schools (Frederick and Gereffi 2011).

if the Center foments collaboration and transparent communication of market intelligence. However, those involved in the design and launch of the Center must assure that private sector businesses are included in the planning and developing. If they are not, the Center runs the risk of being a public sector initiative without legs of its own.

ii. Innovative Financial Arrangements to Strengthen Supply Chains

Several private sector supply chain strengthening programs have already been implemented worldwide, with both suppliers and purchasers benefitting from these relationships. Kohl's "Supply Chain Finance" program lets suppliers get paid quickly once their invoices have been approved for payment, and has been well-received by suppliers. (O'Connell 2009, cited Gereffi and Frederick 2010). Walmart has included a group of primarily apparel manufacturers in their "Supplier Alliance Program", which allows eligible suppliers to receive payment for orders within 10-15 days of receipt of goods, instead of the typical 60-90 days (O'Connell 2009, cited in Gereffi and Frederick 2010). Nestlé's "Creating Shared Value" program for suppliers provides attractive factoring schemes for their SME suppliers, as well as training, counselling, and assistance for the creation of business plans (Lopez-Salazar 2015).

It is clear that private sector initiatives can be successful in strengthening local supply chains and incorporating SMEs into GVCs. However, it is difficult to find details on what factors lead private companies to commence these programs. Possible public-private alliances, such as the INADEM's Development of Providers program, can play an important first step in getting these innovative financial arrangements off the ground. In Argentina, tax incentives were provided to large firms to form loan guarantee associations that give guarantees to SMEs, resulting in large firms facilitating increased financial access to their SME suppliers (Navas-Aleman, L., Pietrobelli, C. and Kamiya, M. 2014).

iii. Government Financial Support

The OECD recommends that governments provide regulatory exemptions and ease of tax burdens and accounting regulations for SMEs, due to the fact that SMEs are disproportionately affected by the costs of fulfilling regulations (Domestic Strategy of Small and Medium Entrepreneurship Development, n.d.). For small, formally declared businesses, the government may pass SME relief laws that decrease the tax and information burden. Although the SAT has already created a smoother online portal to facilitate tax paying by small businesses, regulatory exemptions may be another important step.

Many European Union economies have already tested policies to overcome the lack of access to finance that SMEs face. These policies involve collateral insurances, joint guarantees, cooperation and research between SMEs and research and development organizations, the assurance of financing and liquidity, as well as specific credit lines for longer-term investments. Local and regional banks can play an important role in channeling regional and domestic funds, as long as they abide by previously-agreed upon regulations. In economies where these policies have been implemented, access to risk and venture capital has been increased, information has become more transparent, and SMEs have easier access to available credit lines (Domestic Strategy of Small and Medium Entrepreneurship Development, n.d.).

iv. Foreign Direct Investment or Joint Ventures

While ProMexico has important trade missions that seek out foreign direct investment and joint ventures, the efforts are still on a small scale. Knappe (2008) and Gereffi and Frederick (2010), recommend that a government establish a one-stop-shop for investor or supplier wishing to

establish a new business, especially in textile production. These joint ventures help to establish backward linkages and develop skills not currently in the economy.

Mexican government policy should promote competitiveness through fiscal and financial incentives, and continue to align their regulations and standards with international norms, and enforce their trade policies, including anti-dumping measures, countervailing duties, and safeguards (Padilla-Perez and Alvarado-Vargas, 2014).

c. Conclusions

Transitioning toward full package sourcing with the support of improved human capital, government policy that incentivizes innovative financial arrangements, competitive public bank lending, and leveraging of the “Center for Innovation” and joint ventures are crucial for the Mexican textile and apparel industry to avoid falling further behind other economies. The lessons learned from this case study and the recommendations that have arisen are valuable for the Asia-Pacific Economic Cooperation, Mexican public and private stakeholders, and other decision makers as they attempt to assist Mexican SMEs regain market share and better incorporate themselves into the global market.

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BOX 2: INTERVIEWS

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Note: Although the Harvard citation system does not recommend citing interviews done by the authors, the terms of reference and research contract call for all information presented in this document to be clearly traceable. It is in this spirit that all information obtained from interviews is cited by last name of the person interviewed, as well as the year. The only exception is in situations where an interviewee provided information on the condition of anonymity; in those cases the interviewee is not cited.

ANNEX

Annex 1: Map of Mexico with Important Industry Hubs



Source: Authors' creation based on textual research

Annex 2: Firm Size Distribution in 2014 by Activity

	Micro	Small	Medium	Large	Number of Firms
Repair and Threading of Textile Fibers, and Spinning of Yarn	95.65	2.55	1.44	0.36	3,611
Fabric Creation	64.19	15.99	12.63	7.18	863
Creation of Textile Inputs and Textile Finishing	88.68	5.80	3.87	1.64	5,170
Finishing of Textile Products and Manufacturing of Finished Fabrics	82.90	10.06	5.60	1.44	696
Manufacturing of Textile Products, Except Garments	98.15	1.34	0.41	0.10	28,108
Sewing of Carpets, Home Textiles, and Similar	92.79	4.52	2.09	0.61	2,301
Manufacturing of Other Textile Products, Except Garments	98.63	1.05	0.26	0.06	25,807
Manufacturing of Woven Clothing Garments	90.00	7.11	2.23	0.66	33,265
Manufacturing of Knitted or Crocheted Clothing	77.97	14.14	5.85	2.04	1,471
Sewing of Clothing	90.14	7.01	2.20	0.64	29,507

Note: Bolded numbers correspond to the highest value in each column

Source: Instituto Nacional de Estadística y Geografía, 2014 Annex 3: Evaluation of Government Programs

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
<i>Programa de Apoyo al Patentamiento</i> <i>IMPI-FUMEC-NAFIN</i>	IMPI / NAFIN / FUMEC	Supports projects with a defined business plan who wish to apply for patents.	Indirect	Both individuals and firms	Program	10	813,600	No	66.67
IMPI-FUMEC-NAFIN Patent Support Program									
<i>Portal tu Empresa</i> Your Business Portal	SE	A website that the Federal Government uses to consolidate various distinct procedures needed to constitute, open and develop new businesses.	Direct	Individuals	Campaign	N/D	N/A	No	38.89
<i>Registro de Empresas de Comercio Exterior (ECEX)</i> Registry of Businesses in External Trade (ECEX)	SE	Facilitates firms' access to international markets with administrative assistance and financial support from the development bank. Companies are eligible if they are dedicated solely to foreign trade, and must fulfill other requirements, including registering as an exporting firm.	Direct	Firms	Campaign	N/D	N/D	No	31.94
Devolución de Impuestos de Importación a los Exportadores	SE	Allows participants to recover the general importation tax caused by imported materials that	Indirect	Firms	Other	N/D	N/D	No	30.56

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
(Draw Back) Reimbursement of Importation Taxes for Exporters (Draw Back)		have been incorporated into an exported product, that have returned in the same state or products that will be repaired or altered in the economy.							
Programa de Empresas Exportadoras (ALTEX) High Volume Exporters Program (ALTEX)	SE	ALTEX companies are granted benefits such as special treatment before administrative authorities, customs advantages such as simplified procedures, and access to the value-added tax automatic refund system. To be eligible for this program, applicants must demonstrate direct exports of at least US\$2,000,000 or 40 percent of the company's total annual sales, or indirect exports of at least 50 percent of total annual sales.	Indirect	Both individuals and firms	Other	N/D	N/D	No	30.56
Programas de Promoción Sectorial [PROSEC] Program for Sectoral	SE	Allows producers to import goods with preferable tariffs for the manufacture of certain products in the PROSEC program. These firms are allowed to import certain goods with a	Indirect	Firms	Program	N/D	N/D	No	26.39

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
Promotion (PROSEC)		preferential ad-valorem tariff (General Import Tax) in order to produce the merchandise, independently if the end products will be sold domestically or abroad.							
Programa de Estimulos a la Innovación (PEI) Innovation Stimulus Program	CONACYT	A support program for businesses that invest in innovation projects, the development of technology, or innovation directed toward new products, processes or services, with the objective of investing in the competitiveness of the domestic economy. The 4,329 businesses registered in the National Registry of Scientific and Technological Businesses and Institutions may apply.	Direct	Firms	Program	602	3,000,000,000	Yes	76.39
<i>Fondos Mixtos (FOMIX) Fortalecimiento en las Entidades Federativas de las capacidades científicas, tecnológicas y de innovación.</i>	CONACYT / State Governments	This fund awards various grants for projects that develop high tech projects, with each grant having its own rules and regulations and ways in which the money can be spent. These grants allow local and state governments to channel federal resources to scientific investigation and technological development that might resolve	Indirect	Firms	Fund/ Grant	133	656,167,979	Yes	69.44

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
Mixed Fund: (FOMIX) Strengthening of Federal Entities in Scientific, Technological and Innovation Capacities		local or state problems. There are 6,964 local science, innovation and technology systems that may apply for these grants.							
<i>Ventanilla Única para el Comercio Exterior</i> Single Window for External Trade	Federal Government	This online tool combines external trade requirements, and permits businesses or business owners to fulfill all their requirements for foreign trade by uploading their information once in a single website.	Indirect	N/A	Program	N/D	N/D	Yes	55.56
<i>Fondo PYME</i> SME Fund	INADEM	This fund grants temporary support to programs and projects that foment the creation, development, productivity, competitiveness and sustainability of the 200,000 micro, small and medium businesses registered in Mexico. The goal is to support the orderly, planned, and systematic strengthening of entrepreneurship.	Direct	Firms	Fund/ Grant	1029	7,113,955,924	Yes	73.61
<i>Promoción de comercio</i>	PRO-MÉXI	The majority of ProMexico's activities fall under	Direct	Firms	Program	N/D	773,680,258	Yes	69.44

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
<i>exterior y atracción de inversión extranjera directa</i> Promotion of External Trade and Attraction of Foreign Direct Investment	CO	this "program", as technically ProMexico is a fund. The activities included in this program include the creation of business agendas, publicity, market consulting, participation in trade fairs, logistics diagnoses, and market research, among others.							
<i>Proyectos estrategicos para la atracción de inversión extranjera directa</i> Strategic Projects for the Attraction of Foreign Direct Investment	PRO-MÉXICO CO	Grants economic support to foreign and domestic firms with primarily foreign capital that have an existing investment plan that contributes to Mexican economic growth.	Indirect	Firms	Program	12	195,686,800	Yes	41.67
<i>Programa Productivo Productiva</i> Productiva Program	SAGARPA	This program is a resource transfer mechanism to compensate domestic farmers for subsidies that foreign producers receive; 2,700,000 farmers are eligible.	Indirect	Individuals	Program	N/D	15,845,900,000	Yes	77.78

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
<i>Programas de Apoyo a la Inversión en Equipamiento e Infraestructura</i> Support Programs for the Investment in Equipment and Infrastructure	SAGARPA	The objective of this program is to increase the capital of agriculture firms by granting complementary credits for investment in equipment and infrastructure for the production of raw materials, adding value, and market research.	Direct	Both individuals and firms	Program	89,891	9,769,800,000	Yes	43.06
<i>Industria Manufacturera Maquiladora y de Servicios de Exportación (IMMEX)</i> Manufacturing, Maquiladora and Export Services Industry (IMMEX)	SE	Allows for the importation of specific goods without having to pay importation tariffs, value added tax, and in certain cases, countervailing duties. Domestic firms that file their taxes under Title II of the IMMEX are eligible, and must comply with the requirements laid out in the <i>Decreto IMMEX</i> .	Direct	Firms	Other	N/D	N/D	Yes	25.00
<i>Programa de Financiamiento al Microempresario [PRONAFIM]</i>	SE	Contributes to the establishment and consolidation of the microfinance sector in Mexico by implementing favorable public	Direct	Individuals	Program	653,907	155,492,754	Yes	83.33

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
Program for Financing of Microentrepreneurs (PRONAFIM)		policies for microfinancing. 721,000 individuals who have applied for microfinancing through microfinancing institutions and intermediaries will be benefited.							
<i>Programa para Impulsar la Competitividad de los Sectores Industriales (PROIND)</i> Program to Promote Competitiveness of Industrial Sectors (PROIND)	SE	Offers support to individuals, firms, organisms, business groups, and civil associations, through intermediate organisms to promote the production of industrial sectors in Mexico and attenuate the impact of negative economic circumstances. 85,228 businesspersons or firms belonging to strategic industries that are vulnerable to suffer negative effects from economic downturns or shocks are eligible.	Indirect	Both individuals and firms	Program	4,654	427,106,600	Yes	88.89
Fondo de Innovación Tecnológica Fund for Technological Innovation	SE / CONACYT	This is a fund (trust) that support businesspeople and micro, small, and medium enterprises interested in generating products and innovative services, as well as new businesses/start-ups in niches or high value added sectors. There are three modalities: Fit A: Startups, Fit B:	Direct	Firms	Fund/ Grant	43	123,200,000	Yes	65.28

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
		Integration of technological base, and Fit C: Creation and consolidation of groups and/or centers for engineering, design, research and technological development.							
<i>Fondo Sectorial de Innovación (FINNOVA)</i> Sectoral Fund for Innovation (FINNOVA)	SE / CONACYT	This program for micro, small and medium sized enterprises that are incorporated in Mexico and registered in the RENIECYT (National Registry of Scientific and Technology Institutions and Businesses) that show interest in growth and innovating their processes or products through certified consultants.	Direct	Firms	Fund/ Grant	309	243,546,460	Yes	80.56
<i>Programa de Fomento a la Economía Social (PFES)</i> Program to Foment Social Economy	SE / INAES	Generates employment among low-income entrepreneurs, businesses or social groups by generating, developing and consolidating productive and commercial projects, as well as developing business capacities and abilities. The target population is residents of rural areas, indigenous people, small farmers, or low-income urban residents who have demonstrated	Direct	Individuals	Program	14,313	2,302,000,000	Yes	55.56

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
<i>Fondo de Co-inversión de Capital Semilla</i> Fund for Co-Investment in Seed Capital	SE/NAFIN	entrepreneurial and organizational abilities. Makes seed capital available to entrepreneurs and/or established businesses within Mexican territory that are focused on innovation and high added value. This program functions by imposing funds/grants and investment during early stages of business creation. Resources are injected directly into the patrimony of the investment vehicle and/or project, which means it is not a credit nor a subsidy.	Direct	Firms	Fund/ Grant	14	14,300,000	Yes	51.39
<i>Programa de Opciones Productivas</i> Program for Productive Options	SEDESOL	Offers economic support, technical assistance and/or capital to promote the growth of productive projects. This program is only available to individuals or social groups/organizations living below the poverty line or in marginalized areas.	Direct	Both individuals and firms	Program	7,982	414,140,524	Yes	65.28
<i>Programa de Apoyo para la Productividad</i>	STPS	Offers economic support so that firms can train their workers. Any company established in	Indirect	Firms	Program	N/D	5,292,363	Yes	75.00

Name of the Intervention (Spanish and English)	Regulative Agency	Description	Type of Support	Program is Directed Toward	Classification	Number of Firms Benefitted 2013	Total Budget 2013 (Mexican Pesos)	Has the Program been Evaluated?	Accessibility Index
Support Program for Productivity		Mexico, regardless of size or activity, is eligible.							

Source: Consultores C230 Analysis from Government Databases Annex 4: Success Stories

In textiles and apparel, Turkey and Sri Lanka are considered similar to the Mexican market. Selected stories of successful programs may offer reflection and serve as examples for Mexican SMEs as they attempt to insert themselves into GVCs.

BOX 3: TURKEY

Turquality: Accreditation and support program to strengthen Turkey's international image and the garments manufactured there. Focuses on a group of 30 selected textile and clothing brand owners.

Strategic Action Plan for Textile, Ready-to-Wear, and Leather Sectors: Provides support in the form of government finance, advice, and training for export-oriented clothing producers who wish to relocate away from Istanbul toward provinces. Incentives include exemptions from customs tax and reductions in value-added tax, corporate tax and energy bills.

BOX 4: SRI LANKA

Sri Lankan Government Actions: The government wrote off the unpaid debt of local textile manufacturers who registered for restructuring, invested one million USD to promote backward linkages, established an industrial park with treatment plants to facilitate fabric manufacturing, and established a regional apparel hub near an export processing zone and an international airport.

Garments Without Guilt: A program co-founded in 2002 by the government and private sector to promote the economy's image as an ethical textile and clothing manufacturer. This campaign is a way for Sri Lankan producers to differentiate themselves from other Asian suppliers.

Source: Gereffi and Frederick (2010)

PROMOTING THE PARTICIPATION OF SMES IN TEXTILE
AND APPAREL GLOBAL VALUE CHAINS

VIET NAM'S CASE STUDY

By Nguyen Huong Tra

April 2016

CONTENTS

1. Introduction	149
2. The current state-of-play of Vietnamese SMEs’ integration into the global textile and apparel value chains	150
2.1. Overview of the Vietnamese textile and apparel sector	150
2.2. The status of Viet Nam in the textile and apparel global value chains	154
2.3. The current situation of Vietnamese SMEs in the textile and apparel global value chains	156
3. The impacts of Government’s strategies and policies on Vietnamese SMEs’ integration into textile and apparel global value chains.....	163
3.1. Free trade agreements.....	163
3.2. Local investment and foreign direct investment policies	167
3.3. Domestic trade policies and regulations	170
4. The main barriers for Vietnamese SMEs to integrate in the textile and apparel global value chains	171
4.1. Dependence on imported fabric and accessories	171
4.2. Labor skills shortage	172
4.3. Lack of horizontal and vertical linkages in the value chain.....	173
5. Business cases on Vietnamese SMEs’ integration in the textile and apparel global value chains	173
5.1. Bianco Levrin - The special strategy to penetrate the world market	173
5.2. TBT Hai Duong - The choice and barriers to a Vietnamese OEM/ FOB manufacturer in increasing integration in the global value chain.....	176
6. Conclusion and policy recommendations.....	178
6.1. Conclusion	178
6.2. Recommendations	179
References.....	182

Abbreviation

AANZFTA	ASEAN- Australia - New Zealand Free Trade Agreement
ACFTA	ASEAN- China Free Trade Agreement
AIFTA	ASEAN- India Free Trade Agreement
AJFTA	ASEAN- Japan Free Trade Agreement
AKFTA	ASEAN- Korea Free Trade Agreement
APEC	the Asia-Pacific Economic Cooperation
ASEAN	The Association of Southeast Asian Nations
ATIGA	ASEAN Trade in Goods Agreement
B2B	business-to-business
BTA	U.S. - Viet Nam Bilateral Trade Agreement
CBAs	collective bargaining agreements
CIF	Cost, Insurance and Freight
CIT	corporate income tax
CMT	Cut, Make & Trim
EU	the European Union
EVFTA	the EU - Viet Nam Free Trade Agreement
EVFTA	EU - Viet Nam Free Trade Agreement
FDI	foreign direct investment
FOB	Free-On-Board
FTA	free trade agreements
GDP	Gross Domestic Product
GVCs	global value chains
LDP	landed duty paid
MNC	multi-national corporations
MOF	Ministry of Finance
MONRE	Ministry of Nature Resources and Environment
MUTRAP	the European Trade Policy and Investment Support Project
OBM	original brand manufacturer
ODM	original design manufacturer
OEM	original equipment manufacturer
RCEP	Regional Comprehensive Economic Partnership
SMEs	small and medium-sized enterprises
SOE	State-owned enterprises
TPP	the Trans-Pacific Partnership
U.S.	the United States
VAT	value added tax
VINATEX	Viet Nam Textile and Apparel Group
VITAS	Viet Nam Textile and Apparel Association
VJEPA	Viet Nam-Japan Economic Partnership Agreement
VKFTA	Viet Nam - Korea Free Trade Agreement
WTO	World Trade Organization

EXECUTIVE SUMMARY

Being a traditional manufacturing sector of Viet Nam, the textile and apparel sector emerged as a key export-oriented sector since 1990s during the economy's rapid industrialization and international economic integration. As the total export turnover increased by almost five times between 2004 and 2014 to reach US\$20.9 billion, Viet Nam has become one of the ten largest apparel exporting economies in the world. The largest markets for Vietnamese apparel export are the United States (47.0 per cent of the total export turnover in 2014), the European Union (15.9 per cent), Japan (12.5 per cent) and Korea (10.0 per cent). The key product categories are jackets and coats, knitted shirts, pants and shorts, they account for three-fifth of the total export turnover while the textile export value is tiny. The sector is important for employment creation. With over 5,900 companies, 74.5 per cent of which are involved in labor-intensive apparel manufacturing, the sector generates 2.5 million jobs or 5 per cent of the total industrial employment of the economy.

Despite of the impressive export figures, Viet Nam works successfully only in apparel manufacturing in the midstream part of the global value chain. It can hardly move either upstream to apparel export and marketing or downstream to component and raw material supply. This is because the value chains for fiber, textiles and apparels of Viet Nam have separately emerged instead of being linked together. In 2013 one-third of woven fabric production volume and two-third of fiber production volume produced in the economy were exported or used elsewhere rather than fed into apparel manufacturing and textile production as the key inputs for export products. Another key reason is the demand for materials of the fast-growing apparel production is much higher than the local textile, yarn and cotton production capacity. The value chain development has so far been heavily dependent on importation of all key commodities, including cotton, fiber and fabric.

SMEs dominate the Vietnamese textile and apparel sector in number of enterprises while large companies dominate in export turnover. 85.2 per cent of companies are small enterprises, which employ up to 199 workers; and 14.7 per cent are medium-sized enterprises, which employ from 200 to 4,999 workers. 21 per cent of SMEs are participating in the global value chains. However, 20 per cent of the total apparel export turnover goes to the five largest companies, including one SOE giant and four large-scaled FDI companies. Textile and fiber production and export are also dominated by large companies; the observation is associated with the capital intensity nature of such businesses and reveals a high entry barrier for SMEs. The situation is well reflected in the survey sample. There was only one textile manufacturer and no spinning enterprises in the sample, compared to 21 apparel manufacturers. 78.3 per cent of the total export sales in 2014 went to one-third of the sample, which are upper-medium companies (1,000 to 4,999 workers), 21 per cent went to one-fifth of the sample, which are lower-medium companies (200 to 499 workers), and the remaining 14.3 per cent of the sample, which are small companies, took a tiny share of 0.7 per cent of the total export sales. Companies' export performance in the sample reillustrates the fact that the global market works in favor of larger size. Only a small number of companies sold to the domestic market and the domestic sales were rather small compared to the export sales. It was reported that the domestic market did not much support the export market. The companies just tried to fill up the idle production line during the low season. They simply undertook processing orders for local brands and other export manufacturers, and thus did not really build their reputation or add more value. Only one SME sold to the final consumers in the domestic market.

In the midstream of the global apparel value chain, most Vietnamese companies are manufacturing contractors for foreign retail chains, apparel brands, overseas buying offices and trading companies and they work mainly in the CMT and FOB I production modalities. This is the common status of both SMEs and large enterprises. Few companies are able to penetrate the global value chain in the FOB II and FOB III modalities, and very few in the ODM or OBM modalities. So within the global value chain Vietnamese SMEs are mainly involved in just a couple of steps and hardly anyone is able to participate in export and marketing in the upstream or in design and branding in the downstream where high value is created. In the survey sample 57.1 per cent of SMEs classified themselves as CMT manufacturers, 38.1 per cent as FOB I manufacturers, and only 4.8 per cent as ODM/ OBM companies. FOB manufacturers exceeded CMT manufacturers in both profit margin and productivity indicators. Of every hundred dollar of sales a FOB manufacturer earned on average 2.1 dollar more than a CMT manufacturer in gross profit and spent 1.9 dollar less in costs. However, a FOB manufacturer paid ten times more material costs in return for five time larger revenue, and had to commit a large amount of its own finance to afford the costs. So it can be a barrier for a SME if it cannot access suitable financing schemes. Unfortunately the higher amount spent by apparel manufacturers on material costs would not be earned by other industries in Viet Nam as most fabric and accessories would have to be imported. Looking more closely into the profile of SME exporting manufacturers we realized that it is actually the medium-sized enterprises that participate in the global value chain, not SMEs in general. Small-sized enterprises should have a special strategy to penetrate the global market. Some Vietnamese small companies have worked out their own way to do branding, design, export and marketing through the niche market, and thus successfully expand the value addition range by moving both upstream and downstream the global value chain. The successful ODM/ OBM company in the sample earned 5 - 6 times higher profit margin than FOB and CMT manufacturers, and more importantly it could set up a solid brand which was appreciated and paid for by medium and high-end consumers and retailers in the European and U.S. markets.

Among the government's strategies and policies, the free trade agreements, the investment policies and the trade policies and regulations have the most impact on the textile and apparel SMEs. FTAs have positive impact on the whole sector and its SMEs as negotiations of Viet Nam focus on cutting down textile and apparel tariffs, aiming at increased export turnover, more jobs and improved competitiveness of the sector. The booming growth of textile and apparel export in the past was linked to the major FTAs, especially the U.S. - Viet Nam Bilateral Trade Agreement, the ASEAN-Korea Trade in Goods Agreement and the accession to the World Trade Organization. In the future the new FTAs, especially the Trans-Pacific Partnership (TPP), the EU - Viet Nam Free Trade Agreement (EVFTA) and the Viet Nam - Korea Free Trade Agreement (VKFTA), are expected to give tariff preferences to about 80 per cent of the Vietnamese textile and apparel exports to the U.S., the E.U., Japan and Korea and increase the export turnover to about US\$ 50 billion by 2025, and thus create millions more jobs. However, companies will have to meet stricter rule of origin and labor standards, which require large investment of the private sector as well as regulatory reform of the government.

While the foreign investment policies successfully attract large volumes of foreign direct investment into the textile and apparel sector, the changes to the domestic investment policies have an adverse impact on local enterprises. With limited size of employment and capital SMEs are losing their advantages to large local and foreign companies as land, water treatment, labor and tax are getting relatively more costly under the new policies and laws. On top of that, the pieces of law related to overtime and union are tricky for Vietnamese SMEs to satisfy

the business and labor requirements of international buyers and at the same time comply with the domestic laws. The government's SME promotion policies are too general and thus not much helpful for textile and apparel SMEs. They actually have more practical benefits from the policies and strategies aimed to promote the whole sector.

Among the domestic trade policies and regulations, the ones related to taxation and customs procedure are facilitative to SMEs' integration in the global market. Unfortunately most other regulations are perceived as creating more difficulties through unreasonable licenses and standards. In general, the domestic trade regulatory framework needs to be reviewed to make sure unreasonable barriers is removed if more integration of SMEs into the global value chains in the textile and apparel industries is to be promoted.

Dependence on imported fabric and accessories, labor skills shortage and lack of business linkages are the three main challenges that Vietnamese SMEs face in integration in the global textile and apparel value chains. Viet Nam imports nearly 88 per cent of the total demand for fabric and accessories. Unattractive and inconsistent policies of the government have so far failed to attract sufficient upstream investment from the private sector. On the other hand the technology and manufacturing capacity of foreign input manufacturers is much more advanced than that of domestic manufacturers, and thus they can offer better terms to Vietnamese apparel companies. Relating to the workforce, the whole sector faces a high level of shortage of management skills, engineers, skilled manual trades and even general laborers, and SMEs are on the weak side in the competition with large companies for workers. Both horizontal linkages of SMEs with the other manufacturing companies in the same step of the value chain, and vertical linkages with different value chain steps (weaving, dyeing, designing, marketing, etc.) are weak and they hardly receive any business or cooperation from other value chain players. In this context, it is vital for SMEs to review their own business strategy toward the global market and develop necessary knowledge, capacities and linkages to penetrate appropriate market segments. The role of business associations is very important in information dissemination and training, mapping sources of materials and inputs, and coordinating joint business and networking efforts of SMEs. The government and APEC should work to improve policy making and implementation, support capacity building and data collection about companies involved in different steps of GVCs and ideally build a regional supplier and buyer directory.

1. Introduction

Nowadays, the technological advancements and intensive trade and investment liberalization increasingly make fragmenting of activities in all stages of a production value chain possible. Some of these activities can be performed in various economies in the world and reintegrated again through the global value chains (GVCs). According to a 2013 report by the APEC Policy Support Unit, multi-national corporations (MNCs) have become the major players in managing the GVCs. Small and medium-sized enterprises (SMEs) on the other hand, are engaged in the business activities that link up with MNCs, usually providing goods or services that are used to produce the final products. However, SMEs have often been left out of the network of GVCs as the outsourcing of production processes and cross-border trade takes place mostly within networks of MNCs.

The textile and apparel value chain is one of the most global ones. The developed economies such as the U.S., the European Union and Japan choose to specialize in design, branding and apparel retailing. Large buying offices and trading companies are concentrated in Korea, Chinese Taipei and Hong Kong (China) to be specialized in export and wholesaling activities. Production of apparel is often located in developing economies, especially those in Asia, including China, Viet Nam, Indonesia and Thailand. Although it is a low value-added labor-intensive step, apparel manufacturing is very important in many economies, being the classic starter industry for export oriented industrialization.

The textile and apparel sector is a traditional manufacturing sector of Viet Nam. During the rapid development of the Vietnamese economy since “doi moi”⁹ in the mid-1980s, it played a key role in the economy’s industrialization and international economic integration. From US\$1.89 billion in 2000, the textile and apparel export turnover was valued at US\$20.91 billion in 2014 and is estimated at US\$ 27.50 billion in 2015, representing a 1,353 per cent increase in 15 years (Viet Nam Customs Statistics, 2000-2014; VITAS, 2015a). The sector ranks second and accounts for 16 per cent of the total export value of the economy. Viet Nam is currently among the ten largest apparel exporting economies in the world¹⁰.

SMEs are making up the majority of the textile and apparel sector in Viet Nam. According to the Viet Nam Statistical Yearbook, over 99 per cent of Vietnamese textile and apparel businesses are SMEs. However, as SMEs in other economies and industries, Vietnamese textile and apparel SMEs have been largely left out of the global value chains in the sector due to lack of linkages to the global production networks as well as lack of effective policy back up.

This study has been completed within the Project CTI 07-2015 of the Asia-Pacific Economic Cooperation (APEC) in order to explore ways in which policy-makers of APEC economies can contribute to increased SMEs participation in GVCs of the textile and apparel industries through positive trade and investment outcomes, while improving their competitive edge in the international markets. While the study involves four economies, specifically China, Indonesia, Viet Nam and a Latin-American economy, this report outlines the findings and recommendations related to Viet Nam. Following the introduction in Part 1, the report is structured with four parts, addressing the four objec-

⁹ Reform in the Vietnamese language

¹⁰ WTO on <http://textilefashionstudy.com/top-apparel-exporters-economies-of-the-world-rmg-business/>

tives of the study. They include:

- Part 2. The current state-of-play of SMEs' integration into the textile and apparel global value chains;
- Part 3. The impacts of Government's strategies and policies on Vietnamese SMEs' integration into textile and apparel global value chains;
- Part 4. The main barriers for Vietnamese SMEs to participate in the textile and apparel global value chains
- Part 5. Business cases on Vietnamese SMEs' integration in the textile and apparel global value chains
- Part 6. Conclusion and recommendations.

2. The current state-of-play of Vietnamese SMEs' integration into the global textile and apparel value chains

2.1. Overview of the Vietnamese textile and apparel sector

The textile and apparel sector is one of the most important manufacturing industries of Viet Nam. It contributes 10 per cent of the total industrial production value of the whole economy. It provided the largest manufacturing-based export until 2011 and the second largest (after electronics) in the last three years. The sector is also important for employment creation, generating 2.5 million jobs or 5 per cent of the total industrial employment of the economy. (VITAS, 2015; Viet Nam Customs, 2011-15).

As of 1 January 2014 there are 5,936 enterprises in the Vietnamese textile and apparel sector. This represents a large increase from 3,700 enterprises in 2009. The company distribution by production field, ownership type, geographical location and size is presented in Figure 1. Classified by the field of production, apparel manufacturers are dominant, accounting for almost three-fourth of the total number of enterprises. They are involved in the production networks in the midstream part of the apparel global value chain. 25.5 per cent of the total number of enterprises is working in the component networks in the upstream part of the value chain. However, only one-third of them are working on fabric production (weaving, knitting, non-woven fabric, dyeing and finishing); twice as many are in the supporting industry. Very few enterprises (1.8 per cent) are working on fiber production (cotton ginning, spinning and synthetic fiber production), which is also in the upstream part of the value chain. Compared with the statistics of 2009, the figures reflect the structural change of the industry. Although the total percentage of the upstream companies has not much reduced from almost 30 per cent in 2009, the supporting industry (accessories and components) has soared from as little as 3 per cent 5 years ago to 15.3 per cent in 2014. On the contrary, both the fabric manufacturers and the cotton ginning and spinning companies have shrunk almost three times in the relative number during the period (from 21 per cent and 6 per cent in 2009 to 8 per cent and 2 per cent in 2014 respectively).

By type of ownership most of the textile and apparel manufacturers are domestic private businesses (85.3 per cent). 14.6 per cent of enterprises are FDI companies. The State-owned enterprises (SOE) make a very small proportion, just 0.1 per cent of the total number of enterprises. The figures reflect the results of the fourth stage of the SOE equitization process in the textile and apparel sector from 2011 until now. During

the last few years, the State share, often 51 per cent or more of the total share, in the joint-stock companies was sold off and the companies were transformed into 100 per cent private share entities from what used to be the so-called “SOE with 51 per cent State capital”.

By geographical location nearly two-third of the textile and apparel manufacturers are located in the Southern Viet Nam. 28.7 per cent of the total number of enterprises is located in the Northern Viet Nam and only 7.9 per cent in the Central Viet Nam. They are actually located with very high density in two out of six sub-regions of Viet Nam, specifically the Red River Delta in the North (26.5 per cent) and the South - East Area in the South (58 per cent). The sub-regions contain the most industrialized “triangles” of the economy, with most developed manufacturing infrastructure and convenient connection to the major airports (Noi Bai and Tan Son Nhat) and seaports (Hai Phong Port and Sai Gon Port) of the economy. Such locations are geographically important for the textile and apparel sector of Viet Nam, which involves large volumes of both import and export.

By size of employment small enterprises, defined as those that employ less than 199 workers, are dominating the industry with 85.1 per cent. Medium-sized enterprises, which employ from 200 to 4,999 workers, account for 14.7 per cent. Only 0.2 per cent is large companies with 5,000 employees or more. Most of the large-sized companies are foreign invested enterprises. (VITAS, 2015a).

As long as the production capacity is regarded, Viet Nam is facing a mismatch between the mid-stream (apparel production) and upstream parts (fabric production and raw material production) of the value chain. In the midstream part of the value chain the total apparel production capacity is 4,000 million units and requires about 7.000 million square meters of fabric per year. In the upstream part, Vietnamese textile companies are only able to produce up to 800 million square meters of woven fabric, 110,000 tons of knitted fabric, 16,000 tons of non-woven fabric and 62,000 tons of terry toweling, 1,200 million square meters of dyeing and finishing per year. With 6.2 million spindles in 2014, the spinning industry is able to produce up to 900,000 tons per year. However, the raw material production capacity of Viet Nam is very limited. The cotton ginning capacity is only 70,000 tons per year. Viet Nam needs about 400,000 tons of cotton every year, but only 3,500 tons was produced in the economy in 2010 and 1,270 tons in 2014 (VITAS, 2015b; MARD, 2011-2015).

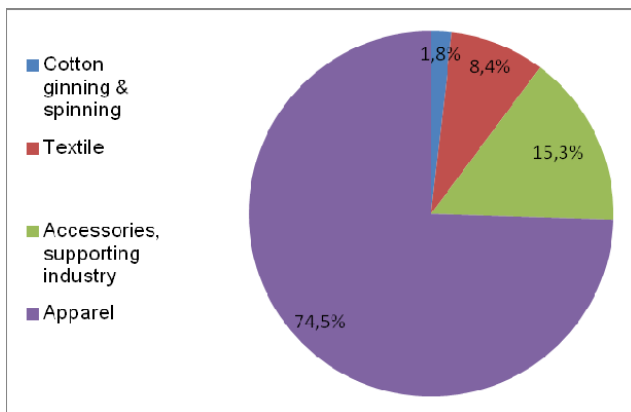
BOX 1. VIET NAM COTTON FARMING AND SPINNING

The cotton farming and spinning industry has a long history in Viet Nam. However, it did not become important until the last two decades when the industrialization took place in the economy. Cotton farming and spinning are the first two steps in the textile and apparel value chain. Between 2000 and 2014, the spinning industry expanded by over 800 per cent from 1.2 million spindles and 120,000 tons of total production capacity to 6.2 million spindles and 900,000 tons. However, cotton farming was shrinking in a reserve shift. The total cotton production of Viet Nam was 12,000 tons in 2000, cutting down by almost 9.5 times to 1,270 tons in 2014. While in 2000 the domestic cotton met about 20 per cent of the demand of the spinning industry, in 2014 it was able to meet less than 1 per cent. (VCOSA, 2015).

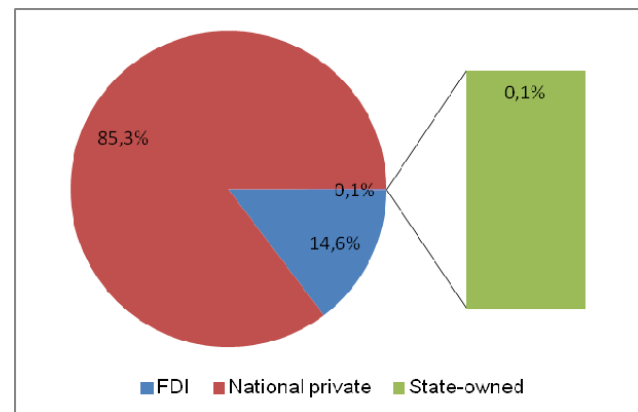
Figure 1. Distribution of textile and apparel companies in Viet Nam

Number of companies (2014): 5,936

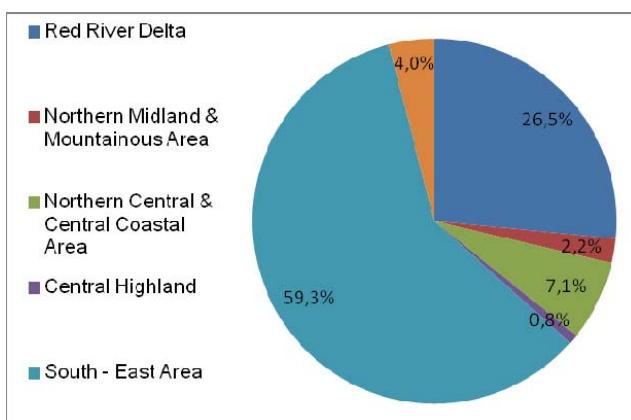
By field of production



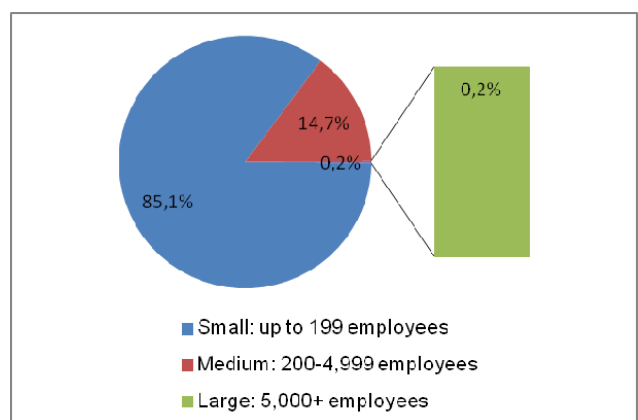
By type of ownership



By geographical location



By size of employment

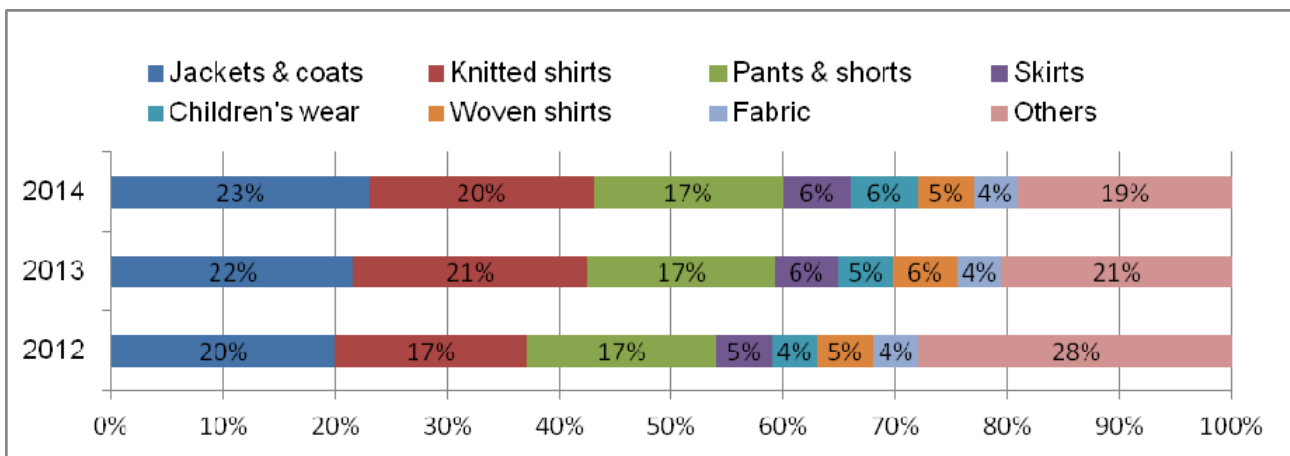


Source: VITAS, 2015b; GSO, 2015

The local sales value of Vietnamese textile and apparel sector was about US\$ 3.27 billion in 2013. It was rather small compared to the export sales value. Since Viet Nam actively participated in the textile and apparel global value chain during the 1900's the export turnover of the economy increased rapidly and reached US\$17.93 billion in 2013, almost 5 times larger than 10 years earlier and 5.5 times larger than the domestic sales value of the same year.

The key products of Viet Nam in the textile and apparel GVC are jackets and coats, knitted shirts, and pants and shorts. The three categories together made up 50-60 per cent of the total textile and apparel export value of Viet Nam from 2012 to 2014. Textiles maintained a small share of just 4 per cent in the last three years.

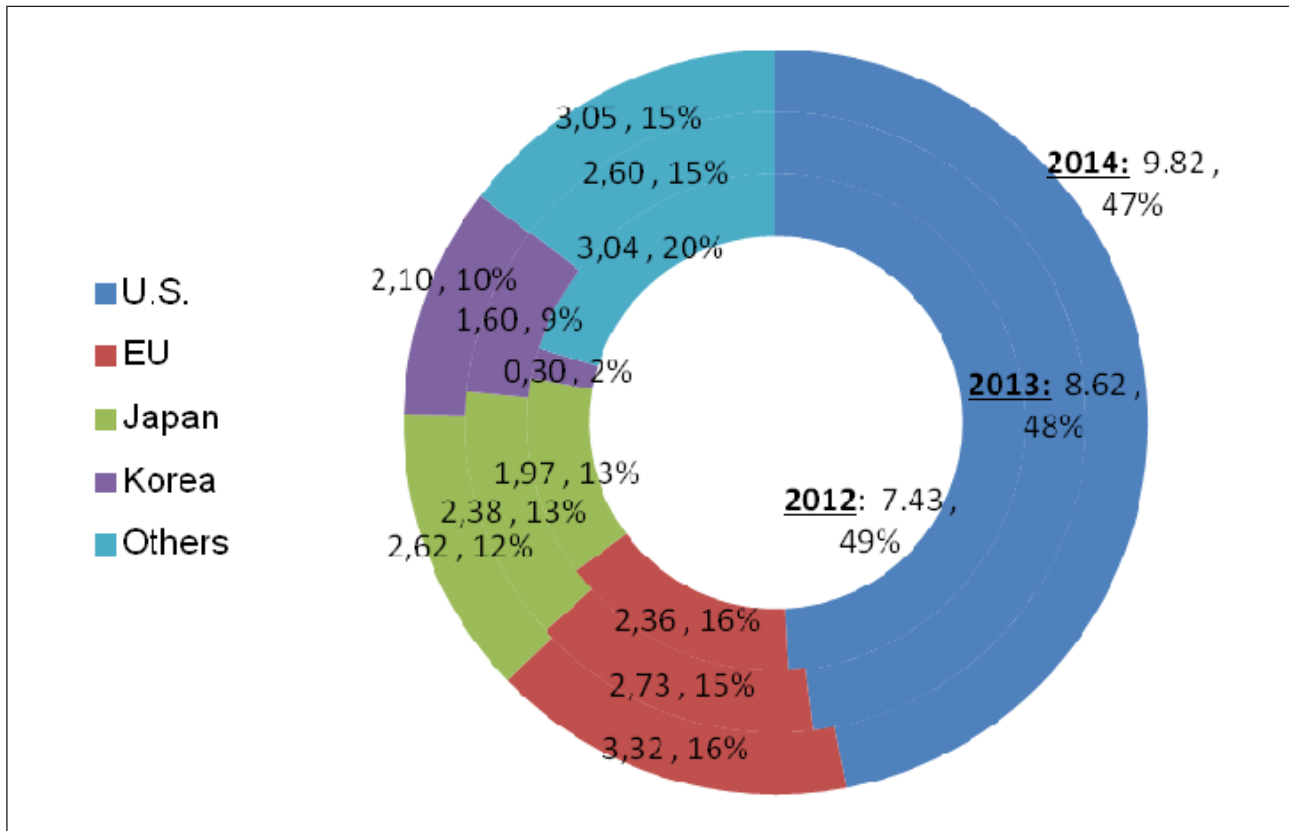
Figure 2. Key products of Viet Nam in the textile and apparel global value chains



Source: VITAS, 2015a

The largest markets for Vietnamese apparel export are the United States, the European Union and Japan. They are also the top three world apparel importers, just in a different order. The United States is the second largest importer in the world apparel market while it ranks first for Viet Nam. Exports to the U.S. accounted for 40-50 per cent of the total textile and apparel export in the last 5 years and outweighed both the European Union and Japan together in value. Despite that apparel consumption and import in the world and in those three regions were declining during the economic hardship, Vietnamese exports to the United States, the European Union and Japan kept on rising. Korea emerged as the fourth largest importer of Vietnamese apparels after the AKFTA. Altogether those four economies account for 80-85 per cent of the total apparel export of Viet Nam.

Figure 3. Key markets of Viet Nam in the textile and apparel global value chains
Export sales in billion US\$

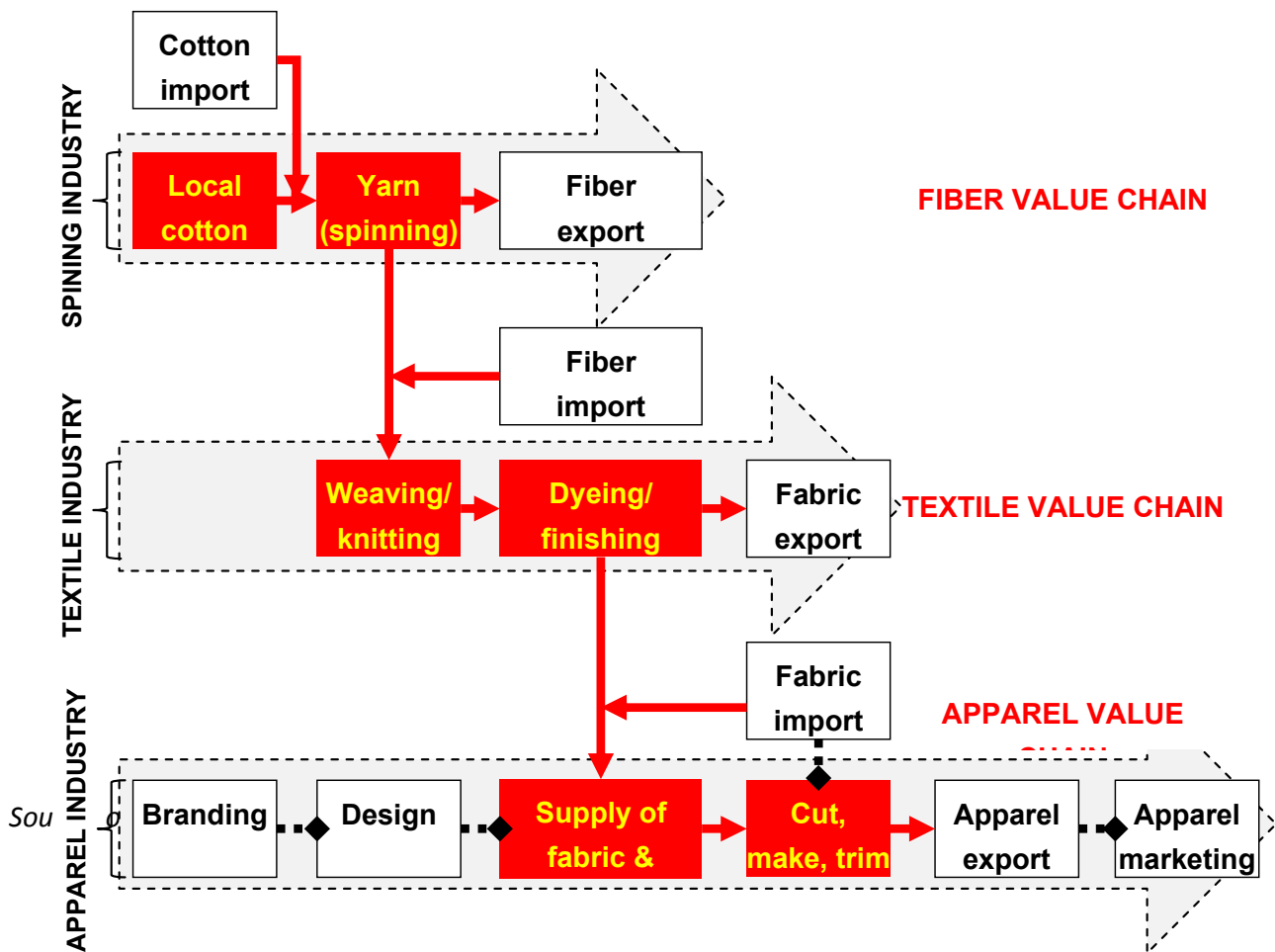


Source: VITAS, 2015b

2.2. The status of Viet Nam in the textile and apparel global value chains

The current status of Viet Nam in the global value chains is illustrated in the Figure 4. Comparing to the apparel global value chain described by Gereffi and Memedovic (Gereffi & Memedovic, 2003), we can realize that there is a disconnection among the value chains of Viet Nam. The production of the key commodities is loosely linked. A large proportion of fabric and fiber produced in the economy are exported or used elsewhere rather than fed into apparel manufacturing and textile production as the key inputs. As a result, three value chains for fiber, textiles and apparels have separately emerged instead of being linked together to make up a comprehensive high value-added apparel value chain. Within the same value chain Vietnamese companies are mainly involved in just a couple of steps and hardly anyone is able to participate in the export and marketing networks in the downstream part where high value is created.

Figure 4. Viet Nam's spinning, textile and apparel industries in the global value chains



There is a serious imbalance among export, import, and local supply of components and raw materials in the textile and apparel value chains. As mentioned earlier few companies are involved in the upstream part of the value chains and the production capacity is rather small. Therefore, the value chain development is adversely affected by the shortage of home-produced inputs and the dependence on importation of all key commodities, including cotton, fiber and fabric.

Let take the year 2013 as an example. In 2013 Viet Nam produced 4,590 tons of cotton and imported almost 600,000 tons valued at US\$ 1.71 billion for the ginning industry. The total production of the industry was 720,000 tons of fiber. Only one-third of the volume was used in the domestic market. In response to the rising demand of the global market for fiber, especially from China, Korea and Turkey, two-third (470,000 tons) of the total fiber production was exported. However, an additional 700,000 tons of fiber was imported for the domestic textile industry. 1,400 million square meters of plain fabric was produced in 2013, 500 million of that went through sub-standard dyeing businesses and did not end up in the apparel products for the global market. As only 900 million square meter of home-produced fabric was professionally dyed and used in apparel exports, Viet Nam had a shortage of 5,900 millions square meter of plain fabric, 4,700 million square meter of finished fabric and had to import 6,000 million square meters of different types of fabric. In 2013 Viet Nam's fabric import was valued at US\$ 8,34

billion while fabric export was only US\$ 0.71 billion. It should be noted that Viet Nam imported fiber mainly from China, Chinese Taipei and Korea. Therefore, taking all industries together, we exported fiber as a lower value-added product and imported dyed and finished fabric as a higher value product from the same markets.

Beside, the Vietnamese textile and apparel sector also has to import accessories from abroad, as the supporting industry of Viet Nam was not developed enough to meet the demand of production for export. In 2013 the total value of imported inputs for export was US\$ 10.43 billion while the total export value of all the three value chains was US\$ 20.08 billion. So the Vietnamese textile and apparel sector actually earned only US\$ 9.65 billion or less than a half of the total export sales in 2013 through participation in the global value chains.

2.3. The current situation of Vietnamese SMEs in the textile and apparel global value chains

The small and medium enterprises are defined in Viet Nam by size of employment or capital for the primary, secondary and tertiary sectors. The official definition classifies three levels of SMEs, specifically medium-sized enterprises, small-sized enterprises and very small enterprises (see Table 1). In general, for the textile and apparel companies, which belong to the secondary sector (industry and construction), SMEs are those enterprises that employ up to 300 workers or have up to VND 100 billion of total capital (approximately US\$ 5 million).

Table 1. Viet Nam's definition of SMEs

Size Sector	Very small enterprises	Small-sized enterprises		Medium-sized enterprises	
	Number of workers	Total capital	Number of workers	Total capital	Number of workers
I. Agriculture, forestry and fishery	10 persons or less	VND 20 billion or less	Over 10 to 200 persons	Over VND 20 to 100 billion	Over 200 to 300 persons
II. Industry and construction	10 persons or less	VND 20 billion or less	Over 10 to 200 persons	Over VND 20 to 100 billion	Over 200 to 300 persons
III. Trade and service	10 persons or less	VND 10 billion or less	Over 10 to 50 persons	Over VND 10 to 50 billion	Over 50 to 100 persons

Source: Decree No. 56/2009/ND-CP on Assistance to the Development of SMEs, 2009

However, there is a gap between the official SME definition in the Government Decree and the definition used in the official domestic statistics. According to the General Statistics Office (GSO) small-sized enterprises in the textile and apparel sector are those businesses that employ up to 199 workers, while medium-sized enterprises have between 200 and 4,999 workers and large-sized enterprises have 5,000 workers or more. This is a more appropriate SME definition as the textile and apparel sector is labor-intensive in Viet Nam. Therefore we use the GSO definition in this study.

It is obvious from the Figure 1 that SMEs are making the absolute majority in the sector, accounting for 99.8 per cent of the total number of enterprises. However, taking into account the market share in the total export sales of the economy, large companies with 5,000 workers or more seem to have the real dominating power. Around 20 per cent of the total apparel export sales are made up by the five largest companies, among which the state-owned corporation of VINATEX has around 15 per cent on its own. All the other four names are large-scaled FDI companies. The figures imply a much lower level of prevalence of SMEs in the textile and apparel GVCs. It is estimated that only 21 per cent of Vietnamese textile and apparel SMEs are participating in the global value chains, compared to 30 per cent of their Thai counterparts and 46 per cent of their Malaysian counterparts (Business Forum, 2015).

Therefore it is important to analyze who are those Vietnamese SMEs and where they actually are in the big picture. There is only one textile manufacturer with rather small export sales of fabric (xxx per cent of its total sales in 2014) and no spinning enterprises in the sample. It is consistent with the fact that very few small and medium-sized establishments work in the export-oriented textile and spinning business. This is because the industries are, in most cases, heavily capital-intensive and therefore difficult for smaller value chain participants to pass the entry barrier. So SMEs' participation in the fiber and textile value chains is almost zero despite of the fact that Viet Nam's fiber and textile exports have been on a rise for the last few years.

Regarding the apparel manufacturers, the survey shows that 85.7 per cent of the sample is medium-sized companies and they take 99.9 per cent of the total export sales in 2013 and 99.3 per cent in 2014. Looking closer into the medium-sized sub-group, the seven upper-medium companies (33.3 per cent of the sample), which has from 1,000 to 4,999 workers, contribute around 83.5 per cent of the total export sales in 2013 and 78.3 per cent in 2014. Over a half of the sample is lower-medium companies with 200 to 999 workers and they have only one-fifth of the total export sales. The small-sized companies with up to 199 workers have a tiny share in both 2013 and 2014. So it is actually the medium-sized enterprises that participate in the global value chain, not SMEs in general. This is consistent with the fact that the export-oriented apparel industry of Viet Nam is labor-intensive. As the mass market seems to work in favor of upper-medium businesses rather than the small ones, small-sized enterprises should have a special strategy to successfully participate in the global value chain. Niche is a suggestion, as in the case of Sao Thai Duong Company, who develops the boutique brand "Bianco Levrin" in the European and US markets (see the case study of the company later in this report).

Table 2. Distribution of surveyed SMEs by size of employment

Size of employment	No of enterprises		Employment		Export sales			
			Total	Average	Total value (US\$)		Share	
					2013	2014	2013	2014
Small: up to 199 employees	3	14.3 %	409	136	283,955	1,469,909	0.1%	0.7%
Medium: 200-4,999 employees	18	85.7 %	18,493	1,027	197,643,274	217,874,734	99.9%	99.3%
In which								
Lower-medium: 200-999	11	52.4 %	5,295	481	32,446,818	46,081,000	16.4%	21.0%
Upper-medium: 1,000-4,999	7	33.3 %	13,198	1,885	165,196,456	171,793,734	83.5%	78.3%
Total	21		18,902	900	197,927,229	219,344,643	100%	100%

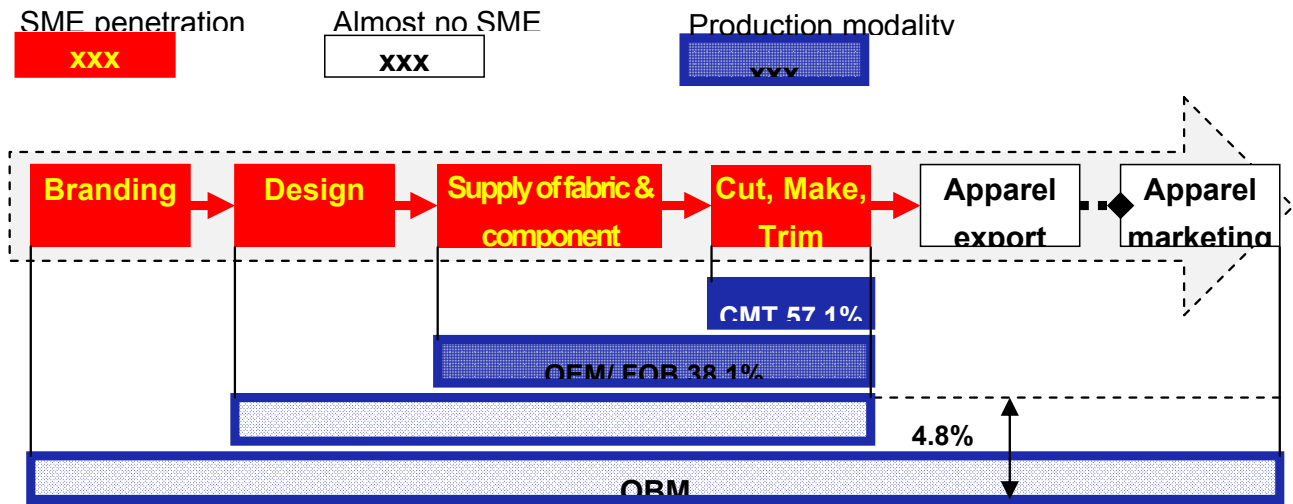
Source: own survey

To locate where SMEs are in the global value chain, it is useful to look at the production modality. The survey data shows that most of SMEs (57.1 per cent) are Cut, Make & Trim (CMT)¹¹ manufacturers. They basically provide the service of producing apparels only and receive the key inputs for processing from the foreign buyers. So they work in the production networks in the midstream part of the global value chain and often take the role of domestic sub-contractors for larger Vietnamese and Asian apparel contractors. They can also have contracts with the brand companies, overseas buying offices in the export networks or even with the retail outlets in the marketing networks. In this case, they become the key apparel contractor.

¹¹ A CMT manufacturer is a company that provide the complete service of producing an apparel, including cutting the fabric, sewing fabric, and attaching the trimming such as hangtags, buttons, labels... Some CMT manufacturers may subcontract some of the work, but typically they will manage the entire production process.

38.1 per cent of the surveyed apparel enterprises work in the original equipment manufacturer (OEM)¹² modality, and all of them classify themselves in the FOB I¹³ type. So they are still in the midstream part of the global value chain working on production, and start to upgrade to the function of input supply. The SMEs in the FOB I production modality can take the role of sub-contractors or contractors in the production networks.

Figure 5. Distribution of surveyed SMEs by production modality

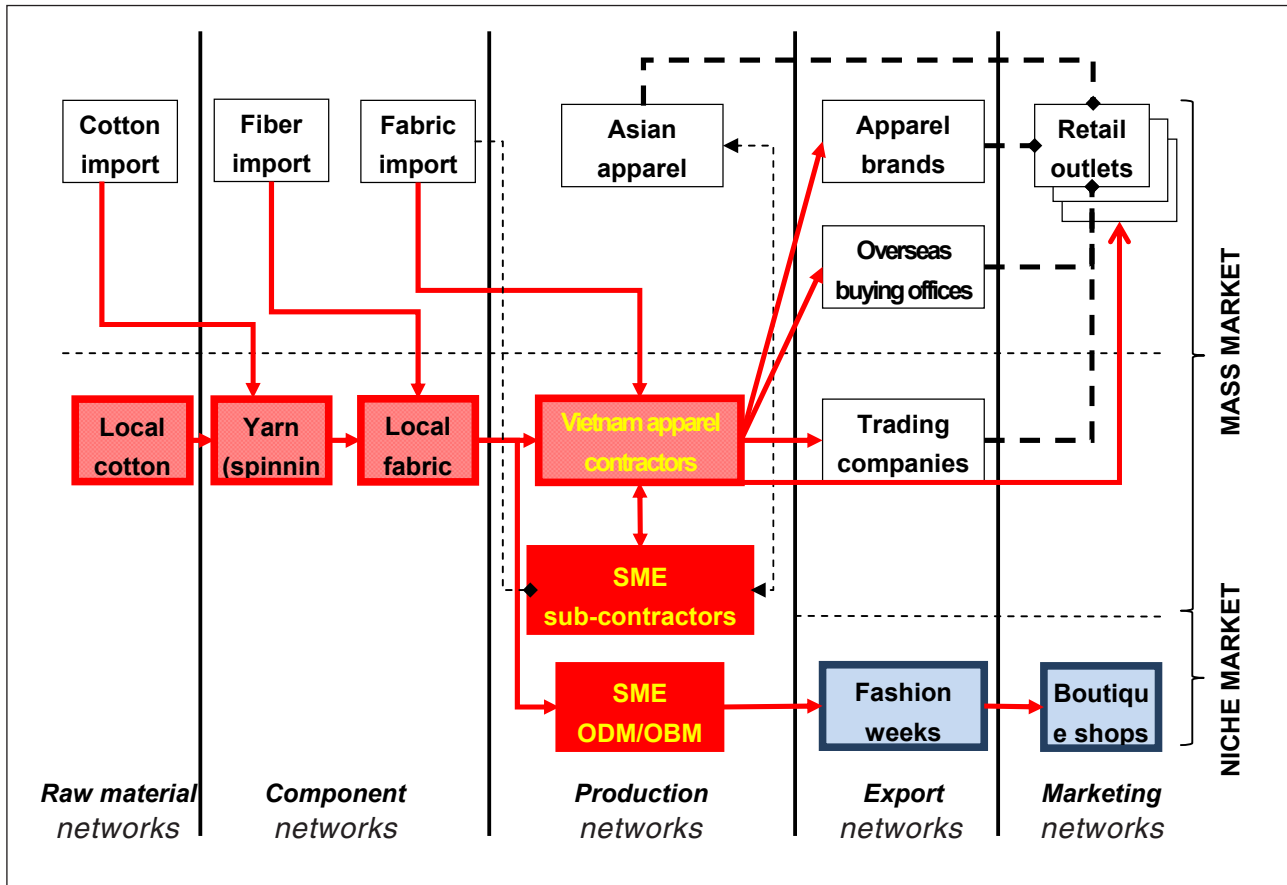


Source: own survey

¹² Original Equipment Manufacturing (OEM)/Full Package/Free on Board (FOB): The apparel manufacturer is responsible for all production activities, including the CMT activities, as well as finishing.

¹³ In the OEM production modality, apparel manufacturers are classified into three types: FOB I, FOB II and FOB III. A FOB I manufacturer is a company that purchases input materials processing from suppliers that are designated by foreign buyers. A FOB II manufacturer is a company that receives fabric samples from foreign buyers and purchases from suppliers at its own discretion. A FOB III manufacturer is a company that initiates production of apparel based on their own design, with no prior commitment of any kind from foreign buyers.

Figure 6. Vietnamese SMEs in the apparel global value chain



There is only one original design manufacturer (ODM)¹⁴ in the survey sample. The company designs collections, develops its own brand and sells apparels under it. As the products are not re-branded by retail outlets, the SME has some characteristics of an original brand manufacturer (OBM). In the big picture of the global value chain, it is obvious that the company is moving both upstream and downstream to the design, branding and export functions.

If an SME is classified as working in a certain production modality, it does not mean it only works in that modality. Only seven enterprises in the sample run a single modality of production, mainly CMT. All others operate in a major modality, FOB I for example, and at the same time try to manufacture and sell a certain volume in a more advanced one, such as FOB II. The CMT - FOB I mixture is common with nine out of 21 SMEs; and others such as FOB I - FOB II, FOB II - ODM and ODM - OBM are also detected in the sample. This observation captures the functional upgrading efforts of the companies.

So looking at the entire sample, we can see that the SME distribution by production modality is consistent with VITAS figures, which depict the prevalence of CMT manufacturers (85 per cent), a small proportion of OEM (13 per cent) and a tiny share of other production modalities.

This is not a good new from value addition perspective. Nowadays about 90 - 95 per cent of value added is created in the supply chain, including material production, design, research and

¹⁴ An original design manufacturer (ODM) is a company that designs and manufactures a product as specified and eventually rebranded by another firm for sale.

development... Although the textile and apparel sector in Viet Nam has ranked first in export value for many years, basically it still works in Cut, Make & Trim, and the lowest value adding step of the global value chain. Very few SMEs in the sample, as well as Vietnamese apparel producers in general, are able to provide a full package service for buyers, including product design. While the majority of fabric and some key accessories still need to be imported, efforts to go for more FOB simply do not improve value addition. The rapid expansion of the sector only represents the quantitative aspect of growth. As shared by Mrs. Dang Thi Phuong Dung, the Vice Chairperson of the Viet Nam Textile and Apparel Association (VITAS), in the qualitative aspect “Viet Nam almost has no role in the global value chain” (Business Forum, 2015).

Similar to the general Vietnamese apparel manufacturers, the key market for SMEs in the survey sample are the U.S., European Union, Japan and Korea. Other export markets include China, Chinese Taipei, Hong Kong (China) and Canada. The most common product categories are also jackets and coats (29 per cent of the surveyed enterprises export this category), knitted shirts (24 per cent), and pants and shorts (29 per cent). Other product categories include women’s clothes, sport wear and swim wear, and protective overalls.

Only ten of 21 surveyed enterprises sell their products in the domestic market. The domestic sales were rather small compared to the export sales. The total domestic sales of all the ten enterprises was US\$ 7.8 million, or 12 per cent of the export sales of the companies in 2013, cutting down to US\$ 6.9 million, or 7 per cent of the export sales in 2014. The in-depth interview revealed that the domestic market did not much support the export market. The companies just tried to fill up the idle production line with domestic processing orders during the low season and they lasted for a few weeks only. The companies often take up outsourcing contracts with other export apparel manufacturers and thus become indirectly involved in the global value chain in the sub-contractor’s role. In other cases, they manufacture for domestic brands without designing or marketing the products. So they simply repeat their production role in the domestic value chain and did not bother upgrading to higher value adding steps. It was explained that the domestic market was not easy as it had a very different style than the international market. The companies will also need a new set of skills for marketing and sales that they do not have for the international market. We can see that with many excuses, when going global, Vietnamese SMEs leave the “backyard” market open for China, Korea and other competitors. A good suggestion for the domestic market is again the high-end niche with high quality and special identity in design. This is what the smallest manufacturer in the sample has pursued and succeeded in.

Table 3 presents the key performance indicators of SMEs in different production modalities. Out of the 21 SMEs, 18 answered all questions about sales and costs while three answered the question about sales. The key indicators have been calculated based on the responses of those 18 SMEs. It is observed within the survey sample that an OEM/ FOB manufacturer earned on average 5.2 times larger in export sales than a CMT manufacturer. The percentage margin column indicates how much gross profit a company makes per dollar sales and the costs/ sales column indicates how much cost the company spends to get a dollar in sales. Compared to a CMT manufacturer, on every US\$100 in sales an OEM/ FOB manufacturer spent US\$2.1 dollar less in costs and earned US\$ 2.1 more in gross profit. The productivity is indicated by the average sales per dollar of labor costs. It is obvious that the productivity of the OEM/ FOB manufacturers was much higher than that of the CMT manufacturers. Every dollar on labor costs generated US\$ 1.97 more in sales, or 76% higher. The best performing business is the ODM manufacturer. It earned US\$61 in gross profit out of every US\$ 100 in sales for

which it spent only US\$ 39. However, since there is only one ODM company and its operation is very small compared to other companies in the sample, we are not going to focus on ODM in this analysis. So if we look at the performance of the OEM/ FOB and CMT manufacturers the question would be why one did not go for OEM/ FOB when the two per cent margin would bring almost half a million dollar more in profit. The answer lied at the size of operation. The average ODM/ FOB in the sample had to incur ten times more material costs and three times more labor costs to generate five time larger revenue. In total it spent at least US\$ 13 million more. We know that in the CMT production modality the Vietnamese SME would not have to commit its own finance for materials as fabric and key accessories are provided by the buyer. If it follows the OEM modality, FOB I in this case, though the supplier is designated by the buyer, the Vietnamese manufacturer would have to pay a big amount of money to purchase inputs for processing. So it can be a barrier for a SME with limited capital if it cannot access to appropriate financing scheme. We have cross-checked the capital of companies in both CMT and OEM/ FOB modalities in this sample. All the five levels of capital (specifically 10 billion VND or less, 10 - 20 billion VND, 20 - 50 billion VND, 50 - 100 billion VND and over 100 billion VND) were observed among CMT manufacturers as well as OEM/ FOB manufacturers. However, there were more companies with large capital in the OEM/ FOB modality. As described later in this report there are other barriers that prevent SMEs from going to higher production modality that incorporate more functions and larger value addition potential. As the supporting industry in Viet Nam has not developed adequately, most fabric and accessories would have to be imported and the amount spent by the companies on material costs would not be earned by other industries in Viet Nam.

Table 3. Comparison of key performance indicators among different production modality (based on 2014 sales and costs)

Production modality	% margin (Gross profit/ Total export sales)	% Costs/ Sales	Productivity (Labor costs/ Total export sales)	Average export sales per enterprise (US\$)	Average material cost per enterprise (US\$)	Average labor costs per enterprise (US\$)
CMT	10.6%	89.4%	2.60	4,274,895	1,077,646	1,645,037
OEM/ FOB	12.7%	87.3%	4.57	22,421,922	10,985,707	4,907,715
ODM	61.0%	39.0%	4.27	40,682	6,345	9,518
All	12.2%	87.8%	3.93	11,096,838	8,768,275	2,822,994

Source: own survey

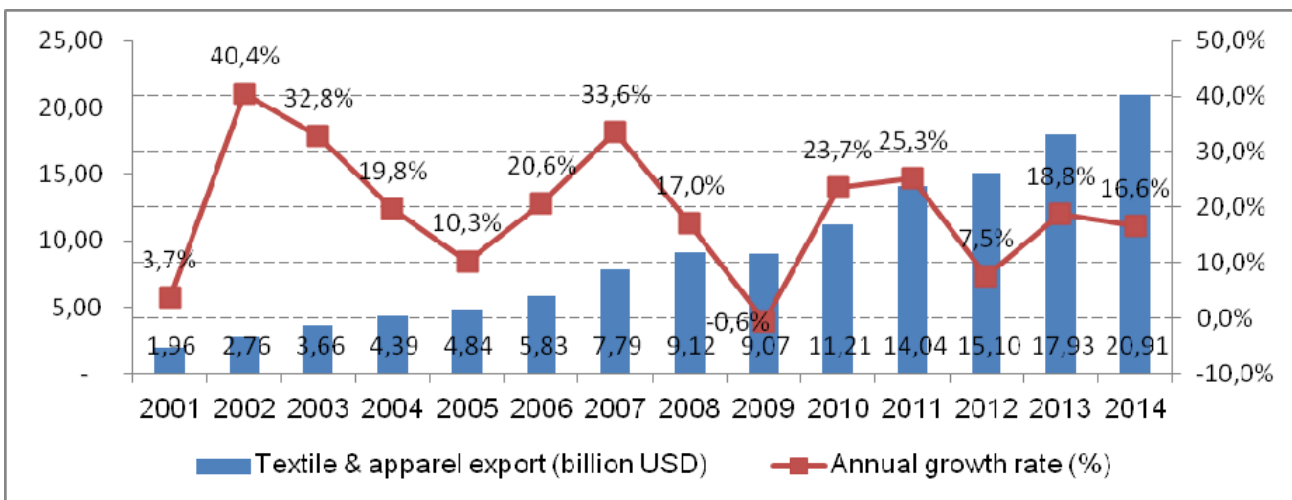
3. The impacts of Government's strategies and policies on Vietnamese SMEs' integration into textile and apparel global value chains

There are three sets of Government policies and strategies that have large impact on Vietnamese SMEs' integration into textile and apparel global value chains, both in a positive and negative way. They are i) the free trade agreements that Viet Nam have signed or is going to sign, ii) the investment policies, including the specific policies and strategies related to the textile and apparel sector and SMEs, and iii) the trade policies and regulations. Each set of policies and strategies will be analyzed below.

3.1. Free trade agreements

The textile and apparel sector is important for Viet Nam for both export and employment creation. It ranked the second largest in export turnover in the last three years after electronics. It has over 5,000 enterprises and employs 2.5 million workers, which is about 5 per cent of industrial employment (VITAS, 2015). That is why the Government of Viet Nam always bears in mind the role of the sector during negotiation of bilateral and multilateral FTAs, and aims to increase its export turnover, create more jobs and improve competitiveness through cut-down tariffs. Thanks to this strategy, the textile and apparel sector has great opportunities for growth after signing every FTA. Looking back to 2001, the textile and apparel export value of Viet Nam soared right after conclusion of every significant free trade agreement (FTA) as depicted in Figure 7. They include the ratification of the U.S. - Viet Nam Bilateral Trade Agreement (BTA) in December 2001, the signing of the ASEAN-Korea Trade in Goods Agreement in August 2006 following the establishment of the ASEAN- Korea Free Trade Area (AKFTA) in 2005, and the accession to the World Trade Organization (WTO) in January 2007. They were the significant milestones that had large positive impact on the impressive growth of the textile and apparel sector and SMEs in Viet Nam in the last 15 years. Just one year after the FTAs, in 2002 and 2007 the annual growth rate of the textile and apparel export turnover of Viet Nam reached the highest level within the last five years. One and a half decade after the first free trade agreement with the U.S., Viet Nam accounts for 7.1 per cent of the U.S. apparel market, 5.9 per cent of the Japanese market, and 14.2 per cent of the Korean market (Hoai Anh, Huong Diu, 2014).

Figure 7. Vietnamese textile and apparel export value 2001 - 2014



Source: Viet Nam Customs, 2001-2015

In the last few months of 2015, Viet Nam concluded negotiations for the Trans-Pacific Partnership (TPP) and the EU - Viet Nam FTA (EVFTA). The ratification procedures in the committing economies will take them until 2018 to come into force. Viet Nam needs these two years to prepare the pre-conditions, which are mainly related to the rule of origin and labor standards, for getting benefits from reduced tariffs for textile and apparel exports. Once completed, the FTAs are expected to have huge positive impact on SMEs in particular, on the whole sector in general.

The EU - Viet Nam FTA (EVFTA)

On 2 December 2015, the European Union and Viet Nam announced the conclusion of the negotiations for an EU - Viet Nam Free Trade Agreement (EVFTA).

The EU is one of the most important trade partners of Viet Nam. In 2013 exports to the EU reached US\$24.3 billion, accounting for 19.2 per cent of Viet Nam's total export and the EU then became the largest export market of Viet Nam. The five leading exported products to the EU is footwear, apparels, coffee, seafood and furniture. At the moment Vietnamese goods exports to the EU are subject to an average tariff of 4.6 per cent.

According to the European Trade Policy and Investment Support Project (MUTRAP), the EU-Viet Nam FTA will help increase EU investment in the service sector in Viet Nam, increase Vietnamese export to the EU and create the opportunity of improving the technical capacity of Viet Nam through the import of strategic goods at lower prices. In addition, trade liberalization will help increase the GDP and maintain the trade balance. The simulation results of MUTRAP show that the GDP of Viet Nam will significantly increase since EVFTA comes into force until 2025 (the estimated increase in GDP is 2.0- 2.5 per cent). By 2020 Viet Nam's export turnover to the EU is expected to grow by 75 per cent in the absence of the FTA and by 110 per cent if it is adopted. Under EVFTA the existing tariffs imposed on Vietnamese apparel products will be cut down from 11.6 per cent to 0 per cent. Specifically, five popular apparel categories will benefit, including male and female suits, male and female jackets, and knitwear. At the same time, the apparel export value from Viet Nam to the EU is expected to have an average growth of 6 per cent per year. The rule of origin will apply to cotton, but cotton from Korea, one of the major supplying economies for Viet Nam now, will also be allowed because Korea has an FTA with the EU.

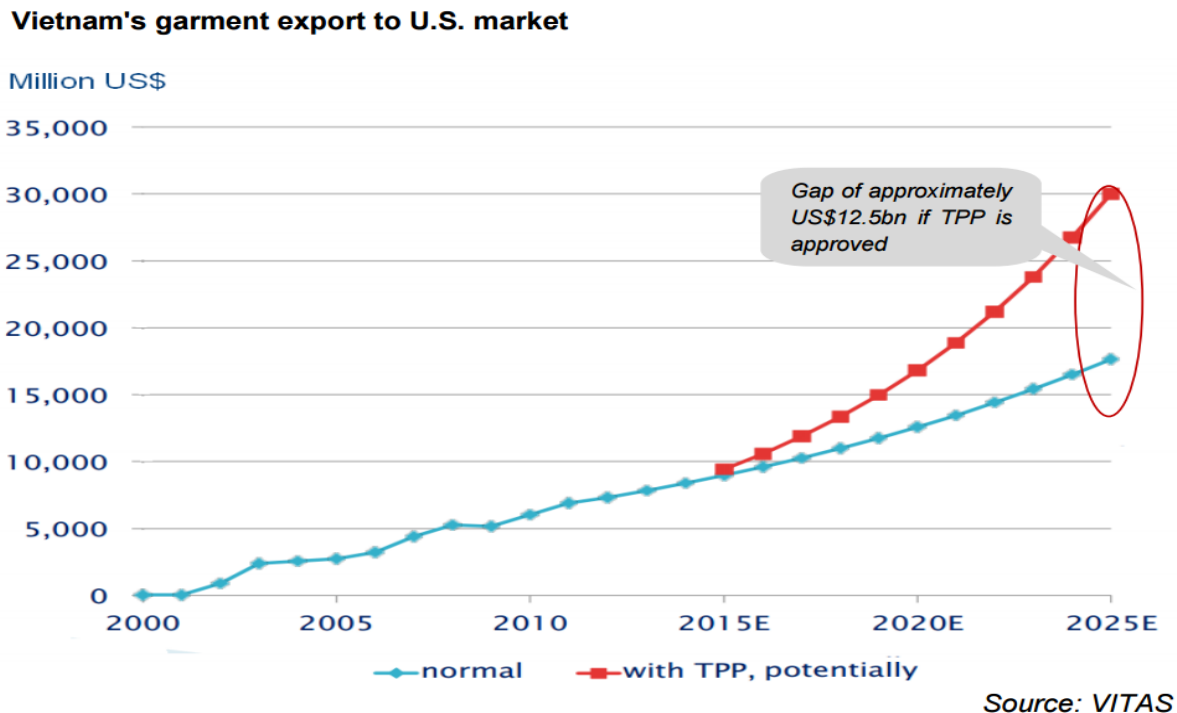
The Trans-Pacific Partnership (TPP)

TPP is a free trade agreement with the aim of integrating the economies of the Asia - Pacific region. TPP was signed in February 2016 and will come into effect in 2018. The agreement currently covers 12 member economies, specifically Viet Nam, the United States, Canada, Mexico, Peru, Chile, Brunei, Singapore, Malaysia, Australia, New Zealand and Japan. The total GDP of the TPP region is estimated at US\$26,000 billion, accounting for approximate 40 per cent of the global GDP. It has a population of around 792 million people and takes around one third of the global trade. TPP has undergone 30 rounds of formal negotiations, four ministerial sessions and a large number of interim sessions, bilateral meetings and visits. It is considered a new generation FTA, covering commercial activities (goods and services) and non-commercial activities (labor, environment, state-owned enterprises, etc.). In addition, TPP contains a higher level of commitment to cut nearly 100 per cent tariffs. Currently Chile, Brunei, Singapore, Malaysia, Australia, New Zealand and Japan have FTAs with Viet Nam, so the impact of TPP on the open market between Viet Nam and these economies is not significant. However, the United States is the largest export market of Viet Nam, so TPP is expected to

have a huge impact on Viet Nam's exports to the U.S. More importantly Viet Nam's relations with the TPP economies, especially with the U.S., will be upgraded to a much higher level with TPP and this opportunity will not only encourage organizations, corporations, companies and individual investors to invest in Viet Nam through FDI and FII, but also promote remittances of the overseas Vietnamese communities for domestic investment. Viet Nam currently exports about 1,000 lines of apparel products into the United States with an average tariff of 17-18 per cent. TPP is expected to gradually cut down tariffs to zero per cent. According to VITAS, with prospects of TPP, Viet Nam's apparel export to the United States could grow by 12-13 per cent per year and reach US\$30 bn in 2025, thus, the total export turnover of the whole sector in 2025 will reach about US\$55bn. Besides, if TPP could boost investment in input production as expected, the indicators of trade surplus, added value and the rate of industry localization will be increased. It is expected that the industry will achieve a localization rate of 60 per cent in 2015 and 70 per cent in 2020. TPP offers tariff preferences to the textile and apparel products made with yarn that have certificate of origin from TPP member economies. Vietnamese CMT enterprises can take advantages of the one by one bargaining mechanism¹⁵ for fiber bags, bra, kids' wears, and pants.

However, in order to enjoy the zero per cent tariff, textile and apparel enterprises have to meet the requirements of "yarn forward", which means that the stages of spinning, weaving - dyeing - finishing and sewing have to be done in TPP member economies. This poses a big challenge for Vietnamese apparel industry. Since the supporting industry in Viet Nam is not sufficiently developed, the economy depends heavily on the supply of materials from foreign economies, which accounts for nearly 88 per cent of the total demand. Most of the economies that Viet Nam currently imports inputs from are not covered by TPP.

Figure 8. Viet Nam's apparel export to the U.S. market before and after TPP



¹⁵ one product from US cotton can be traded with one cotton from outside TPP

Other FTAs

Viet Nam has so far joined thirteen free trade agreements and commitments (see Table 4). When all of the FTAs come into effect about 80 per cent of the Vietnamese textile and apparel exports to the U.S., the EU, Japan and Korea will enjoy tariff preferences, leading to significant advantage over other exporting economies. Based on the calculation of the industry experts, elimination of tariffs on exports to such large markets would be the turning point for Vietnamese textile and apparel export growth, including those of SMEs. The positive impact would be huge, as every US\$ 1 billion increase in the export turnover is expected to bring 250,000 jobs of all types. The joining to TPP alone, with 12 member economies, will create an additional 6 million jobs in the Vietnamese textile and apparel sector, most of which will be absorbed by SMEs. (Zing.vn, 2015).

Table 4. List of bilateral and multilateral trade commitments of Viet Nam

No	Trade commitment	Year of signature	Status
1	U.S. – Viet Nam Bilateral Trade Agreement (BTA)	2000	in effect
2	ASEAN- China Free Trade Agreement (ACFTA)	2004	in effect
3	ASEAN- Korea Free Trade Agreement (AKFTA)	2006	in effect
4	WTO Accession Protocol	2006	in effect
5	ASEAN- Japan Free Trade Agreement (AJFTA)	2008	in effect
6	Viet Nam-Japan Economic Partnership Agreement (VJEPA)	2009	in effect
7	ASEAN- India Free Trade Agreement (AIFTA)	2010	in effect
8	ASEAN- Australia – New Zealand Free Trade Agreement (AANZFTA)	2010	in effect
9	<i>ASEAN Trade in Goods Agreement (ATIGA)</i>	2009	in effect
10	Viet Nam- Chile Free Trade Agreement	2011	in effect
11	Viet Nam – Korea Free Trade Agreement (VKFTA)	2015	signed
12	EU – Viet Nam Free Trade Agreement (EVFTA)	-	concluded negotiations
13	Trans-Pacific Partnership (TPP)	2016	signed

Source: WTO Integration Support Centre, 2015

In addition to the FTAs listed in Table 4, Viet Nam is negotiating four more FTAs, namely RCEP¹⁶ (also called ASEAN + 6), ASEAN - Hong Kong (China), Viet Nam - Israel and Viet Nam - EFTA¹⁷. After being paused in 2009 to give way to a bilateral format of negotiations with single ASEAN economies such as Singapore, Malaysia, Viet Nam and Thailand, negotiations for the region-to-region FTA between the EU and ASEAN, known as the ASEAN-EU FTA, may resume after the single bilateral FTAs are concluded. When they are actually concluded and implemented, more the positive impact on the textile and apparel sector of Viet Nam and Vietnamese SMEs' integration into the global value chains can be expected.

3.2. Local investment and foreign direct investment policies

3.2.1. General foreign direct investment policies

Viet Nam has successfully attracted large volumes of foreign direct investment, valued at US\$ 10-12 billion per year over the last six years. Investors commonly cite the proximity of Viet Nam's geographical position to the global supply chains, the growing domestic consumer market, expected improvements in the business environment upon enforcement of TPP, relative political and economic stability and an increasing desire to diversify their manufacturing base in Asia away from China as reasons they opted to invest in Viet Nam. Japanese and Korean firms in particular appear eager to increase manufacturing investment. Generally, the political situation has been very stable, and the Government reacted quickly to quell the May, 2014 anti-China labor disturbances that mainly hit the labor-intensive manufacturing industries, including apparel production.

Viet Nam explicitly encourages foreign investment as part of its development strategy and the government has stated its commitment to improving the business and investment climate to move Viet Nam closer to the ASEAN average by 2015. Foreign invested companies play an increasingly important role in the economy. Viet Nam's attractiveness to foreign investors resulted in large part from the economy's government policies encouraging FDI, as well as from its geographical position near global supply chains, political and economic stability, and abundant labor resources.

On top of the FDI policy, the recent investment-related policies and laws, ranging from the 2014 Investment Law, Enterprise Law and Law on Real Estate Business which came into effect in the middle of 2015, which expands the 'room' on the stock market, separates business from investment, and allows foreigners to buy houses in Viet Nam, are expected to promote foreign capital flow into Viet Nam, including into the booming textile and apparel sector to prepare for the new business opportunities.

3.2.2. General local investment policies

In contrary to the foreign direct investment policies, the local investment policies are giving some disadvantages to the textile and apparel industry.

The Ministry of Nature Resources and Environment (MONRE) increases the land use fee rapidly during the urbanization process while the textile and apparel companies usually need a large piece of land. On top of that MONRE sets out infeasible standards for industrial waste water

¹⁶ The RCEP is a 16-party FTA that is launched by the Leaders of the Association of Southeast Asia Nations (ASEAN) and their current FTA Partners of Australia, China, India, Japan, Korea and New Zealand at the 21st ASEAN and Related Summits in Phnom Penh, Cambodia.

¹⁷ Switzerland, Norway, Iceland, Lichtenstein

treatment, which is higher than the standard for safe drinking water set out by the Ministry of Health. Such a high standard would require huge investment on water treatment facilities, which is not affordable for SMEs.

The Ministry of Finance (MOF) issues policies on cost reduction and expense control, taxation system and tax incentives with through preparation of the new laws on value added tax (VAT) and corporate income tax (CIT). The Circular 78/2014/TT-BTC assigns one common CIT rate for both local and foreign enterprises of 20 per cent and 22 per cent depending on geographical regions. In practice, these new tax regulations are more beneficial to FDI than domestic enterprises and SMEs. The FDI companies located in the industrial parks and export-processing zones enjoy a much lower CIT rate of 10 per cent for 15 years, which is completely exempted for the first four years and reduced by 50 per cent for the next nine years. As most of the FDI companies are new investments, it is convenient for them to locate in the tax-haven-like areas, while SMEs are often established for a few years and cannot move to the tax-exempted places.

The Labor Code and related legislation on labor are highly changeable and create huge difficulties for Vietnamese textile and apparel SMEs. As a labor-intensive sector, textile and apparel companies are highly prone to labor policies. However, regular changes in the domestic labor policies are putting more cost burden on the enterprises and making the business environment less attractive. In particular, the annual increase in minimum wage which is not based on productivity increase makes labor more and more expensive. The policy asks to increase the minimum wage gradually until it covers the minimum living standards plus support for 0.7 dependent. This is the level of wage used for calculating the three types of compulsory insurances and union fee paid by all companies and workers, including the textile and apparel SMEs. Such insurances and fee add 34.5 per cent on top of the net-take home wage of workers¹⁸ and all add up to the labor costs incurred by the employers. As shown in the recent survey done by Viet Nam Chamber of Commerce and Industry, the economy largest umbrella employers' organization, a 10 per cent increase in the minimum wage would trigger a 15 per cent increase in the total labor costs. For an SME with 200 workers, for example, it would cost it US\$ 74,000 more per year and make the bottom line really thin as the labor costs account for 50 - 60 per cent of the total production costs of a CMT manufacturer. The apparel industry is considered as a footloose industry as it is more prone to reallocation if its workers become expensive and scarce (Abrar, 2012). It should be noted that at the moment the human resources of Viet Nam is still relatively cheaper than the key competitors, especially China, and the shift of FDI in apparel production is working in favor of Viet Nam. The negative effect of this movement on SMEs is that with the influx of FDI into the economy's apparel industry and the current sector-wide shortage of labor it would become even more challenging for SMEs to retain their workforce in competition with the FDI companies which have relatively larger financial resources.

In addition to the minimum wage policy, the most sensitive legal provisions and policies for the textile and apparel sector include the articles on overtime, women workers, trade union, freedom of association and collective bargaining. The maximum number of overtime hours is 300 hours per year, 30 hours per month and 4 hours per day. The ceiling level is too low and the breakdown of the overtime provision by month and day is too rigid to allow companies working more intensively on urgent delivery deadlines, which are common for the sector. Women are the majority in the textile and apparel labor force and women workers in Viet Nam has up to six

¹⁸ By laws, the employers contribute 24 per cent, consisting of 2 per cent union fee, 18 per cent social insurance, 3% health insurance and 1% unemployment insurance. The workers contribute 10.5 per cent, consisting of 8 per cent social insurance, 1.5 per cent health insurance and 1 per cent unemployment insurance.

months of maternity leave, a longer time than most economies in the world. It creates a lot of disturbances and troubles in getting replacements, adapting them to the production lines, and terminating them later on when the key workers return to job. When integrating into the global value chains, Vietnamese textile and apparel manufacturers have to meet the international labor standards, among which the workers' rights to organize or unorganize in trade unions and to get engaged in collective bargaining agreements (CBAs) are fundamental. However, in the current Trade Union Law of Viet Nam, there is only one trade union and every enterprise with 10 employees or more has to organize their workers under that trade union. This is obviously against the rule of freedom. The textile and apparel SMEs, therefore, are in the dilemma of either breaking the domestic laws or non-conforming to the labor standards that international buyers are engaged to. Obviously under the TPP and upcoming FTAs, such laws and policies of the economy need going through comprehensive review and radical amendment to align with the international labor standards, which are part of Viet Nam's commitment under the FTAs.

3.2.3. Domestic specific policies relating to the textile and apparel sector and SMEs

In February 2013, the Vietnamese Prime Minister approved the plan of restructuring the Viet Nam Textile and Apparel Group (VINATEX), the State-owned giant in the textile and apparel sector, for the period of 2013-2015. The goal is to ensure that VINATEX will focus on the core manufacturing and trading areas. On this basis, the supply chain of fiber - weaving - dyeing - CMT was formed to enhance value addition, business efficiency and competitiveness of VINATEX, contributing to social - economic development. The parent company of VINATEX was demanded by the Prime Minister to carry out the initial public offering in the stock exchange in 2014. After that, from 2013 to 2015 it has to disinvest 100 per cent of capital from 37 companies which are not in the core business area, such as investment, banking, security and education. The Ministry of Trade and Industry has to make a specific plan and roadmap to make sure VINATEX completes the disinvestment by 2015. These measures are expected to make a large amount of capital ready for investment in the upstream production of textiles and supporting industries and develop more solid domestic sources of inputs, from which SMEs can also benefit. In addition, in February 2014, the Prime Minister signed the Decision No. 288/QĐ-TTg about funding the training of human resources for Viet Nam's apparel industry through the Group. Accordingly, VND65.6 billion will be funded from the State budget in 2014 to support the training of human resources for the whole sector.

Although there are not any pro-SME policies in the textile and apparel sector, they are covered by the general SME promotion policies. According to the Decree 56/2009/ND-CP on assistance for SMEs development, SMEs are defined as enterprises that have no more than 300 employees in agriculture, industry and construction sectors, and less than 100 employees in commerce and services. However, since the textile and apparel industries are characterized by large number of workers, the medium size of SMEs would go up to 4,999 workers. This is the official cut-off level that the General Statistics Office uses in all official surveys and statistics. It is obvious that the Decree 56/2009/ND-CP provides for a too small size of business compared to the common size in the export-oriented textile and apparel sector. Even if the Decree offers specific support to SMEs in eight areas, we doubt that any SMEs which participate in the textile and apparel global value chains are eligible for any of the support¹⁹:

In 2015, the Viet Nam Chamber of Commerce and Industry and the Ministry of Planning and

¹⁹ financial supports with SMEs guarantee funds, SMEs development funds, land tax and taxation incentives; land and public services access; technical supports on information access, renovation and technology transfer, management training and consulting; trade and investment promotion; start-ups and SMEs incubators development.

Investment jointly prepared and proposed a draft of the SME Law. The version will be considered for approval by the National Assembly in July 2016 according to its publicized regular meeting schedule. If the Law comes into force, it will be a big improvement of the previous SMEs supporting policies and hopefully give a lot of practical incentives for start-ups and SMEs development.

3.3. Domestic trade policies and regulations

Among the domestic trade policies and regulations, the provision of the Taxation Management Law issued in 2006 on 275-day import duties deferred payment is the most welcomed by the textile and apparel manufacturers. Pursuant to this Law when an enterprise imports materials for production of products for export it has a “deferred period” of up to 275 days to manufacture and export the products and clear up the import customs declaration without paying the import duties. As the majority of inputs for production of the textile and apparel exports are imported and SMEs have limited financial resources to cover the associated costs, this policy greatly reduces the cash flow pressure on the small and medium-sized textile and apparel manufacturers and facilitates a higher level of participation in the global markets. The renewal of the provision in the 2012 amendment of the Taxation Management Law one more time confirms the commitment of the National Assembly and the Government of Viet Nam to ensure an enabling environment for the economy’s export-oriented industries and SMEs, including those engaged in the global value chains in the textile and apparel sector.

Also related to removing barriers to trade, the customs procedure reform that started in 2005 with the Government’s Decision on pilot of the electronic customs clearance procedure was highly appreciated by the textile and apparel SMEs. As the goods imported and exported by the textile and apparel sector were among the first categories that enjoyed the new procedures and the pilot started with Hai Phong and Ho Chi Minh City where the largest ports for imports and exports of textile and apparel inputs and finished products are located, it was convenient for the sector from the first days of the pilot. Now as the electronic customs clearance procedures have been made nationwide and universal for all companies since January 2013, the textile and apparel SMEs noted in the survey and interviews that the time and costs they spent on clearing the goods has been enormously decreased, adding to business efficiency and capacity to meet the delivery deadline of the buyers. In this way, the policy has a positive impact on improving the competitive edge of Vietnamese textile and apparel SMEs in the international markets and promoting their integration in the global value chains.

Unfortunately most other domestic trade policies and regulations have been perceived as creating more difficulties for textile and apparel companies in general, for SMEs in particular. They include the Ministry of Industry and Trade’s regulations on special licenses, which are over-complicated and cover many unnecessary licenses for the textile and apparel industries, among other sectors; and the Ministry of Agriculture and Rural Development’s regulations on phytosanitary certificates, which are based on too high and inappropriate standards to import feathers, fur and leather for apparel manufacturing. Relating to importation of machine and equipment, the printing machines for the textile and apparel SMEs are subject to the same standards as the printing machines for press and advertisement sector, as imposed by Ministry of Science and Technology. This regulation is commonly deemed to be too high for the textile and apparel sector. Manufacturing uniforms also requires a special license, and the large potential contracts of Vietnamese SMEs to produce military uniforms for export have been wiped off by the Ministry of Defense’s objection, based on the excuse that there would be a risk for the domestic security if the factories cannot control the inventory of finished products and

the anti-government forces can steal them. In general, beside some facilitating trade policies, the domestic trade regulatory framework needs to be reviewed to make sure unreasonable barriers is removed if more integration of SMEs into the global value chains in the textile and apparel industries is to be promoted.

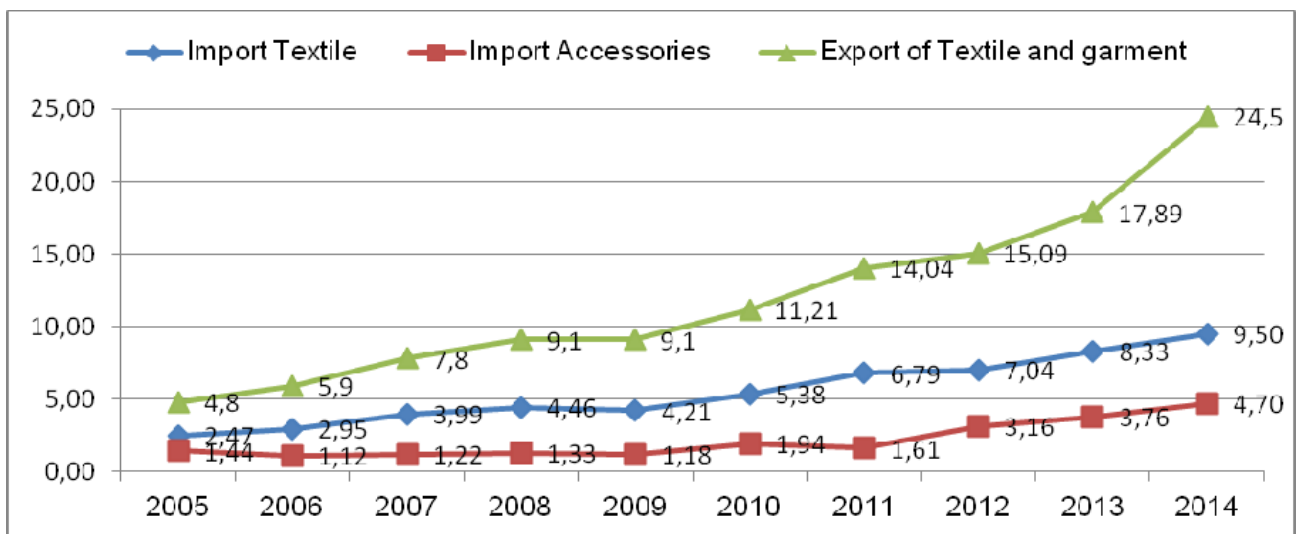
4. The main barriers for Vietnamese SMEs to integrate in the textile and apparel global value chains

Due to the nature and characteristic of SMEs, joining the global value chains could bring about many challenges. Based on the survey data and in-depth interviews with VITAS and typical SMEs, the main challenges to SMEs include i) dependence on imported fabric and accessories, ii) labor skills shortage, and iii) lack of horizontal and vertical linkages in the value chains. Each challenge will be discussed below.

4.1. Dependence on imported fabric and accessories

This is not just the case of SMEs but also of most Vietnamese textile and apparel enterprises since the majority of fabric and accessories come from foreign suppliers.

Figure 9. Value of textile and apparel export versus fabrics and accessories import
Billion US\$



Source: GSO, 2005 - 2014

There is an upward trend of both imported fabric and accessories corresponding to the rapid increase of textile and apparel export during the 2005- 2014 period as shown in Figure 9. If in 2005 Viet Nam imported fabric for roughly US\$ 2.47 billion and accessories for nearly US\$1.44 billion then in 2014 both figures have risen sharply to US\$9.5 billion and US\$4.7 billion respectively. According to the Customs of Viet Nam, in the first 11 months of 2015, the value of fabric imported is roughly US\$9.3 billion, 8.3 per cent higher than the same period of 2014 (Viet Nam Customs, 2015).

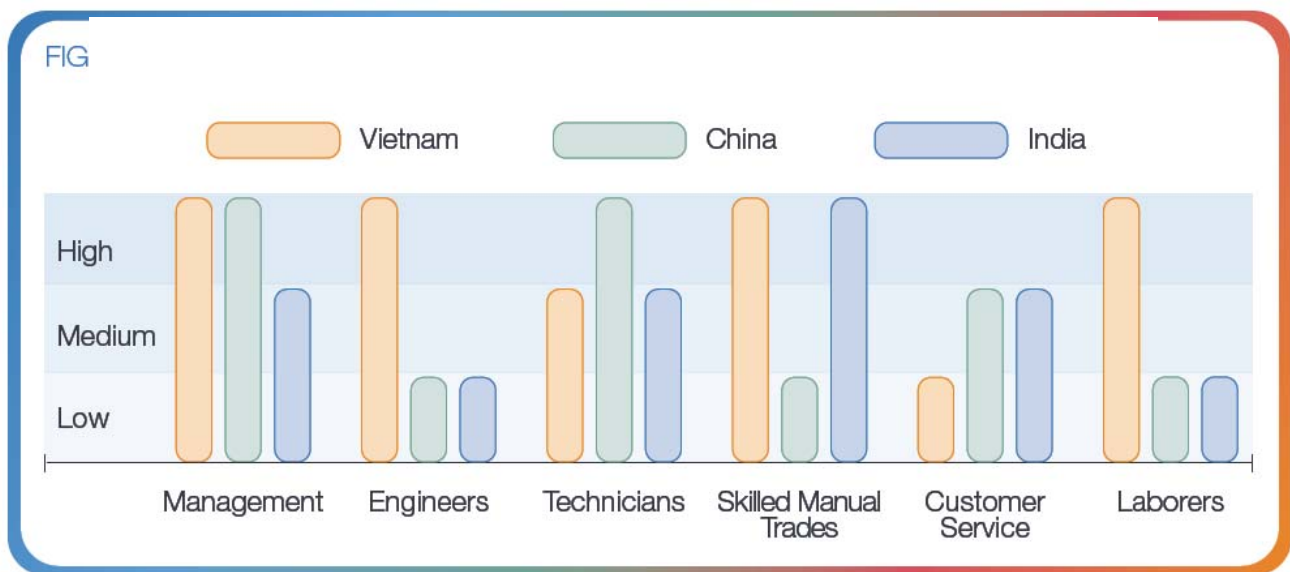
The key reason for the heavy dependence on foreign sources of fabric and accessories is that the technology and manufacturing capacity of foreign manufacturers is much more advanced than that of domestic manufacturers. The difference is not only in volume, quality and diversity

of fabric and accessories but also in cooperation and responsibility of suppliers. Unattractive and inconsistent policies of the government have so far failed to attract sufficient upstream investment from the private sector.

4.2. Labor skills shortage

There is a shortage of skilled labor in the textile and apparel industries. In the management positions, Viet Nam and China have a high level of shortage while India has just a medium level of shortage. It presents a serious problem for the sector since it needs experienced management to accomplish the newly approved projects. The skills shortage persists at a high level with engineers, skilled manual trades and general laborers in Vietnamese textile and apparel SMEs compared to the low rate of shortage in China. Therefore, there is a huge demand for high and middle-level management training. Beside, new recruitment of engineers and skilled manual trades or training courses on such skills are also required by large projects such as of Hoa Khanh, Pho Noi, Nam Dinh, Yarn Dyed Across Asia. The only job that Vietnamese textile and apparent SMEs are not worried about is the customer service staff. Viet Nam has a low level of shortage in customer service positions, compared to the low or medium levels in China and India (VINATEX, Annual report 2014).

Figure 10. Viet Nam skill shortage compared to China and India



Source: ILSSA/Manpower Group Survey

BOX 2. SKILL LABOR - THE BIGGEST ISSUE OF BINH MINH COMPANY

Binh Minh is a small company that has just moved out of sub-contracting, but is found very potential in foreign markets with very high demand and good market prices. But the biggest challenge is the lack of skilled worker, since there is very strong competition among textile and apparel manufacturers. In addition, labor discipline is also a big problem, workers easily quit job or come late to work, especially after Tet holidays when a large number of workers do not get back to work. So the company has to recruit and train new workers on a frequent basis. It takes much time, but more seriously the company cannot deliver the orders on time.

4.3. Lack of horizontal and vertical linkages in the value chain

There is still a lack of the horizontal linkages among enterprises and SMEs in the same value chain step. For example, those enterprises which have the larger manufacturing contract than their production capacity may outsource to the sub-contracted SMEs. Another common case is when a large enterprise has not used up the working capacity of machines in the production lines, they can lend the free hours to SMEs. This service from expensive equipment, which require large amount of investment such as feather processing machines, would be very useful for SMEs who often lack of large capital to make investment. In reality, SMEs hardly receive such cooperation to complete their orders. Lack of vertical linkages between companies in different value chain steps such as weaving and dyeing, weaving and sewing...) is also widespread, as specified by VITAS and companies participating in the survey. Currently, it is not common that one enterprise can do all the steps in value chain. Instead, they are more often specialized in one step only. Although a few enterprises such as Thanh Cong, August 8th and Nam Dinh have recently started to manufacture in some steps of the value chain, it is not feasible for SMEs due to their limited resources. (VINATEX Annual report 2014).

5. Business cases on Vietnamese SMEs' integration in the textile and apparel global value chains

This part presents some real business cases to illustrate the challenges and strategies that Vietnamese SMEs have in integration in the global value chains in the textile and apparel sector. They have been developed based on in-depth interviews with the companies' CEOs, companies' online information and data provided through survey. The names and contacts are released with the permission of the companies.

5.1. Bianco Levrin - The special strategy to penetrate the world market

Sao Thai Duong Company Limited was established in 1997 in Ha Noi, the capital city of Viet Nam, by the designer couple My An and Riccardo. This was a small-sized apparel company with about ten full-time employees. From the first days, the founders chose to develop and sell under the company's own brand name Bianco Levrin. This strategic choice was based on a thorough analysis of the top three apparel import markets in the world. The founders realized that there was a niche market of medium to high-end boutique shops that sold specially designed collections to consumers in Europe and the U.S. The final customers were usually persons with medium to high income, and they had very special taste about fashion to look delicate and unique. They were willing to pay a high price for the product and did not mind taking special care of clothing to look good every day. Therefore, the boutiques shops also had a special way of sourcing. They went to international apparel and clothing trade shows, fairs and exhibitions to look for designers' collections rather than going for mass-produced apparel products. Although the boutique shops were willing to pay a higher price for the products, too, it was never an easy market. The wholesalers must have very strong design capacity so that they could catch up with the changing trends and colors of the fashion world and offer two collections every year.



Sao Thai Duong Company had very good design capacity as both founders were professional designers and they designed both clothes and accessories. This was the first comparative

advantage over other apparel manufacturers in Viet Nam. My An and Riccardo also realized that to be successful in the capitals of the fashion world, they needed something more special. They defined it with texture. The designers always used hand-made silk for the spring-summer collections and velvet for the fall-winter collections. Both textures were perceived by the world to be traditional, silk for Viet Nam, and velvet for China. They also used 100 per cent of Mother of Pearl buttons from Viet Nam and other hand-made traditional components. However, the contemporary design, patterns and colors blended with the traditional materials gave the coordinated collection of clothing and accessories the unique delicacy that the high-end market desired. This is a very different taste from other Viet Nam-based designers. Following the traditional long dress “ao dai” of Viet Nam, they tend to design very tight forms which looked nice only on model-like bodies without convenience for daily use. Therefore, the Vietnamese collections often looked good in fashion shows, but did not sell abroad. My An and Bianco spent a lot of efforts researching the styles and measurements of the Western markets and went on another direction - delicate clothing and accessories with special textures and practical usefulness.

The third comparative advantage of the company was quality workforce. Although the company had only ten regular staff members, it maintained a network of satellite manufacturers with hundreds of high-skilled weavers and seamstresses. The techniques used for natural silk and velvet were very difficult and mastering it gave the workforce a big advantage. The customer service staff was another pride of Bianco Levrin. They provided “detailed with care” services and joy in the company’s shops, where friends are clients and where clients have become friends”.

Sao Thai Duong brought two collections to prestigious fashion trade fairs and exhibitions in Paris, London, Milan or the United States every year. The SME selected the destination based on the market focus for the year. It was very hard during the first time, and the company had to wait a couple of years before it was invited to come to the fair on its own, not in a joint booth with another designer. It also took some time for the designer to find out the tastes of the target markets and created well-selling collections.

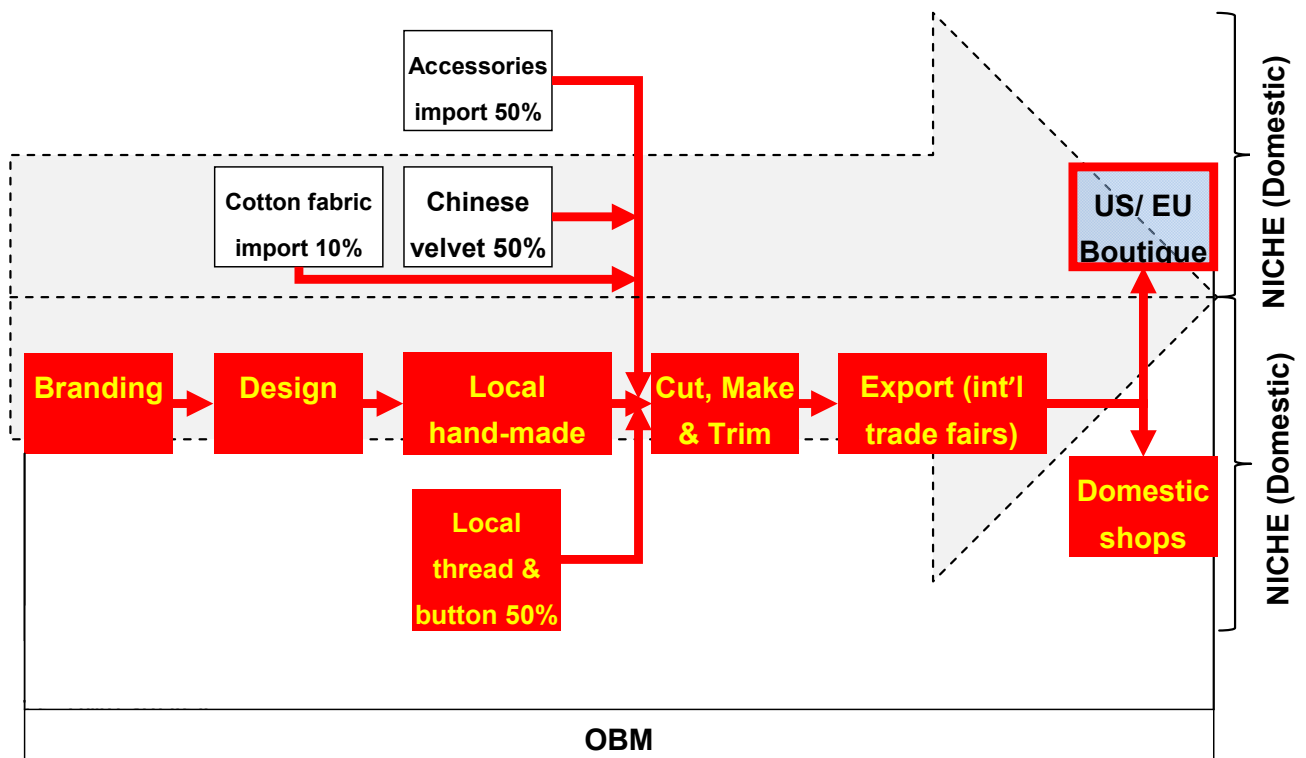
In the input market the company faced a lot of challenges in the supply of fabric. Vietnamese hand-made silk weavers often had technical issues in dyeing. Colors were not always consistent and some red and pink shades may even fade away. The company had to repeat a lot of trial-and-error with the suppliers before they could produce more consistent quality. The weavers often made delivery late since they had to do dyeing again and again until they produced the satisfactory level. On top of that, the fabric market in Viet Nam did not have the medium quality silk with medium price for more affordable apparel products, so it was difficult to expand to this segment for a wider clientele. The Chinese market posed another type of challenge. One could not purchase small quantities that the designers needed for the first collection they brought to the trade fair. The smallest size of order should be thousands of square meters for each color and each collection needed at least 2 - 3 colors. Therefore, a relatively large amount of cash would be tied up or even lost if the color did not sell later on.

In such context, the company decided to persistently market under its own brand Bianco Levrin through the boutique channel. Such factors as the unique design, high skills of workers, special natural texture would altogether support the high-end image and quality and add value. It took orders from boutiques at the international fashion trade fairs for the desired sizes and colors, manufactured in Viet Nam and made delivery within a few weeks. The company also maintained

its own shop and showroom in Milano, Italy, and a network of agents in other key markets. It helped promote the brand to high-end consumers in the largest fashion centers in the world, and thus increase the demand for the boutiques that source from the company. As it also serve as a base to deliver to the clients the distance between the manufacturing location and the key markets was eliminated and close linkages with clients maintained. Women’s apparel and accessories manufactured by the company were sold to the final consumers under the brand Bianco Levrin without being re-branded by the retailers. In this very special business set up, the company successfully moved along the global value chain and fill in every high value adding stage, from upstream to downstream, as depicted in the Figure 11.

At the same time the company sold to the domestic market about one-third of its production. The target customers were foreigners living in Viet Nam, mainly diplomats and business people, and Vietnamese with high income and international fashion taste. The boutique and showroom in Ha Noi, Viet Nam, marketed the collections and offered clients high quality tailoring service. Although this was not the key market, it served as a strong back up for the SME during hard time in the international markets, especially since 2010 when the economic downturn swept through the world of fashion and devastatingly undermined the purchasing power of the high-end markets. The positioning in Viet Nam was also high-end and contemporary, and thus completely consistent with the positioning in the global value chain. As stated by the brand on its website, by “...bring the wonders of different cultures together...”, Bianco Levrin created and manufactured success “...on the road from Milano to Hanoi through local markets and exhibitions, master weavers and fashion gurus, a glass of Bellini and a cup of lotus tea”.

Figure 11. Vietnamese OBM company in the apparel global value chain



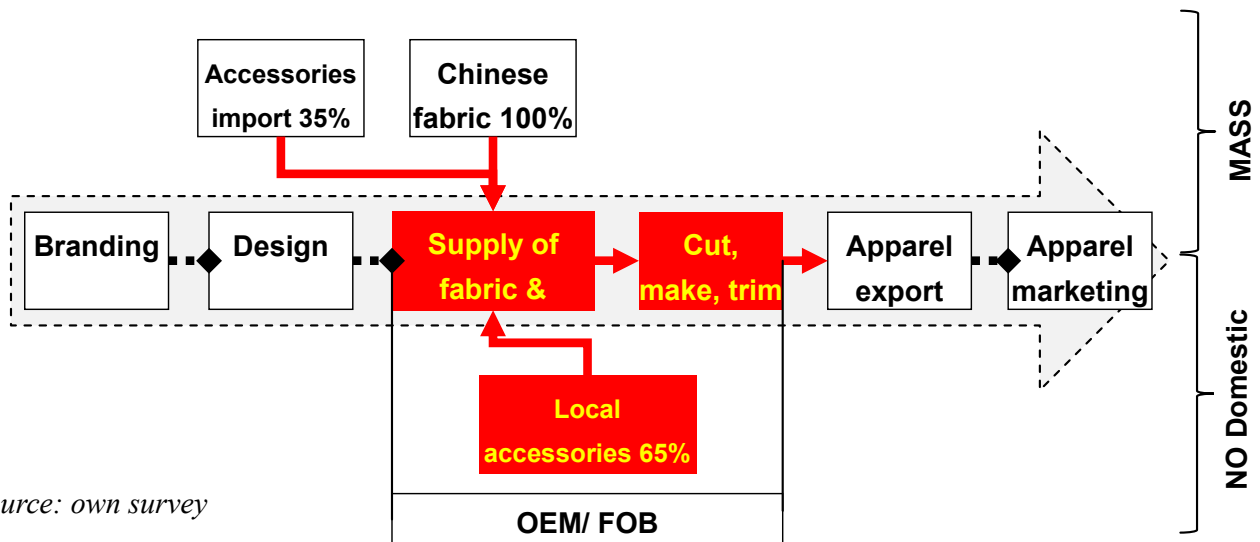
Source: own survey

5.2. TBT Hai Duong - The choice and barriers to a Vietnamese OEM/ FOB manufacturer in increasing integration in the global value chain

TBT Apparel Company Limited was incorporated in 2007 in Hai Duong, a province with dynamic economic development in the Red River Delta, North of Viet Nam. It is a medium-sized company with about 250 workers and US\$ 1 million of capital. It produces women’s apparel and the key market is the United States, with a small volume of production exported to Korea.

From the very beginning, the company made a strategic choice to become a FOB manufacturer so that it could add more value to the apparel products through material supply and design. It analyzed the CMT modality and realized that this modality was based on the labor costs and exposed to lowering profit margin as the wage increased every year while the CMT price could not be increased. It was a more challenging alternative for the company during the first period, since it had little experience and limited financial sources and took time to prepare the workforce to become more active in sourcing inputs as well as to build relationship with suppliers to purchase on credit. The issues related to material supply improved after some time, but the company also had to face more competition. So far, TBT Apparel has successfully developed into the input supply step of the value chain, as presented in Figure 12.

Figure 12. Vietnamese OEM/ FOB company in the apparel global value chain



Source: own survey

The company has to order all chiffon, the key type of fabric for production, from China. Viet Nam can only supply some knitted fabric and has not yet been able to produce any chiffon. The company also has to import most of the accessories for decoration in the women’s apparel products. Only a limited variety of accessories is available in the domestic market and the price is often uncompetitive with the other supply market. Among the challenges for getting benefits from the upcoming FTAs, TBT Apparel particularly cites the urgent need for domestic inputs or connection to the supply sources from another TPP economy in replacement of China, which is not joining the TPP.

As the company has proved to be effective in purchasing quality inputs the buyers are confident to let it provide all from the suppliers it identifies right now. However, TBT Apparel wants to gradually upgrade to full own sourcing since as an SME it takes some time to consolidate the supplier network, improve skills of their staff and prepare financial sources. The access to credit in Viet Nam is rather complicated and time-consuming, especially for SMEs. It involves tons

of paperwork and very difficult collateral requirements. The appraisal process is often too long and companies are exposed to the high risk of missing business opportunities due to delayed transactions. Although the interest rate is quite affordable such a credit policy prevents SMEs from moving towards production modalities with higher potential for value addition that require flexible cashflow and large investment.

On top of that the buyers of TBT Apparel want it to offer a CIF (Cost, Insurance and Freight) or LDP (landed duty paid) price instead of FOB (free-on-board). At the moment, TBP Apparel is quoting FOB Haiphong Port, Viet Nam, and the shippers are also designated by the buyers, too. The company is trying its best to meet the buyers' demand. However, it needs some time to find reliable service providers as so far Vietnamese shipping and forwarding services have not been very well developed. This is another barrier that prevents Vietnamese SMEs and the local textile and apparel industries in general from integrating more in the global value chains. TBT Apparel recognizes both positive and negative impact of the changing trade and investment environment on Vietnamese apparel SMEs for the last few years. Since 2008 the demand of the global market was weakening due to the economic downturn, but the level of order moving from China to Viet Nam was increasing. The reason is that the labor costs in China are on a rise. But more importantly, the buyers are moving to Viet Nam to check in advance the production capacity of the local manufacturers in view of the upcoming TPP. This is a big challenge since they require more advanced technologies which imply large investment. It happened that the domestic credit policy was tightened in 2008 and 2011, when the company invested in expansion. Based on very good connections with the banks, TBT Apparel was able to take short-term loans, so that it could spare own capital for investment in the long-term fixed assets. The company was most concerned about the high interest rate for the long-term loan and collateral for the short-term loans, as the bank accepted only the value of land use, not buildings on the land, for security. It is not appropriate for the SME, which needs about US\$ 1 million per month for working capital. There is a credit guarantee scheme but it has the same collateral requirements and a higher guarantee fee. So it is, too, not feasible for companies. There are not yet any adaptive credit facilities to the needs of SMEs in textile and apparel export. Without the backup of the local credit policy, TBT Apparel has to re-negotiate with the suppliers for the 60-day deferred payment term and incurs higher material costs. However, the company CEO thinks that it should first rely on the reputation and many years of business relationship with the suppliers rather than waiting for the Government to improve the enabling policy environment. The company also noted big improvements in the customs procedure reform which much shortened the time for customs clearance of their imports and exports. The tax procedures have been simplified, too, but the frequency of checking has been increased so the effectiveness of public governance is not much improved for SMEs.

TBT Apparel plans to double both turnover and employment by the next year to get ready for the increasing opportunities. For this purpose, the most useful policies of the Government is to promote linkages between domestic SME manufacturers and foreign importers and suppliers through the system of the commercial attaché abroad, as well as linkages among companies working in various steps of the value chain inside the economy (weaving/ knitting, dyeing/ finish, apparel production, logistics...). It would be best to put in place a transparent and comprehensive information system for convenient use of the companies. APEC can have a big role coordinating this process among the member economies to develop a comprehensive system of APEC textile and apparel directory, manuals and handbooks to guide SMEs toward the global value chains. The business-to-business (B2B) forum is also useful if organized in the same value chain, for example, input suppliers and textile and apparel companies, apparel

manufacturers and apparel importers and retailers, apparel contractors and brands. In this way APEC can speed up the process of linking SMEs to international companies, especially MNCs, to better integrate in the global value chains.

6. Conclusion and policy recommendations

6.1. Conclusion

In Viet Nam the three key industries of spinning, textile and apparel production are loosely linked together in the global value chain. While the apparel industry is well developed, the spinning and textile industries are rather under-developed. Therefore most of the key inputs have to be sourced outside the economy. Viet Nam imports about 6 billion square meters of fabric, 700,000 tons of fiber and 600,000 tons of cotton, valued at approximately US\$ 11 billion per year. Although Viet Nam is one of the top six out of the 153 apparel exporting economies in world, it basically works in Cut, Make and Trim, the lowest value added step in the midstream part of the global value chain. It is difficult to move upstream due to the under-development of the supporting industries and the skill shortage in R&D and design; it has almost nothing downstream due to the lack of market intelligence, connection and investment overseas.

Small and medium-sized enterprises are making an outweighing number in the Viet Nam textile and apparel sector. However, the participation of the textile SMEs in the global value chain is almost zero and the participation of the apparel SMEs is limited. Similar to the general situation of the whole sector, Vietnamese apparel SMEs are concentrated in the production networks in the middle of the global value chain. They mainly work as the CMT manufacturers, and in many cases as even as the sub-contractors for other Vietnamese or Asian apparel contractors. Some SMEs have tried to upgrade to the OEM/ FOB modality. However, the low local content ratio and the lack of design capacity keep value addition at a low level and SMEs earn nothing but the labor costs. Moreover, it is actually the medium-sized enterprises that participate in the global value chain, not SMEs in general. Small-sized enterprises should have a special strategy to penetrate the global market. Some Vietnamese small companies have worked out their own way to do branding, design, export and marketing through the niche market, and thus successfully expand the value addition range by moving both upstream and downstream the global value chain.

Vietnamese SMEs face three key challenges in participation in the global value chains. The first one is related to the serious shortage of local inputs leading to heavy dependence imported fabric and accessories. The second is labor; this is a group of issues including the skills shortage in every step of the value chain and the frequently changing domestic labor policies. The third one is the lack of horizontal and vertical linkages among SMEs, between SMEs and large companies, between the FDI and the domestic sectors, between different industries and steps along the value chain.

The strategies and policies of the Government of Viet Nam are inconsistent in promoting the integration of SMEs into the global value chain in the textile and apparel sector. The signing of the major FTAs such as the U.S.-Viet Nam BTA, WTO Accession Agreement, AKFTA in the past have triggered the rapid growth of textile and apparel export from Viet Nam and facilitated more and more SME's participation in the apparel global value chain. They help to reduce or to remove the tariffs barriers among the participating economies and level off the playing field for Vietnamese SMEs and companies in general.

Regarding the domestic trade policies, the customs procedure reform and the policy on import duty deferment have removed some key barriers to SMEs and apparel manufacturers in importing

and exporting of materials and products to the world market. However, the other domestic policies do not work in the same direction. SMEs are exposed to all sort of complicated and inappropriate special licenses, overly high standards and requirements imposed by ministries, which add to costs and time of transaction and in some cases complete shut down the opportunity. In the investment field, Vietnamese textile and apparel SMEs have serious difficulties from the frequent changes in labor, land use and water treatment policies. Foreign investors enjoy more priorities and benefits from the FDI promotion policies than Vietnamese investors have from the domestic investment promotion policies. Although the Government has the so-called “Policy for Development of Supporting Industries”, including those for the textile and apparel sector since 2013, the policy is still on paper and no effective measures have been taken in reality up to now.

Viet Nam has committed to new FTAs with the European Union and the TPP. Both will come into force in 2018. They are expected to once more time boost the economy’s textile and apparel sector and SMEs would again have the golden chance to further integrate into the global value chain. However, the challenges are big since the new FTAs employ strict rule of origin from fabric or even fiber. In this context, it is vital for Viet Nam to develop new sources of materials and fabric in replacement of those from China, which is not eligible under the new FTAs. It require huge efforts from both the private sector on adapting their business strategies and the Government on making more enabling business environment for investment in the local spinning, textile and supporting industries.

6.2. Recommendations

In order to further promote the integration of SMEs in the textile and apparel global value chain it is vital that the private sector and the government should first work together. APEC can support this process by providing the policy advice to the government of Viet Nam and other economies linked in the value chains. Technical assistance and cooperation activities among APEC members are also important for the private sector and this is where APEC can play the facilitative and coordinating role.

6.2.1. Recommendations to SMEs and the private sector

SMEs should

- Make efforts to explore the key apparel importing markets, analyze their supply chain and marketing channels to identify the appropriate market segments and build a proper strategy to enter the chain.
- Proactively seek to build linkages with MNCs and large enterprises and find out their needs and gaps in textile and apparel production to develop appropriate products and services.
- Improve the communication and working skills to better work with international customers and global markets.
- Learn about the upcoming FTAs and adapt their business to the opportunities and challenges created under the FTAs.

Business associations, especially VITAS, VCOSA, VCCI and SME associations, foreign business associations with a lot of members working the textile and apparel sector, should

- Carry out activities and services to share information about members and facilitate exchange, relationship and linkages between SMEs and other enterprises.
- Update information on the upcoming FTAs, analyze their requirements and exceptions and organize training and dissemination to members and SMEs.
- Collect information and map the domestic supply of fabric, inputs and accessories and supporting industries for textile and apparel production. Try to collect and verify information from abroad on sources of materials and inputs, with a focus on eligible economies under the

new FTAs.

- Coordinate input sourcing and trade promotion activities of member companies and SMEs.
- Coordinate investment and linkages between member companies in the textile production and supporting industries.

6.2.2. Recommendations to the Government of Viet Nam

Investment

- Review and improve policies to attract domestic and foreign investment in the upstream industries, especially weaving, dyeing and finishing. They are the bottom neck of the textile and apparel sector in Viet Nam. Make sure policies and implementation at the domestic and provincial levels are aligned and consistent.
- Improve the master plan to make it feasible and appropriate for textile investment. Land availability, land use fee and environmental standards should be the focus.
- Invest in a model of supporting industry development, including financing, adequate infrastructure and environmental treatment facilities. It will serve as the role model for private investment.
- Review procedures and paperwork to improve access to credit by textile and apparel SMEs. The focus should be to simplify the collateral requirements and to shorten the appraisal time.
- Facilitate linkages between SMEs and FDI companies, especially the multinational enterprises, through regular activities of the provincial and regional networks, industrial park management boards, business associations as well as focus programs and industry exhibitions.
- Make policies to promote expansion into the domestic market. This will be a building block to increase apparel exports under OEM and other modality with higher value addition potential.

Trade

- Analyze the requirements and exceptions of the upcoming FTAs, especially VEFTA and TPP, and train SMEs, private sector and business associations.
- Support mapping of domestic supply of various types of fabric and key inputs for which rule of origin will be applied under the new FTAs. Identify which eligible economies Viet Nam can source from and for what type of inputs. Develop a database for SMEs and apparel manufacturers.
- For the moment, speed up translation and dissemination of the newly committed FTAs, specifically VEFTA and TPP, to the private sector. In the future representatives of the private sector, especially from the textile and apparel industries, should be involved in negotiation of FTAs, together with government negotiators.
- Review policies and procedures related to trade, import and export to identify problems, barriers and inconsistencies and remove them. Special licenses and add-on requirements should be simplified and removed as much as possible.
- Support SMEs in trade promotion activities.

Labor and human resource development

- Link the policy on wage increase to productivity and revise the formula to calculate minimum wage, social insurance, health insurance and unemployment insurance.
- Consider amending the Labor Code and related legal provisions to allow more room for negotiation between employers and employees rather than fixing by law. The most important provisions for the textile and apparel sector include overtime, women workers, trade union,

freedom of association and collective bargaining.

- Upgrade the human resource quality through improving the quality of curriculum, teachers, training and practice at design, textile and apparel technology university faculties, colleges and vocational training schools. Link them to appropriate training and labor supply policies for the textile and apparel sector.
- Expand the labor force through incorporating proper career guidance in the secondary school curriculum to remove the ill attitude against becoming a “low-profile worker”, especially among the rural population.
- Build the domestic design capacity by supporting more specialization in design training, creating innovation incubators, supporting Vietnamese designers’ participation in the international fashion trade fairs and facilitating exchange and learning between domestic and international designers through Viet Nam Fashion Weeks.

6.2.3. Recommendations to APEC

Useful interventions for the private sector can be to

- Provide technical and capacity building support to SMEs in terms of training, exchange of experience, study tours, discussion forum... Preparation of manuals or handbooks would be practical to guide SMEs through integration in the textile and apparel global value chain.
- Support business linkages, building of connections among SMEs and companies in the textile and apparel sector from the member economies. This can be done in the form of workshops, seminars, forum, dialogues ... between, for example, input suppliers and textile and apparel companies, apparel manufacturers and apparel importers and retailers, apparel contractors and brands.
- Support data collection and information sharing among companies of the member economies which are involved in different steps of the global value chains. For example, APEC can help prepare and disseminate the lists of SMEs and textile and apparel companies, suppliers of fiber, fabric and accessories, importers and retailers. Ideally, a database or directory will be developed and shared online or offline.
- For larger impact it is useful to train resource trainers from the member economies so that they can replicate the activities at home.

For governments of the member economies APEC should

- Organize experience sharing among the member economies on how to address the issue of low value addition in the global value chain. The specific topics can be how to move from production to higher value adding steps of the value chain, how to move from CMT to OEM/ FOB, how to build the full package service and provide total supply chain solutions to customers, how to do branding for SMEs. The intervention should aim first at policy makers and the business associations so that the impact can become wider. If resource trainers are developed, they will be helpful in expanding this intervention.
- Give policy advice and experience sharing to the governments on policy implementation. The most useful areas of implementation include the model of textile and supporting industry development, including financing; raising the local content or regional content ratio; experience in building textile and apparel clusters; experience in strengthening the linkage between the FDI and the domestic sector, between SMEs and MNCs.
- Support and coordinate data collection and information sharing among member economies about companies involved in different steps of the global value chains. Each economy can provide the lists of SMEs and textile and apparel companies, suppliers of fiber, fabric and accessories, importers and retailers and APEC coordinate to build up a regional database or directory.

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