Providing an Attractive Business Environment: The Competitiveness of Lao Garment Industry in the Global Value Chain after the Multi-Fiber Arrangement Termination

by

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Declaration of Origin

I, SILAPHET Korrakoon declare that this thesis titled “Providing an Attractive Business Environment: The Competitiveness of Lao Garment Industry in the Global Value Chain after the Multi-Fiber Arrangement Termination” which is submitted for the degree of Master of Science in International Cooperation Policy, is my original work and research with the supervision and guidance of Prof. NATSUDA Kaoru. All secondary data and information, especially the researches, legal documents, data as well as publications used in this thesis have already been cited and acknowledged with the appropriated referencing method.

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Acronyms and Abbreviations

AEC	ASEAN Economic Community
ALGI	Association of the Lao Garment Industry
ASEAN	Association of the South-East Asian Nations
ATC	Agreement on Textiles and Clothing
CMT	Cut, Make, and Trim
CO	Certificate of Origins
DIMEX	Department of Import and Export
EBA	Everything But Arms
EU	European Union
FOB	Free On Board
GSP	Generalized System of Preferences
GVC	Global Value Chain theory
HS	Harmonized System of UN Trade Classification
ISO	International Standard Organization
ITC	International Trade Centre
JICA	Japan International Cooperation Agency
JV	Joint Venture
Lao PDR	Lao People's Democratic Republic
LDC	Least Developed Countries
LNCCI	Lao National Chamber of Commerce and Industry

LSB	Lao Statistics Bureau
MDG	Millennium Development Goals
MFA	Multi-Fiber Arrangement
MOIC	Ministry of Industry and Commerce
MPI	Ministry of Planning and Investment
NEM	New Economic Mechanism
NSC	National Statistics Centre
NTR	Normal Trade Relations
OT	Overtime
ROO	Rule of Origins
SA	Social Accountability
UNCTAD	United Nations Conference for Trade and Development
UNIDO	United Nations Industrial Development Organization
UNDP-RCC	United Nations Development Programme Asia Pacific Regional Centre in Colombo
US	United States
WTO	World Trade Organization

Abstract

Since implementing the NEM in 1986, the economy of Lao PDR has grown, especially in manufacturing, which includes food and beverages, garments, and wood processing as the major sub-sectors. The garment industry has been growing due to a favorable international business environment, and has been able to receive countrywide quotas under the Multi-Fiber Arrangement (MFA) since the 1990s. However, there were several discussions on the possible matters of this critical industry after phasing out the MFA, especially for the small garment producers who are far from the global market and would fail in terms of market share. In Lao PDR, questions have also been raised on the competitive power in a global market with powerful competitors after MFA period. But the result of MFA has not affected the Lao garment industry much due to Lao PDR having relatively low labor cost and GSP, especially when compared with the EU; some trade partners, such as the US and Japan, provide a lower tariff rate, and duty and quota are free to Lao PDR in terms of garment products. Therefore, the average exports for this product increased about 6% per year (2005-2013) with the increasing of employment. However, the share of exports for this industry was small compared to the total exports from Lao PDR, due to the fact that mining and hydropower have played an important role in the economy, including exports. Even though the Lao garment industry is small compared to others, it has still grown and increased. Moreover, there was more investment in the garment industry in Lao PDR after the MFA (since 2005). Thus, the

motivation of this study is to find out its competitiveness and the challenges of the industry as, these relate to the industry's sustainability.

This research examines the basis of the competitiveness of the Lao garment industry based on a survey of 30 firms (respondents) and found that the - this competitiveness is due to the relatively low labor cost and the GSP-EBA from major markets. The most significant challenges to the garment industry are labor shortages, because the export-oriented garment firms are mostly located only in the capital city, and the workers usually go back to their home towns for helping their family during harvesting season. In addition, Lao workers will move to Thailand for working after Lao PDR implements the obligation of AEC starting from 2015. Some more challenges are the high turnover rate and the geographic issue that leads to a high transportation cost and long lead-time.

In the case of the sustainability, the Lao export-oriented garment industry could possibly be sustained if the country could keep its main competitiveness and improve or address the challenges mentioned above. However, this research also found some good signs in terms of improvements in the garment industry in Lao PDR, such as the garment firms have changed their processing modality to use higher value-added activities (e.g., more FOB, including FOB-1 and FOB-2 in processing) compared to previous times. Besides that, Lao garment export-oriented firms also have more markets than just the EU, such as the US, Canada, Japan, etc. If Lao PDR

graduates from the LDC list, it will still have a market for garment products. However, the EU also provides a generous transition period of three years. So, it will help to mitigate the possible trade flow shocks, and the garment firms in Lao PDR will have time for adapting. Furthermore, as most of the investment companies are foreign companies that could attract more investment in Lao PDR, it would encourage domestic enterprises to diversify the base of the Lao garment industry.

The garment firms in Lao PDR were mostly established after the MFA period because of low labor cost with the rate of 0.216 USD per hour. Besides that, Lao PDR, similar to other LDCs, is eligible to receive the GSP from the EU. Moreover since 2005, Lao PDR has gotten an additional special treatment for value content cumulation. This means that all producers could import raw materials and accessories for production from the ASEAN, and the produced garment products will be automatically counted as local content. Moreover, the government will also grant incentives related to profit tax to the promoted sectors with tax exemption for a period of 1-4 years, to commence from the first commercial operational date with the favorable condition of resettling the production places from Thailand to Lao PDR. This is because Thailand is not in the LDC's list, so it would not benefit from the EU.

Keywords: Lao PDR, Garment Industry, Global Value Chain, Competitiveness, Multi-Fiber Arrangement.

Chapter 1. Introduction

1.1. Statement of Problem

Lao People Democratic Republic (Lao PDR), which has been on the list of least developed countries,(LDCs), is located in Southeast Asia. Lao PDR has many challenges in terms of country development, such as the commitment to achieve the Millennium Development Goals (MDGs) in 2015; in addition, Lao PDR has to prepare itself for possible changes after it becomes an ASEAN Economic Community (AEC) Member in 2015 and to graduate from the Least Developed Countries (LDC) by 2020. To meet the challenges above, the Lao People Revolution Party and the Lao government have initiated modernized and industrialized directions for national socioeconomic development (MPI, Lao PDR, 2010).

The Lao government reformed its policy in 1986, and called it the "New Economic Mechanism (NEM)". This policy was intended to renovate the economy from the central- based plan to a market-oriented base by decontrolling prices and liberalizing trade and investment. Since implementing the NEM, the economy of Lao PDR has grown, especially in manufacturing, which includes food and beverages, garments, and wood processing as the major sub-sectors (MPI, Lao PDR, 2005).

Since1986, the Lao garment industry has grown due to low labor costs under a favorable international business environment, including imposing country-wide quotas under the Multi-Fiber Arrangement (MFA)[1] as shown in the increasing number of garment factories - from only two garment factories in 1990 to 55 export-oriented factories and 31 subcontractors throughout the country in 2003 (NSC and UNDP-RCC, 2007), and the employment of almost 30,000 workers in 2003 (Sakurai & Ogawa, 2006). Moreover, garment exports continued to increase and reached greater than 145 million U.S dollars, or around 1/3 of the total trade export of the country, in 2005 (VIXATHEP, 2011); however, the market share is small compared to neighboring countries such as Thailand, Vietnam and China (NSC and UNDP-RCC, 2007)

However, there were several discussions on the possible matters of this critical industry after the industry faced the effects from the phasing out of the Multi-fiber Arrangement, which several countries faced[2]. Besides that, China and India have been predicted to benefit from the termination of MFA while the small garment producers, especially those who are far from the global market, would fail in terms of

[1] The MFA was started in 1974, and it was gradually terminated from 1995 and ended in 2004 by the world textile and garment industry. This arrangement aimed to provide safeguard for the textile and garment industry in developed countries because of the competition of developing countries, which normally appreciate comparative advantages in garment and textile production due to their abundance of labor (Nordås, 2004).

[2] The limited garment export quotas to the WTO member countries were eradicated. It meant that the allocated export quotas for individual developing countries would also be ended (Sakurai & Ogawa, 2006).

market share (Nordås, 2004)[3]. For Lao PDR, some issues were raised (1) The garment industry in Lao PDR would not be a competitive power in the global market especially, with powerful competitors after MFA period (JICA, 1998). (2) Lao garment industry would be in the '*loser' Category* after MFA terminated, because most of the Lao garment companies are manufacturing-oriented companies. They are mainly receiving orders from buyers' agents and providing them with manufacturing orders from their sewing capacities (UNIDO, 2003)[4]. However, (3) it would be an opportunity for Lao garment exports after the termination of MFA, because the export quotas of garment products to World Trade Organization (WTO) member countries were ended; also, serious challenges would be raised in the new competitive environment, and thus even survival is challenged (Sakurai & Ogawa, 2006). Recently, research also revealed that (4) the Lao garment industry will not preserve a significant existence if the institutional and firm-level do not improve the technological capabilities in cases where developed countries withdraw the preferences and trade privileges provided (Rasiah, 2009.b). Conversely, according to Lao statistical data from 1990-2012, the Lao garment industry is still growing if compared to the production quantity before and after MFA period (see figure 1.1). Furthermore, the garment industry is like the vehicle or mechanism that numerous countries, particularly the developing countries, normally use to originate export-led growth in manufacturing (Natsuda, K., Goto, K., & Thoburn, J, 2010); while the Lao

[3] http://www.wto.org/english/res_e/booksp_e/discussion_papers5_e.pdf. Accessed on January 15, 2015
[4] http://www.unido.org/fileadmin/user_media/Publications/Pub_free/Lao_PDR_medium_term_strategy_and_action_plan_for_industrial_development.pdf

government will also attempt to revive the garment industry (MPI, Lao PDR, 2010)[5] in order for it to become export-friendly and support the '*employment-export-income distribution nexus*' (United Nation, 2011)[6] which could be a key contributor to economic development, job creation and poverty alleviation

1.2. Objectives of the Research

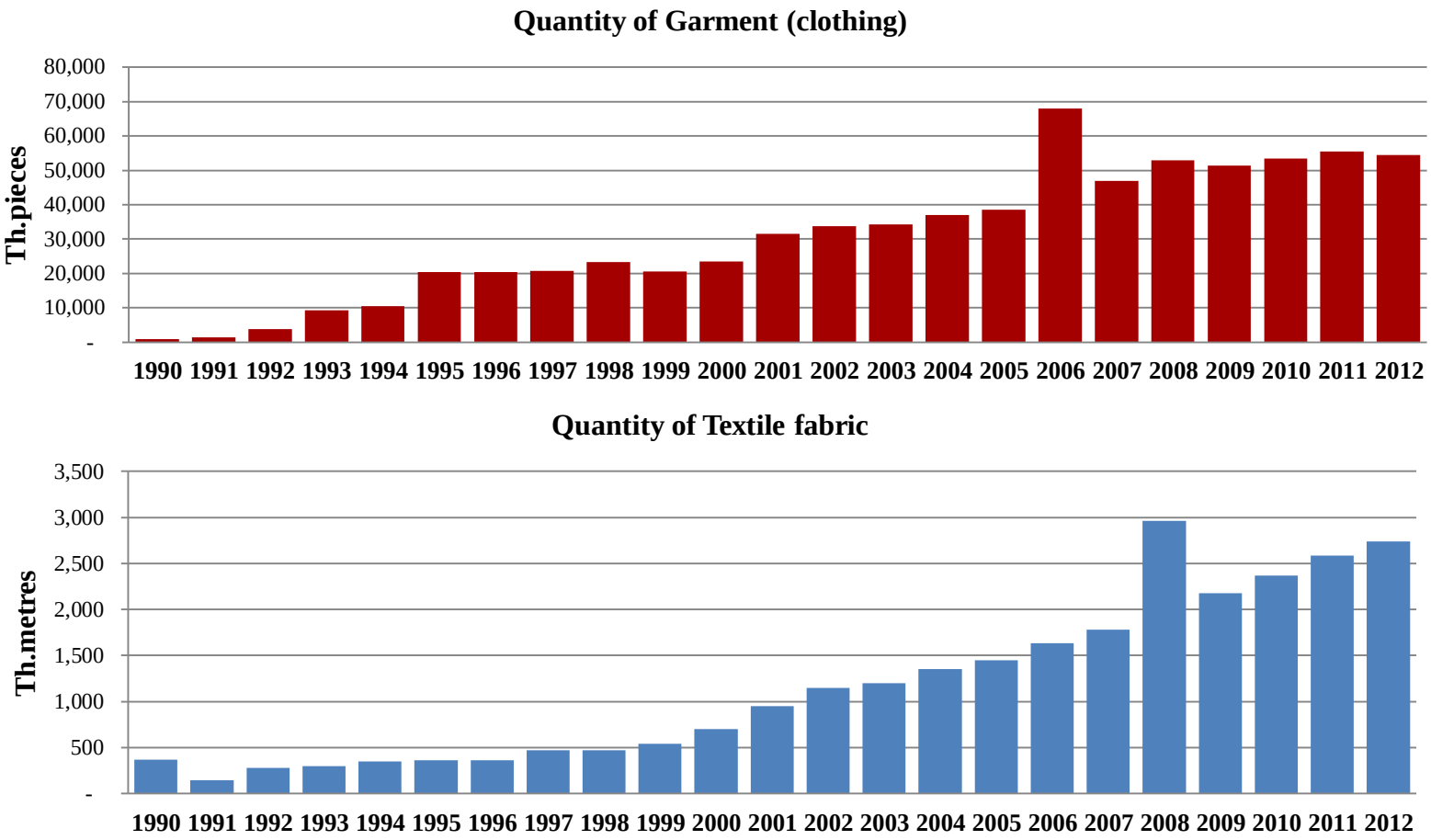
This paper is interested in examining the competitiveness of Lao export-oriented garment industry after MFA period, especially the sustainability of the garment industry in the future, due to the many pressures that surround the industry and unpredictable conditions. This research tries to provide some recommendations and suggestions to policy and decision-makers in terms of providing an attractive business environment for entrepreneurs, particularly in the garment industry.

1.3. Research Questions

From the objectives above, the developed questions for researching will be as follows:

[5] As defined in the Seventh Five-Year National Socio-Economic Development Plan (NSEDP 2011-2015), the government focuses on garment industry and promotes agriculture (MPI, Lao PDR, 2010).
[6] http://www.un.org/wcm/webdav/site/ldc/shared/Laos%20PDR.pdf

Figure1. 1. Production of Garment and Textile, 1990-2012



Source: Statistical Yearbook, 1990-2012, Lao Statistic Bureau, Ministry of Planning and Investment, Lao PDR

1. What is the competitiveness of Lao PRD's export-oriented garment industry based on after the MFA period?
2. What are the challenges in the Lao garment export-oriented garment industry?
3. Can the export-oriented garment industry in Lao PDR sustain its competitiveness in the future?
4. Why have firms been investing in the garment industry of Lao PDR after the termination of MFA?

1.4. Significances of the Research

The results of this research will positively benefit the garment industry at the global level as well as the Lao garment industry. This kind of research has rarely appeared in previous literature, especially in the of Lao PDR's competiveness in the global value chain after the MFA period. Hence, the findings of this research will be entirely unique. Moreover, this research will be evidence as information for other countries who are interested in Lao PDR, especially who are thinking about investing or who currently are investing in Lao PDR in this sector, particularly in the international business environment. Besides that, after figuring out the challenges in the garment industry, the policy and decision-makers will have a vibrant visualization with regards to the garment industry in Lao PDR, which will support the development of proper policies, adopt relevant regulations, or implement any related intervention. Lastly, the study tries to pinpoint the potential markets for the Lao garment industry by looking at the research results that come from the

garment industry survey and the garment industry. Also, the garment firms in Lao PDR will have very useful information for improving their businesses.

1.5. Research's Scope and Limitation

This research will focus only in Vientiane Capital city, where the center of businesses, investment and enterprises are located, so it will not consist of garment companies in the country overall; however, Vientiane Capital city is the place where the garment factories are most densely concentrated. Also, most of the analysis is based on the findings from the survey. In some cases, company representatives such as accountants, production managers, and human resource managers were nominated to fill in the questionnaires and were interviewed, which may affect some of the responses.

1.6. Definitions

This thesis will use some important terms, which are needed in order to make a clear understanding of the concepts and phenomenon used in the research.

Garment Industry is a kind of manufacturing industry, which is a labor-intensive industry that produces whole products of cloth or garment, textile, and accessories; in addition, this industry also includes the marketing, supply chain, and trading works which are related to textile, and garment products, and accessories. This industry has moved to and operated in many countries and it is also a basic step to industrialization for some countries. Normally, the laborers used or workers in this industry are women.

Totally Foreign Firm is a firm entirely owned by foreign investors, and it can be either a single or a group of investors in the firm in Lao PDR.

Joint Venture Firm is a firm that is a joint investment between domestic and foreign investors who conduct business operations, share ownership and establish a new legal entity under the laws of Lao PDR. The organization and activities, management, rights and obligations of investors of the joint venture are defined in a joint venture agreement. Foreign investors in the joint venture shall contribute at least ten percent of total capital as defined in the Law on the Investment Promotion in the Lao PDR[7].

Lao Owned Firm is a firm entirely owned by domestic (Lao) investors, and it can be either a single or a group of investors in the firm in Lao PDR.

Competitiveness is the ability to provide products and services as, or more, efficiently than the relevant competitors. It is also the ability of the nation's firms to achieve sustained success against or compared to the foreign competitors. In the context of MFA termination, notions of competitiveness are valued for doing research as an evidence for improving the business environment within the country as well as economic development.

[7] The third edition, 2009. As Ref No: 02/NA, issued dated on July 8th, 2009. The Investment Promotion Department, Ministry of Planning and Investment.

1.7. Research Structure

This research consists of five chapters. The introduction and background of the study will be described in Chapter 1 (Introduction). The theoretical framework and the way to conduct the research will be described in Chapter 2 (The literature review and methodology). The overall view of the Lao economy and issues related to the Lao garment development will be described in Chapter 3 (An overview of the Lao Economy and its Garment Industry in the World Economy). The research findings, especially the competitiveness of the garment industry of Lao PDR, will be described in Chapter 4 (Lao PDR's Competitiveness in the Global Garment Value chain). Finally, Chapter 5 will conclude with all research issues by providing some suggestions and recommendations for the policy-makers and planners.

Chapter 2. Literature Review and Methodology

This chapter discusses the key literature, particularly the theoretical framework of the Global Value Chain theory (GVC) that is applied in the research, to examine the competitiveness and find the challenges of Lao export-oriented garment industry. The methodology section will provide details for the whole procedure of this research, especially how the research has been carried out and analyzed.

2.1. Literature Review

2.1.1. Theoretical Framework: Global Value Chain (GVC)

The study will follow the global value chain theory, which was developed by Gary Gereffi (1999). It initially consisted of three important approaches. (1) The Value Chain Concept by Michael E. Porter, is a concept that focuses on value-added activities through the consecutive and unified arrangement of economic activities (Porter, 1990 and Henderson et al., 2000). (2) The French filière (or chain) approach is the second, which started in the 1960s and applied to contract farming and vertical integration in France; it fit very well for French agricultural policy during and since colonial times. The approach emphasizes the agricultural commodity chains from local production to consumption (Raikes, Jensen, & Ponte, 2011). (3) The third is the world–system theory by Immanuel Wallerstein, which focuses on how a classified commodity chain is arranged by pinpointing performers and activities through rapidly internationalizing the division of labor and multiple cultural systems (Wallerstein, 1974; Hopkins and Wallerstein, 1986 and Bair,

2005). GVC is interested in understanding the full range of activities from the product to its end use and beyond, which includes activities from designing, producing, marketing, distributing and supporting the final consumer (Global Value Chains Initiative, 2014). The GVC consists of four dimensions: the first is an input-output structure, which identifies the process of changing raw materials to become the finished goods; the second considers geographical concerns; the third is a governance structure, which describes how the value chain is controlled; and the fourth is the institutional context in which the industry value chain is rooted (Gereffi,1995).

In Global Value Chains, there are two important chains: (1) buyer-driven chain and (2) producer-driven chain. The buyer-driven chain discusses the industries that have large retailers, branded marketers, and branded manufacturers and demonstrate the essential roles in initiating decentralized production networks in a multiplicity of exporting countries. This chain commonly depends on labor-intensive activities such as garments, footwear, toys, housewares, consumer electronics, and a variety of handicrafts. The producer-driven chain relies on the technology and capital-intensive industries such as automobiles, aircraft, computers, semiconductors and heavy machinery. It involves several firms (i.e., the headquarters (parent firms), branches (subsidiaries) and subcontracted firms) (Gereffi, 1994 &1999).

The major players of the garment industry are global buyers and traders. They play a very important role in the global value chain. The leading global buyers usually set up

their own offices in the corresponding countries and cooperate with their international traders; for example, if in Asia, they are usually in East Asian areas such as Hong Kong, Taiwan and Korea, which have well-established garment manufacturing companies (Natsuda, K., Goto, K., & Thoburn, J, 2010). This is called a "Triangular Manufacturing" pattern where global buyers hold enormous power to stimulate the garment market (Gereffi, 1999). In addition, the buyers normally have a favor in sourcing from their favorite dealers in any country (Nadvi & Thoburn, 2004). These companies produce their products in different developing countries with lower wages and plenty of labor supply, such as Cambodia, Vietnam and Bangladesh. The production process is made by their own investment or enterprise, such as foreign direct investment, joint venture or contracted manufactures (Natsuda, K., Goto, K., & Thoburn, J, 2010).

In global value chains, one crucial aspect is relevant to 'Industrial Upgrading'. It assists the local producers by executing guidance and supporting the technology and finance from the international buyers in order to improve and develop the modality on producing, thereby assisting them to achieve constancy and high quality (Humphrey & Schmitz, 2002). Thus, the international buyers show a very significant role in industrial upgrading. Besides, firms can also be upgraded by joining the GVC, as well as by increasing the manufacturing efficiency, increasing their competiveness, and concentrating on more value-added activities (Kaplinsky & Morris, 2001; Humphrey & Schmitz, 2002; GOTO, 2013). Particularly, the garment firms can possibly upgrade in the following areas:

- *Process Upgrading* by implementing and building the effectiveness in renovating input to output within its process by applying modern technology and production system.
- *Product Upgrading* by improving old products or developing new products.
- *Functional Upgrading* by acquiring new functions through a shift from lower to higher value-added activities.
- *Inter-sectoral Upgrading,* which can work from using knowledge obtained in the proper chain function to move into different sectors (Humphrey & Schmitz, 2002; Schmits, 2006).

Moreover, there are four levels of producing garment products, called 'functional upgrading', such as: Cut, Make and Trim (CMT), Free on Board-1 (FOB-1), Free on Board-2 (FOB-2), and Free on Board-3 (FOB-3)[8].

- *CMT* is the lowest value-added process in producing garment products, because the buyers/traders will provide all materials to local producers; after that, the local producers will do the CMT procession.
- *FOB-1* includes a greater value-added process while the local producers are responsible in intermediate materials and production; however, the FOB-1 still will not yet determine the highest value-added activity in garment production.

[8] CMT, FOB-1, FOB-2, FOB-3 are corresponding to Original Equipment Assembly (OEA), Original Equipment Manufacturer (OEM), Original Design Manufacture (ODM), and Original Brand Manufacture (OBM) respectively in the electronics and technological products (Yusuf, 2004).

- *FOB-2* is a greater value-added process because it acts as the entire production process, including materials sourcing, designing, and production at all levels.
- *FOB-3* is the highest value-added process since it is a perfect process, including arrangement of marketing and branding.

Therefore, FOB-3 is conceded as the highest value-added process, which can provide a complete garment to buyer and traders.

2.1.2. Previous Studies on Lao Garment Industry

The garment industry is a significant manufacturing industry in Lao PDR in terms of generating benefits from foreign exchange and creating jobs opportunities (employment) as well as economy boosting and poverty reduction. However, particularly in the case of Lao PDR garment industry, this industry has limited studies at a well-respected level, so this thesis will try to summarize the most related literatures, especially from Banomyong & Beresford (2001), NSC and UNDP-RCC (2007), VIXATHEP (2011), Rasiah (2009.a) and Rasiah (2009.b). The details are as follows:

Regards to the Lao Garment Industry's Competitiveness and Constraints: As reported by NSC and UNDP-RCC (2007), the Lao garment industry has some important constraints such as low productivity, low skills of labor force, and low capital productivity, so we will see that these constraints are related to the production course. Rasiah (2009.a) also expressed some more constraints, such as inefficiency in ports and transportation, weak physical infastructue, and lack of supporting industries. In addition, some related issues also

have to be considered, especially the working environment and compliance issues and access to market information and finance (NSC and UNDP-RCC, 2007 & Rasiah, 2009.a). Consequently, the Lead Time issue is one more constraint for the Lao garment industry due to Lao PDR being surrounded by countries (it is landlocked), as said by Banomyong & Beresford (2001) and NSC and UNDP-RCC (2007). Moreover, VIXATHEP (2011) included some other challenges for the Lao garment industry. For instance, most of the factories are concentred only in the capital city that could see a rise of labor shortage, especially during the farming season, because workers like to go back to their hometown for helping their families in the harvest. At the same time, the relatively low labor cost is the most significant factor for competitiveness as reported by NSC and UNDP-RCC (2007:35-36). Lastly, after the MFA and since the safeguards on China was terminated in 2008, the garment firms in Lao PDR have more hope in their businesses (VIXATHEP, 2011 & NSC and UNDP-RCC, 2007).

Regards to Improving and Upgrading: Rasiah (2009.a and 2009.b) said that upgrading and improving technology is a very crucial issue for the Lao garment industry, especially in the technological capability at the firm-level for sustaining the firms' competitiveness. This is consistent with VIXATHEP (2011), because he said that the Lao garment industry is still having a wide gap in efficiency upgrading and production expansion (technological upgrading). However, VIXATHEP (2011) also added more issues related to industrialization and enhancing the garment industry of the country, such as

improving human resources (such as basic skills improvment) and attracting more efficient foreign companies to invest in the country.

2.2. Methodology

This section consists of the whole procession in the thesis, such as how to conduct the research, how to analyze, explain the research design and data sources, including the research instruments and the details of the questionnaire for conducting the survey.

2.2.1. Research Design

Designing the research is an important step in research methodology, because it will tell and guide how to do the research or how the research should be implemented. This research will use both quantitative and qualitative approaches; particularly, the research will use the primary (surveyed) and secondary (official) data and information to answer the research questions.

From reviewing some of the related literatures, the research will look at some macroeconomic factors that will affect the garment industry and are used for evaluating the research. The factors include: labor cost, productivity, interest rate, taxes and duties, exchange rate, infrastructure, international trade policy and economic growth. These kinds of factors try to explain how they could influence the overall garment and textile industry based on the garment firms' directing managers' perspectives, (they are the ones who are running such business/companies in Lao PDR). Besides that, the secondary data of

macroeconomics will be used in terms of economic performance within the country. Nevertheless, an important datum – corruption – will not be used nor considered for analysis in this thesis because there is limited appropriate data and well-respected research conducted for Lao PDR's case.

This thesis uses some constraint criteria, which will be rated or ranked by the firm's owner or managing levels to figure out the garment industry's competitiveness. The criteria consist of increased labor costs, low workers' productivity, technological development, compliance with international labor standards, production capacity, lead time, government policy, law on labor, taxes (high), infrastructure (electricity, water supply, internet, etc.), geographical problems (far from ports), transportation (expensive), labor shortage (include seasonal workers), turnover (labor move to different firms), punctuation of labor, and custom process (import-export clearance). Some of these constraints above are from related studies that have been discussed; however, the main source of constraint factors of the garment industry will mostly rely on the primary data from the field survey.

Therefore, primary data is required to cover all of the possible issues for elaborating the facts and condition of findings. The study will gather the primary data by distributing questionnaire to garment firms, which will be analyzed statistically though different parameters. Besides the survey, in-depth interviews will be conducted to focus deeply on the garment owners or directors. The primary data analyzed will give specific, unique and

usable output to determine the industry's competitiveness after MFA, including the macroeconomic factors of the Lao garment industry.

2.2.2. Data Collection

As mentioned above, the research uses two main sources of data – primary and secondary – of both quantitative and qualitative data types. The quantitative data are a kind of data and information stated in numerical numbers, while the qualitative data is information that clarifies things in categories or qualities. For this research, quantitative data is gathered from trustworthy and variable sources, particularly the Lao Statistics Bureau, Ministry of Planning and Investment, Lao PDR (LSB/MPI); the Association of the Lao Garment Industry (ALGI), and some international organizations such as International Trade Centre and World Trade Organization (ITC/WTO). However, the data from the field survey in the country will be used as the main resource of the research. Besides that, the qualitative data is also employed to comprehend and engender the analysis/findings of the research. The qualitative data has been collected through an in-depth interview approach by using prepared questions. The main relevant respondents are ALGI's director and officers, garment owners, and managing directors who are currently running this business in Lao PDR.

2.2.3. Research Instrument and Data Analysis

Research Instrument refers to the tool for calculating and evaluating a certain phenomenon, especially using the '*Average Value'* to find the level of affection and level of

constraints – 'LA' (see formula below), in order to accomplish the valid and reliable information that will be applied to figure out the competitiveness in the garment industry.

$$LA = \frac{\sum(\sum_{i=1}^{5} X_i * w_i)}{\sum(\sum_{i=1}^{5} X_i)}$$

X_i : Importance/Ranking number in each level

w_i : Level of importance/rating (weight)

i : 1, 2, 3, 4, 5 (Lowest is 1 and Highest is 5)

Data Analysis: This thesis uses appropriate statistical software as a tool in order to gather and summarize all data and information from the fieldwork (all analysis will be presented in the 4th chapter). The descriptive and different statistics are the methods used for analyzing the following details:

1. Descriptive Statistics is used to present the basic information of garment firms (i.e., ownership, producing modality, employment number, capitals for both establishment time and current time, export markets, sources of materials, etc.). Moreover, this type of statistics will use charts and diagrams to present data collected from the field survey.
2. Differential Statistics from estimation; particularly, the average value (mean) is applied to present the level of affection and level of constraints in macroeconomic factors, as well as constraints criteria to the garment industry – especially for the ranking/ranging format questions.

2.2.4. Use of Primary Data

In this research, the primary data was collected over the survey by using the prepared questionnaire. The questionnaire was prepared and developed in a thorough manner in order to gather all necessary data and information, particularly those related to the competitiveness of the Lao garment industry after MFA termination. The choice of a questionnaire for the survey was made because of the reasons below:

1. The questionnaire is a simple and apparent method for gathering information from respondents. Therefore, it is as popular as data collection in statistical works or agencies. It is convenient for getting the required data and information in a limited time. In addition, the respondents could answer and fill the questionnaire form in the convenience of their own time. This thesis issued a questionnaire form with four sections: (1) general information, (2) background of the firms, (3) impact of MFA, and (4) firms' opinion on the impact to the garment industry. So, the necessary information regarding the mentioned sections is collected in reasonable time.
2. Questionnaires can be distributed to the respondents directly without anyone being physically present, so the respondents will not be disturbed during their working time.
3. The questionnaire survey is more convenient in terms of summarizing and analyzing than other forms of survey.

2.2.5. Sample Size and Target Respondents

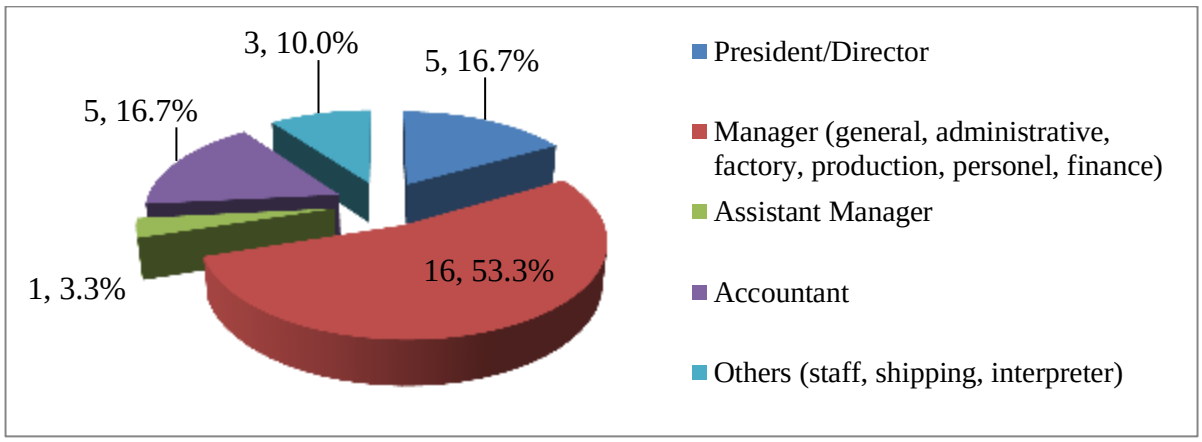
As mentioned in chapter 1, the garment export-oriented factories in Lao PDR numbered 55, and sub-contracted factories numbered 31, in 2003; however, the researcher was concerned and tried to update the exact number of garment factories, so the researcher officially contacted and consulted with ALGI through the Lao National Chamber of Commerce and Industry (LNCCI) for acquiring the updated data and information during the field survey in Lao PDR. As reported from ALGI in 2014, the total garment factories in Lao PDR are 107 factories; of this, 61 factories are export-oriented and 46 factories are subcontracted[9]. For the export-oriented factories, 3 factories among them are located in provincial areas and 58 factories are located in Vientiane.

As this research is mainly focused only in Vientiane, the total population (garment factory) is 58 factories. After that, calculating the sample number was made statistically to achieve a sample number of 50 with a 95% confidence level. Thus, by using the Systematic Sampling approach, 50 garment firms have been selected and 50 sets of questionnaire forms were officially sent to the garment export-oriented factories in Vientiane. However, conducting a survey is usually tough work, so this thesis had a total of 30 factories – or respondents (equal to 60% of total respondents, or about 52% of the total population of garment factories in Vientiane). The research's target respondents from the garment firms were the decision-makers or persons responsible for executing the decision. The survey

[9] The information was reported by AGLI Office, Lao PDR during field research in August 2014.

found that 73.3% of respondents are in the executional level of decision-making[10] (see Figure 2.2). Therefore, it can strongly expect that the provided data from respondents is believable and truthful as to understand the actual condition of the Lao garment industry after the MFA termination.

Figure 2. 1. Number and Share of Respondents' Position



Source: Field Survey, 2014

2.2.6. Designing the Questionnaire

A clearly designed questionnaire is very important and was taken into account, to give concise and understandable questions. Furthermore, any sensitive questions were not included in the questionnaire for avoiding any uncomfortable responses or empty answers. Moreover, in order to prepare the questionnaire, some matters were taken with full care, such as the following:

[10] Including the president/director, and managers (general, administrative, factory, production, personnel, finance, and assistant managers)

1. Minimizing all possible misunderstandings from the respondents by assuring all the questions used are clear and well explained. This will help the respondents to answer the questions with full understanding. Before conducting the survey, a discussion with statisticians in terms of improving the questionnaire was carried out; furthermore, the questionnaire had been compared with the enterprise survey and economic census' questionnaires, which were used to collect enterprise data officially in Lao PDR. These processes are aimed to ensure questionnaire quality and make sure that the respondents could recognize and be familiar with the given questions.
2. The questions used were made in an appropriate and well-arranged manner. Thus, the respondents can answer straightforwardly and understand logically.
3. The closed questions that were prepared were designed to avoid potentially invalid responses and for getting logical answers. However, opened questions are also used for gathering more ideas and real perspectives from the respondents, which will provide exclusive findings for the research.
4. The ranking questions were prepared to comprehend the significance that is given by the respondents in regards to the garment industry's competitiveness over the macroeconomic factors and constraints that possibly affect the industry in Lao PDR.

2.2.7. Questionnaire Measurement

The questionnaire consisted of two types of questions: Closed Questions and Open Questions. However, the rating format question was also applied for ranking the garment

firm level of competitiveness, the level of macroeconomic factors to the Lao garment industry, and the main constraints to the Lao garment industry. The rating will be from the perspectives of managing levels of the surveyed garment firms.

- Closed Question, including the Split Format Question, is *a list of acceptable responses which is provided to the respondents*[11]. Each choice in the answer list will be assigned a particular number, which will be seen in the database. Then, they will be counted and summarized as the percentage or estimate statistically.
- Open Question *is the acceptable response, which is not provided to the respondent*[12]. This type of question could help in describing more closely the real views of the respondents without any leading answers.
- The ranking format question is used for requesting the respondents to rate a particular criterion by using a scale which ranges by weight from 1 to 5 (See Table 2.1).

Table 2. 1. Criteria of measuring the ranking format questions

Lowest ← → **Highest**				
1	**2**	**3**	**4**	**5**
Lowest	**Very low**	**medium**	**Very high**	**Highest**

[11] For more details, please see the "Survey Research Methods" 2009. 4th edition, by Floyd J.Fowler, Jr. Center for Survey Research, University of Massachusetts, Boston (ISBN 978-1-4129-5841-7).
[12] Same as Footnote 10

2.2.8. Validity and Reliability

In this research, validity and reliability are related. It will be valid and reliable when all questions are explained or measured within the target as defined concepts. Imagine that you are measuring something; you are taking a shot at the target. If you measure the concept perfectly, it means you hit the center of the target. In this thesis, the questions are provided through a form of a questionnaire. All data and information are exactly designed to measure as the researcher needed. Therefore, it can be stated that the questionnaire used met all the requirements of validity.

In addition, the questions' reliability leads to the gathered data's consistency and accuracy from the questionnaire. All the gathered answers should remain the same whatever or whenever we produce any output or answer. Thus, the questionnaire's reliability is important and needs to be undoubtable and logical for the respondents. The questionnaire used in this thesis was organized with full attention and explanation for ensuring the respondents' understanding. And completed questionnaires will be used for analysis to ensure that this thesis uses the accurate data and information. Hence, the primary data employed in this study is reliable and applicable for additional use.

Chapter 3. Overview of the Lao Economy and its Garment Industry in the World Economy

This chapter provides an overall view of the Lao economy and issues related to Lao garment development. In addition, the chapter will provide additional issues of the based-competitiveness of Lao PDR's export-oriented garment industry, especially in the global value chain after the MFA, due to the many questions raised about whether or not the Lao garment industry will survive when faced with the big competitors in the world market (such as China). Besides that, possible stress and problems surround, occur, and affect this business, especially for the LDCs and small countries like Lao PDR, which is located very far from the world market.

3.1. Overview of the Lao Garment Industry

Lao People Democratic Republic (Lao PDR) is the least developed country (LDC) located in Southeast Asia (SEA); however, it is a country that has had a steady economic growth of approximately 7.6% per year in last decade (2003-2013). The growth of the Lao economy was because of the investment in large-scale mining and hydropower projects since 2000 (Bui & Ngonvararath, 2006). The income per capita has increased 15.7% per year; nevertheless it is still low (890 USD per person per year) if compared to other countries in the same region or even on the international level. Lao PDR's economy has changed over time. We can see from its economic structure that it changed from being agricultural-based to industrial-based. Agriculture decreased from 48.1% in 2003 to 23.5% in 2013, while industry increased from 22.7% in 2003 to 33.2% in 2013 (See Table 3.1).

The Lao economy relied and depended on garment exports (NSC and UNDP-RCC, 2007, p.19). The United Nations Conference for Trade and Development (UNCTAD) ranked twenty countries that are dependent on garment exports, and Lao PDR is placed in the middle level; other countries such as Cambodia and Haiti were placed in the highest level of dependence in 2003 (UNCTAD, as cited in Appelbaum, 2005)[13]. At first, there were only two garment factories in 1990, but this has expanded to encompass more in recent times. This is because there are more investments in this industry due to Lao PDR having implemented the NEM in 1986, which entailed a series of reforms to renovate the economy from a central based plan to a market-oriented base (as mentioned in Chapter 1). Furthermore, it became more open to the outside world (MPI, Lao PDR, 2005), as shown in joining both bilateral and multilateral agreements. Thus, the number of garment factories increased to 53 in 2000, 55 in 2003 (NSC and UNDP-RCC, 2007, p.19), and 61 factories by 2014; most of them were foreign direct investment, and the way of production has been improved from relying on only CMT to more FOB, as compared to previous times (reported by ALGI from the field research in Vientiane, August-September 2014). Besides that, the garment subcontractors also increased from 18 factories in the 1990s to 26 subcontractors in 2000, 31 in 2003 (NSC and UNDP-RCC, 2007, p.19), and 46 in 2014 (reported by ALGI from the field research in Vientiane, August-September 2014).

Since 1998, garment exports accounted for between 30%-40% of total export of goods, and it was in the top level of revenue generation for Lao PDR between 1998 and

[13] unctad.org/en/docs/iteiia20051_en.pdf. Retrieved on March 22, 2015

2002; nevertheless, this industry was replaced by electricity and mining (NSC and UNDP-RCC, 2007, p.18), and its exports have increased about 6.7% on average during 2003-2013. This indicates that exports could generate an income of 1.3 times over the period of 2003-2013, or an average of almost 168 million USD per year, as suggested by data from ALGI in 2014 (See Table 3.2).

3.2. Employment

The garment industry is a labor-intensive sector, and it is also a unique industry because most of the developed and newly industrialized countries have taken this industry in their development paths. Moreover, some LDCs used this industry as a step for industrialization, and it could help in creating job opportunities[14] (United Nations, 2007). This could help in alleviating the poverty for the poor, because it can provide regular income to the workers (Waglé, 2005, p.3) and will provide benefit in terms of improving living conditions and education, especially for young women from rural areas.

As mentioned above, since the 1990s the Lao garment industry has started with an increase of factory numbers, so the employment in garment sector has consequently increased – from more than 10,000 people in the 1990s to 26,000 people in 2004 and 28,000 people in 2006; 80% of them were women between 18-25 years old, both from rural and urban areas (NSC and UNDP, 2006, p.48; NSC and UNDP-RCC, 2007, p.20). Particularly from rural areas, 59% of the female laborers were from the northern part, while 26% and 16% were

[14] www.un.org/esa/sustdev/.../industrial_development/full_report.pdf. Retrieved on March 23, 2015

from the southern and central parts, respectively (NSC and UNDP, 2006, p.48). Most of them have low skills because of poor and low education, but they had to leave their hometown because they wanted to earn money for supporting their families; there were no jobs opportunities elsewhere (NSC and UNDP-RCC, 2007). Nevertheless, the main restriction for them is low skills and less education, which could be problematic when they start garment work. As the results from the NSC's survey of 286 workers in garment factories shows, 28% and 21% of them completed only lower secondary and upper secondary schools, respectively; besides that, they have not gone to vocational school and also lack prior skills training, which also relatively contributes to low productivity (NSC and UNDP-RCC, 2007).

3.3. Ownership

From 2007-2012, total foreign investment was more than 15,000 million USD; of this, almost 80% was inflow of foreign capital. More than half of the foreign capital went to the mining, fuel, and hydropower sectors; the agricultural sector accounted for 14%, the service sector (excluding hotels, trade, etc.) 13.8%, and the garment sector only 0.1% (See Figure 3.3 and Table 3.5). However, the garment sector is crucial, because it is related to numerous people, especially the poor from rural areas, and is a pathway to industrialization.

As seen in the NSC survey of 2006, most of the investments into the garment sector were from totally foreign firms, accounting for 48% (21 out of 44 firms); Lao owned firms, as the second largest contributor, accounted for a share of 32% (14 out of 44 firms), and JV

accounted for 20% (9 out of 44 firms) (NSC and UNDP-RCC, 2007, p. 21). Table 3.3 shows the garment ownership as reported by ALGI in 2014. The number of garment firms has increased, and the highest share remains with totally foreign firms, which accounted for 64% (39 out of 61) of total export-oriented garment firms; Lao owned and JV firms together accounted for 36% (11 firms for each out of 61 firms) of total export-oriented garment firms. Besides that, the major countries that invested in the garment sector in Lao PDR for both directed (totally foreign firm) and cooperated (joint venture) with local investors are Japan and Thailand; however, Japan has the highest share in the case of totally foreign firms (See Figure 3.2). The NSC and UNDP-RCC (2007) reports indicate that the totally foreign firms could be attracted more to invest in Lao PDR in terms of the quota-free world market; with the support from both private and public sectors, it would encourage the domestic enterprises to diversify the base of the Lao garment industry (NSC and UNDP-RCC, 2007, p. 21).

3.4. International Trade and the Lao Garment Industry

As mentioned above, after Lao PDR reformed and implemented the NEM in 1986, it became more open to other countries. Lao PDR has been granted some benefits from the trade agreements, especially GSP-EBA from the EU, NTR from the US (NSC and UNDP-RCC cited in Bui & Ngonvararath, 2006), and GSP from Japan (NSC and UNDP-RCC cited in Boutsivongsakd, Chooyong, & Stuart-Smith, 2002).

Box 3. 1. The Generalized System of Preferences (GSP)

The EU's GSP allows developing country exporters to pay less or no duties on their exports to the EU. This gives them vital access to EU markets and contributes to their economic growth. There are three main variants (arrangements):

- *The standard/general GSP arrangement, which offers generous tariff reductions to developing countries. Practically, this means partial or entire removal of tariffs on two thirds of all product categories*
- *The "GSP + Enhanced" preferences mean full removal of tariffs on essentially the same product categories as those covered by the general arrangement. These are granted to countries which ratify and implement international conventions relating to human and labor rights, environment and good governance*
- *Everything but Arms (EBA) arrangement for least developed countries (LDCs), which grant duty-free quota-free access to all products, except for arms and ammunitions*

Source: European Commission, 2014[15]

However, while Lao PDR was provided the "European Union's Generalized System of Preferences (GSP)" in the early 1990s to 1995, it was suspended until 1997. At that time, the GSP from the EU was only a quota provision to Lao PDR. Since 2000, the EU has resumed the GSP for Lao PDR again by granting zero percent import duty; but Lao PDR has to be qualified for the regional accumulation rule for exports of textiles to the EU,

[15] Please see: http://ec.europa.eu/trade/policy/countries-and-regions/development/generalised-scheme-of-preferences/index_en.htm

which relaxes the rule of origins (ROO) conditions and amplifies GSP coverage to Lao exports produced from imported immediate inputs from any ASEAN country (ALGI, 2014, and Bui & Ngonvararath, 2006, p. 42). Moreover, Lao PDR also has received benefits from a GSP scheme called "Everything But Arms (EBA)" since 2002 (Bui & Ngonvararath, 2006, p. 43)[16]. EBA is a GSP arrangement, which automatically provides duty and quota free for all LDCs, including Lao PDR, with no limited time (European Commission, 2014). Information from NSC and UNDP-RCC (2007) indicates that 60% of Lao garment exports to the EU were in the GSP under the ASEAN Cumulation; 10% under the Derogations; and 30% under the non-EBA[17] under the certificates of origins (CO) for textiles – CO White and CO Yellow (NSC and UNDP-RCC, 2007, p. 25).

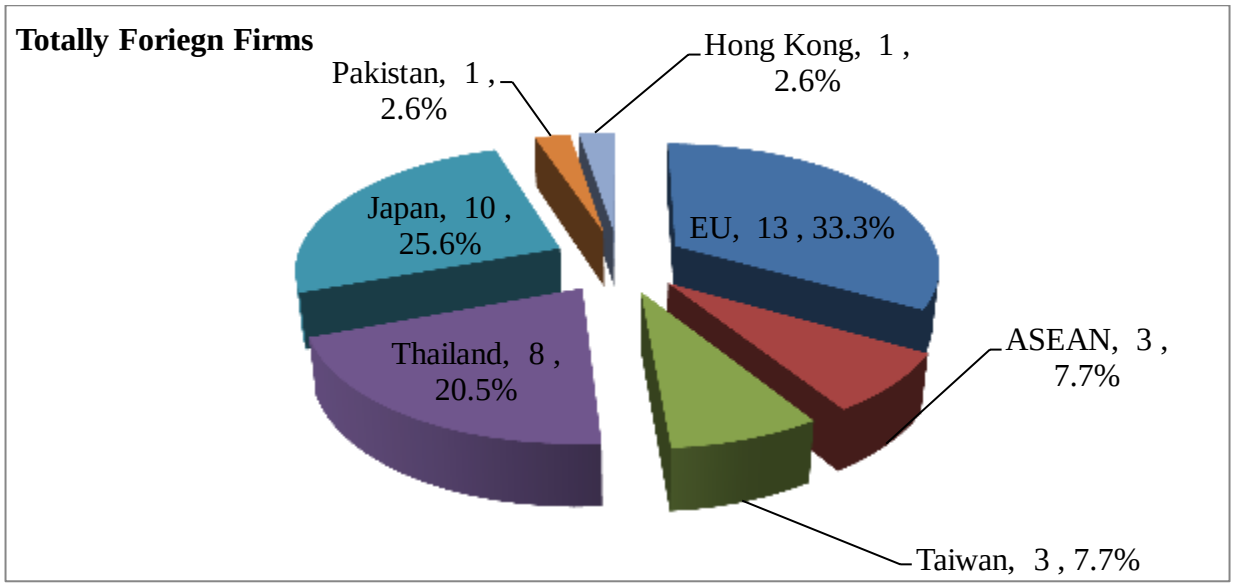
For the Normal Trade Relations (NTR)[18], Lao PDR has been provided this since 2005 from the US by using the Most-Favored Nations (MFN) treatment, which reduced tariffs from 45% to 12.5% on average, particularly for the garment sector; this is the first step to require the GSP from the US[19] (NSC and UNDP-RCC, 2007 cited in Bui & Ngonvararath, 2006). The GSP from Japan is also the same as the GSP from EU in terms of grants (NSC and UNDP-RCC, 2007, p. 28). These support the Lao manufacturing industry, and the garment industry in Lao PDR is also a beneficiary.

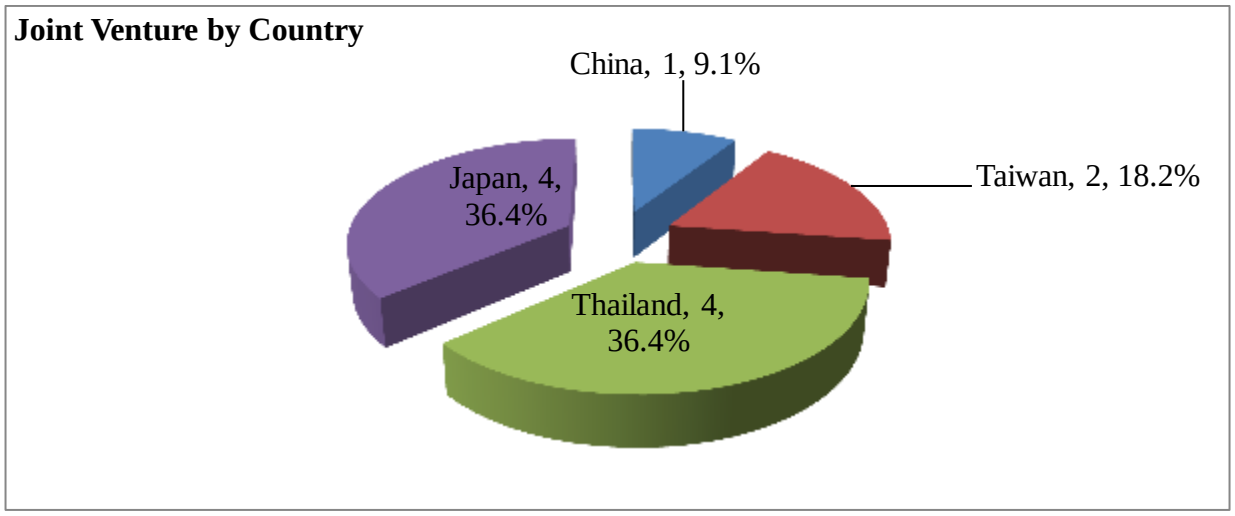
[16] The EU's EBA was born in 2001, which is the most generous form of preferential treatment to LDCs globally, and it encourages all members to follow (European Commission, 2014).
[17] Non-EBA means of general GSP, as clarified by an officer from Ministry of Industry and Commerce, Lao PDR on April 28, 2015
[18] NTR is not a trade preference, so Lao PDR has to compete on an equal footing in the US market with exports from all other WTO member countries (Bui & Ngonvararath, 2006, p. 47)
[19] After Lao PDR becomes a member of the World Trade Organization (WTO), it will negotiate with the US for the GSP, and it is expected that it would help to strengthen Lao garment exports and other exports to US market (NSC and UNDP-RCC, 2007).

Table 3.5 shows the garment exports in the last decade (2003-2013). During this period, the value of exports increased by around 6% per year, or about 221 million USD; however, the share of garment exports is opposite to this value. It slightly decreased in the last decade and accounted for about 20% of the total exports value of Lao PDR annually. According to data from the International Trade Centre (ITC), the major markets and export destinations of the Lao garment industry are the EU, the US and Japan, in that order. The EU shares peaked at around 92% of total garment exports (GE) during 2003-2005. Its shares decreased to between 76% and 90% during 2006-2013 due to more countries investing in this industry than previously; for instance, Japan's shares went from less than 1% during 2003-2005 to 11.4% in 2013. For the US, GE increased from less than 3% during 2003-2005 to higher than 3% to 14% during 2006-2013 (See Table 3.5). However, the garment export share has decreased since 2005 because of the mining and hydropower sectors, which have played a very important role in the Lao economy since 2003. For example, only for the investment in the mining sector, the number of foreign companies increased from 19 to 28; at the same time, there were 31 Lao companies investing. And in 2006, there were about 88 companies working in mining sector; of which 33 companies were foreign companies such as Thailand, China, Vietnam, Australia, Russia, etc. and 55 companies were local companies; the total value went from 374 million USD in 2003-2004 to 416 million USD in 2004-2005 (Sengkeo Kingsada Consulting Co.,Ltd, 2006, p. 12). Consequently, Table 3.4 and Figure 3.3 show that the approved investment in the mining and hydropower sectors were more than 50% of total approved investment value from 2007-2012.

For the products' type which are sold based on the Harmonized System of UN Trade Classification (HS2007) garments, about 52% of garment exports of Lao PDR are the apparel and accessories that are not knit or crochet based (HS62), such as T-shirts, jackets, Polo-shirts, pants (men and women), sport-wears, jogging suits, worker-wears, trousers, underwear/brassieres, dresses, uniforms, and jeans/denims. And the rest are knit or crochet based garments (HS61), such as sweaters and cardigans (See Table 3.6).

Figure 3. 1. Foreign Capital Company by Country, 2014

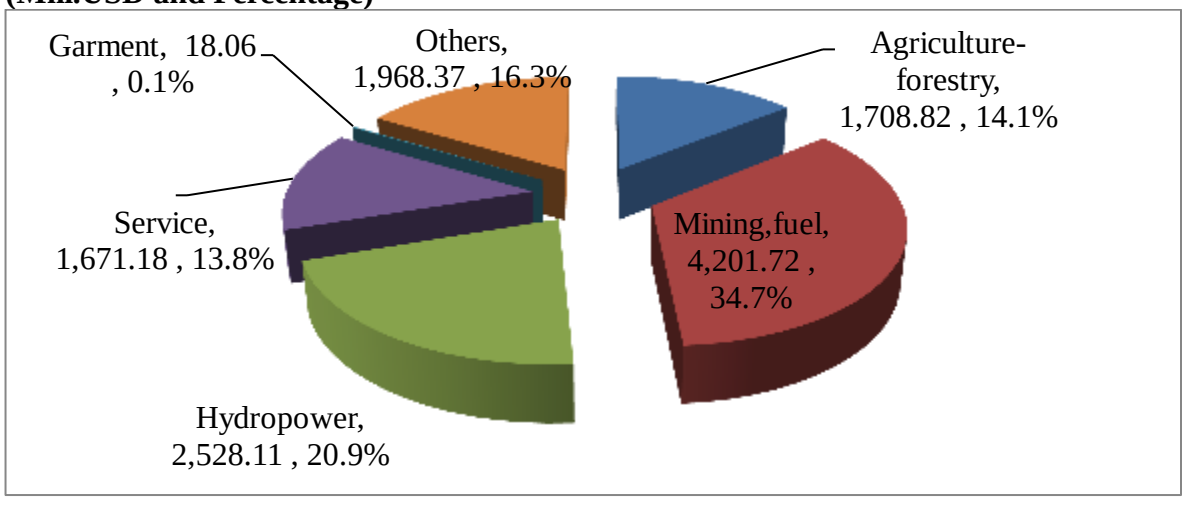




Source: Calculated for this thesis by using data from ALGI, 2014
Note: As the data from ALGI, 2014 found that:

1. *EU included Austria, France, Netherland, Denmark and Italy (only)*
2. *ASEAN included Malaysia and Vietnam only*

Figure 3.2. Total Value and Share of Foreign Investment by Sectors, 2007-2012 (Mill.USD and Percentage)



Source: Calculated for this thesis by using data from the Statistical Yearbook, 2007-2012

Table 3. 1. Lao PDR's Gross Domestic Products, 2003-2013

Indicators	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
GDP growth rate (%)	6.2	7.0	6.8	8.3	8.2	7.8	7.5	8.1	8.0	7.9	8.0
Agriculture	0.2	1.2	0.2	0.7	2.3	1.0	1.2	0.6	0.8	0.8	0.9
Industry	5.6	0.9	3.8	6.3	(0.7)	2.9	4.3	4.9	4.1	3.8	2.8
Service	0.3	4.1	2.3	1.0	5.6	3.3	1.8	2.4	2.8	3.0	3.8
Taxes on products and Import duties, net	0.1	0.8	0.5	0.3	1.0	0.6	0.2	0.2	0.3	0.3	0.5
GDP structure (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	48.1	46.6	44.4	42.2	31.2	30.1	30.5	28.8	27.2	26.0	23.5
Industry	25.7	27.0	29.2	31.5	26.5	25.9	24.5	28.0	30.6	31.2	33.2
Service	25.3	25.5	25.5	25.4	35.8	37.4	38.7	37.2	36.4	37.1	37.4
Taxes on products and Import duties, net	0.9	0.9	0.9	0.9	6.5	6.7	6.2	5.9	5.8	5.7	5.9
GDP per capita (USD/person/year)	375	428	511	606	714	875	907	1,088	1,263	1,396	1,628

Source: Statistical Yearbook 2003-2012, Lao Statistics Bureau, Ministry of Planning and Investment (LSB, MPI)
** Data in 2013 was from the website of LSB, MPI. For more detail see: http://nsc.gov.la/la/index.php*

Table 3. 2. Lao PDR's Garment Total Exports, 2003-2013

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Quantity (Mill.Pieces)	28.12	31.91	33.47	35.58	48.12	61.08	53.78	78.47	71.54	49.06	50.01
Value (Mill.USD)	115.13	131.72	144.87	151.18	152.76	189.69	159.29	195.39	219.91	182.77	201.88

Source: ALGI, 2014

Table 3. 3. Garment Ownership for Export-Oriented Firms, 2014

Item/Type of Ownership	Totally foreign firm	Joint Venture	Lao Owned	Total
Number	39	11	11	61
Share of Total	64%	18%	18%	100%

Source: ALGI, 2014

Table 3. 4. Foreign Investment by Sector (Mill.UDS)

Sectors	2007	2008	2009	2010	2011	2012
Agriculture-forestry	178.72	96.29	281.91	521.06	515.94	114.89
Industry and handicraft	96.09	169.30	148.32	173.03	262.73	0.18
Wood industry	44.49	18.17	13.63	12.03	1.58	15.00
Mining & fuel	98.77	95.97	1,599.31	417.46	1,657.57	332.64
Hydropower	300.43	632.50	174.28	451.64	18.70	950.56
Garment	**5.17**	**4.29**	**1.20**	**0.70**	**6.70**	**na**
Construction	na	56.45	24.68	76.25	152.14	na
Transportation - communication	na	15.90	41.05	3.76	35.10	0.52
Service	154.66	27.20	1,041.35	359.55	88.42	na
Hotel and Restaurant	55.18	26.87	37.45	47.41	11.12	22.03
Bank, insurance	22.75	23.60	64.18	12.00	105.98	na
Trade	12.95	9.55	15.88	26.12	26.68	na
Consultancy	2.21	3.16	6.66	12.57	5.30	na
Education	2.21	na	na	3.76	1.12	na
Public Health	2.21	na	na	6.50	42.53	na
Total Foreign Capital	**975.82**	**1,179.23**	**3,449.91**	**2,123.85**	**2,931.62**	**1,435.83**
Total Foreign Investment	**1,136.90**	**1,440.82**	**4,312.89**	**2,891.71**	**3,519.73**	**1,856.85**

Source: Statistical Yearbook 2007-2012, Lao Statistics Bureau, Ministry of Planning and Investment

Table 3. 5. Trend of Lao Garment Exports, 2001-2013

Exports Value*	**Unit**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Total exports (TE)	Mill.USD	328.33	338.92	368.88	442.15	610.24	1,085.69	1,163.76	1,410.54	1,422.96	2,072.04	3,020.71	3,209.90	3,097.79
Garment exports (GE)	Mill.USD	130.44	137.48	153.02	177.29	181.68	197.78	199.89	235.79	210.19	245.96	289.08	268.46	269.01
GE to EU	Mill.USD	122.58	130.29	141.77	163.82	167.87	177.86	174.58	186.45	171.33	187.57	222.41	214.29	212.02
GE to US	Mill.USD	3.80	2.51	4.17	2.19	2.98	8.55	11.39	31.69	21.08	34.40	35.19	11.53	8.36
GE to ASEAN**	Mill.USD	0.06	0.02	0.04	0.05	0.20	0.13	0.09	0.19	0.09	0.96	0.27	0.75	0.41
GE to Thailand	Mill.USD	0.02	0.06	0.07	0.49	1.04	1.58	2.62	3.01	2.00	3.67	2.77	2.05	0.85
GE to Japan	Mill.USD	1.11	1.09	0.97	1.77	1.34	1.89	2.12	4.74	6.51	8.20	14.65	23.66	30.58
GE to the Rest of the World (RW)	Mill.USD	2.89	3.58	6.07	9.47	9.29	9.36	11.71	12.72	11.19	14.84	16.56	18.23	17.65
Shares of Export	**Unit**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Total	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Share of GE in TE	%	39.73	40.56	41.48	40.10	29.77	18.22	17.18	16.72	14.77	11.87	9.57	8.36	8.68
GE to EU share in Total GE	%	93.98	94.77	92.65	92.40	92.40	89.93	87.34	79.08	81.51	76.26	76.94	79.82	78.81
GE to US share in Total GE	%	2.91	1.82	2.73	1.24	1.64	4.32	5.70	13.44	10.03	13.99	12.17	4.29	3.11
GE to ASEAN**share in Total GE	%	0.04	0.01	0.03	0.03	0.11	0.07	0.05	0.08	0.04	0.39	0.09	0.28	0.15
GE to Thailand share in Total GE	%	0.01	0.04	0.05	0.28	0.57	0.80	1.31	1.28	0.95	1.49	0.96	0.77	0.31
GE to Japan share in Total GE	%	0.85	0.80	0.63	1.00	0.74	0.95	1.06	2.01	3.09	3.33	5.07	8.81	11.37
GE to RW share in Total GE	%	2.22	2.60	3.97	5.34	5.11	4.73	5.86	5.40	5.32	6.03	5.73	6.79	6.56

Source: International Trade Center (ICT), Retrieved on April2, 2015.

For more information, please see: http://www.trademap.org/Bilateral_TS.aspx

*Note: * Assumed that the import of origin country equal to export of destination country*

*** Excluded Thailand*

Table 3. 6. Garment Exports firm Lao PDR by Group of Garment Products

Year	Value (Mill.USD)		Total Garment (Mill.USD)	% in Total Garment	
	HS61	HS62		HS61	HS62
2001	52.97	77.47	130.44	40.6%	59.4%
2002	59.80	77.69	137.48	43.5%	56.5%
2003	67.50	85.52	153.02	44.1%	55.9%
2004	85.02	92.27	177.29	48.0%	52.0%
2005	97.19	84.48	181.68	53.5%	46.5%
2006	112.13	85.66	197.78	56.7%	43.3%
2007	96.63	103.26	199.89	48.3%	51.7%
2008	130.69	105.10	235.79	55.4%	44.6%
2009	109.38	100.82	210.19	52.0%	48.0%
2010	120.76	125.20	245.96	49.1%	50.9%
2011	133.17	155.91	289.08	46.1%	53.9%
2012	123.31	145.15	268.46	45.9%	54.1%
2013	106.94	162.08	269.01	39.8%	60.2%
Total				**47.9%**	**52.1%**

Source: International Trade Center (ICT), Retrieved on April2, 2015.
For more information, please see: http://www.trademap.org/Bilateral_TS.aspx

Chapter 4. Lao PDR's Competitiveness in the Global Garment Value Chain

As mentioned before, the Lao garment industry has started and continually developed since the 1990s. However, to remain in the competition is an issue to take into account, especially after the MFA ended.

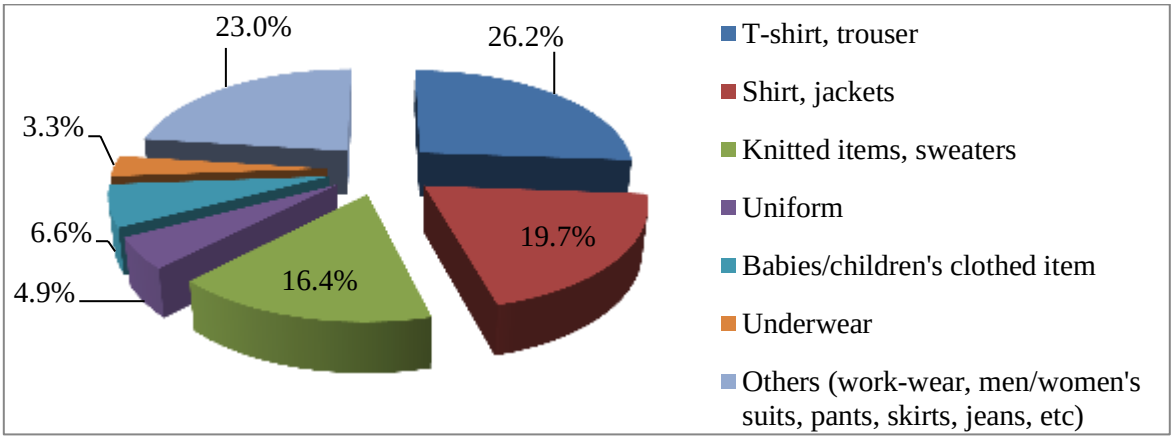
This research tries to discover the competitiveness of the whole garment industry, especially through the possible constraints and through some macroeconomic factors which will affect the Lao garment industry (i.e., economic growth, trade policy, and infrastructure), particularly after the MFA terminated. However, some relevant information and data of garment factories were also collected for using this research, such as ownership, production methods, producers, labors, export destination, annual sales, etc. This study is based on a survey of 30 garment firms (respondents) collected during the field survey in August-September 2014, Vientiane, Lao PDR by using a questionnaire and in-depth interview (both representative of the government side – ALGI, and the garment firms).

4.1. Surveyed Garment Firms' Profiles

The garment firms surveyed in 2014 covers 30 factories, and all of them are export-oriented type. Of these, 17 (56.7%) are totally foreign firms, 7 (23.3%) are joint venture between Lao and foreign entrepreneurs, and 6 (20%) are Lao owned firms. Regarding the factories' location, half of them (50%) are located in Xaythany and Sikhottabong districts;

10 (33%) are located in Sisattanark and Xaysettha districts, and 5 (17%) are located in Chanthabouly, Hadxayphong, and Naxaythong districts. Regarding the main production of the garment firms, 26% of all respondents produce T-shirt and trousers; almost 20% produce shirts and jackets; 16% produce sweaters and knitted apparel, etc.; 15% produce uniforms, babies/children clothes, and underwear; and 23% produce others garments (See Figure 4.1).

Figure 4. 1. Garment Main Production*

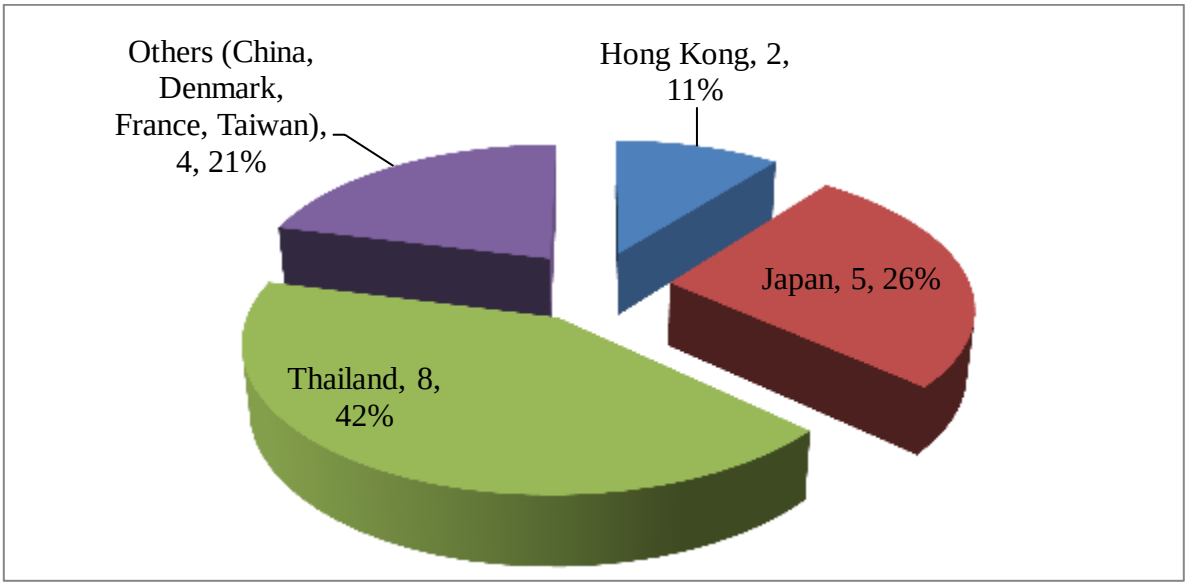


Source: Field Survey, 2014
*Note: *The figure is from the multiple answers which replied by 30 garment firms*

With regards to the garment firms' origin, most of the totally foreign firms are from Japan 35.3% (6 firms) and Thailand 23.3% (4 firms); the others accounted for 41.2% or 7 firms, which include China, Denmark, France, Hong Kong, Italy, Taiwan, and Vietnam. For the joint venture (between Lao and foreign entrepreneurs), most of them are also from Japan, which accounted for almost 43% (3 firms); the others account for 57% (4 firms), which

included Holland[20], Pakistan, Thailand, and Vietnam. The joint venture firms have an average share between the domestic (Lao) and foreign capital of 36% and 64%, respectively. However, the main headquarters, which are located in Thailand, Japan, and Hong Kong, accounted for 42% (8 firms), 26% (5 firms), and around 10% (2 firms), respectively (See Figure 4.2).

Figure 4. 2. Headquarter of Foreign Garment Firms by Locations (Number and %)



Source: Field Survey, 2014

With regards to capital, 19 firms were established during 2005-2013 with capital amounts averaging around 12,238 million Kip per firm. The capital increased to 12,674 million Kip on average in current time, thus increased by 4% from the time of establishment. Nine firms were founded during 1990-2004; besides that, they started their firms with only 8,985

[20] The field survey in 2014 found that Holland also has cooperated with two other investors – one from Germany and another one from Vietnam.

million Kip on average per firm, but they increased to 23,983 million Kip on average per firm in 2014. From this result we found that the capital invested more than one time after the firms were established, and the capital investment increased 45% from the time of establishment (See Table 4.1).

Table 4. 1. Average Capital of Garment Company (Mill.Kip)

Established Year	Number	%	capital at the time of established (Average)	capital at current time (Average)	Change (%)
1986-1989	1	3.3%	361.11	361.11	0%
1990-2004	9	30.0%	8,985.17	23,982.82	167%
2005-2013	19	63.3%	12,238.44	12,674.33	4%
2014	1	3.3%	1,900.00	1,900.00	0%
Total	**30**	**100.0%**	**10,521.94**	**15,297.29**	**45%**

Source: Field Survey, 2014

For employment, factories that employ more than 100 workers are defined as the largest, and 28 out of the 30 factories surveyed (93.3%) fall under this classification. However, the size is very small if compared to other countries such as Bangladesh, Cambodia or Sri Lanka, because they normally employ more than one thousand workers in their firms. The remaining (6.7%) are defined as medium, as they employed between 20-99 workers[21] (See Table 4.2).

Table 4. 2. Garment Firms' Employment by Size

Firms' Size	At the Established time		At Current Time	
	Number	%	Number	%
Small Enterprise (3-19 staff)	1	3.3%	0	0.0%
Medium Enterprise (20-99 staff)	5	16.7%	2	6.7%
Large Enterprise (>=100 staff)	24	80.0%	28	93.3%
Total	**30**	**100.0%**	**30**	**100.0%**

Source: Field Survey, 2014
Note: The enterprise's size was defined as in the Enterprise Survey 2006, Lao PDR

[21] The enterprise's size was defined as such in the Enterprise Survey 2006, Lao PDR (NSC,MPI, 2006).

Nonetheless, the employment increased in recent years if compared with the time of establishment as found in field survey. In terms of workers' age group, half of the garment firms (15 firms) have workers who are between 20-24 years old; 7 firms (23.3%) have workers who are 25-29 years old.

Table 4. 3. Garment Firms' Employment by Age Group

Age Group	No of Firms	Percent
15-19	3	10.0%
20-24	15	50.0%
25-29	7	23.3%
30-34	3	10.0%
35-39	1	3.3%
40-44	1	3.3%
Total	**30**	**100.0%**

Source: Field Survey, 2014

Firms where all the workers are women accounted for 84%; in addition, the totally foreign firms employed the highest number of workers – 6,000 workers approximately for all surveyed firms, while the joint venture and Lao owned firms employed about 2,700 and 1,400 workers, respectively (See Table 4.4). Moreover, the number of employed increased almost 2 times (56.2%), from only 5,600 workers at the time of establishment to about 10,000 workers in current time (Field Survey, 2014).

Table 4. 4. Garment Firms' Employment by type of ownership

	Total employed		Employees	
	Total	Female	Total	Female
Totally foreign firms	5,955	4,894	5,827	4,836
Joint Venture	2,684	2,319	2,615	2,309
Lao owned	1,363	1,109	1,326	1,092
Total	**10,002**	**8,322**	**9,768**	**8,237**
%		**83.2%**		**84.3%**

Source: Field Survey, 2014
Note: The total employed is included managers and the staff in the administration office

4.2. Findings and Discussion

4.2.1. Overall Affected Factors to Lao Garment Industry

Regards to the Level of Macroeconomic Factors to Garment Industry: From the garment firms' perspectives, macroeconomic factors affect garment industry at the medium level. However, the highest ones that have more impact are taxes and duties (3.77), labor cost (3.67), international trade policy (3.50), and exchange rate (3.50). Economic growth has the least impact (3.17) among the other factors (See Table 4.5).

Table 4. 5. Affected Level of Macroeconomic to Lao Garment Industry

Factors	Average
Labor cost	3.67
Interest rate	3.00
Taxes and duties	3.77
Exchange rate	3.50
Infrastructure	3.37
International trade policy	3.50
Economic growth	3.17

Source: Field Survey, 2014

Regarding the Constraint Level to the Lao Garment Industry: According to the garment firms' perspectives, the main constraints affecting the Lao garment industry are labor shortage and high turnover (labor moves to other firms/industry), with the score of 4.30 and 4.23, respectively. However, the geographic issue is also a problem constraint affecting the Lao garment industry, with the score of 3.90, due to the high transportation cost and long lead-time. Besides that, an important and possible issue that should be taken into account is the issue of unexpected policies and regulations (newly released one), which

are not consistent with the prior provided policies or incentives and will affect the businesses. This issue was raised by the garment firms while interviewing and gathering data (See Table 4.6).

Table 4. 6. Main Constraints of Lao Garment Industry

Constraint Factors	Average
Increase of labor cost	3.70
Low workers' productivity	3.87
Technological develop	3.57
Compliance with international labor standard	3.33
Production capacity	3.53
Lead time	3.83
Government policy	3.53
Law on labor	3.23
Taxes (high)	3.37
Infrastructure (electricity, water, communication, etc)	3.77
Geographical problems	3.90
Transportation cost (expensive)	3.97
Labor shortage	4.30
Turnover	4.23
Punctuation of labor	3.80
Custom process (import-export clearances)	3.73
Others (unexpected policies/regulations)	5.00

Source: Field Survey, 2014

4.2.2. Operations of Garment Industry

As indicated in the theoretical framework, the firms can develop and improve their situation through the chain by taking greater value added functions. According to the theoretical framework, the Lao garment industry relies on the buyer-driven chain, because this chain is commonly dependent on labor intensive activities such as garments, footwear, toys, etc. Evidence from the survey found that the garment factories in the Lao PDR receive the orders from international buyers and international traders (the details of popular international buyers and traders will be discussed in Section 4.2.3). The share of exportation methods will provide evidence that can prove this phenomenon. The survey found that, of the garment firms in Lao PDR, 70% (21 out of 30) export through the international buyers/traders; 23% (7 out of 30) export directly through their international buyers; and about 7% (2 out of 30) export through their networks, especially their brother companies (Field Survey, 2014). If we look at the exportation methods by ownership, the totally foreign owned firms usually export their products through international buyers/traders and even directly to their international buyers, which accounted for about 57% of total surveyed firms (17 out of 30). While Lao owned firms do not export their products to international buyers directly, they export through the international buyers/traders and brother companies in Lao PDR, which accounted for 20% of the total surveyed firms (6 out of 30); this is because most Lao businesses work like household businesses, which normally support each other. Also, the garment firms normally support and help by providing orders and source of materials. For the joint venture firms, they usually export both through and directly to the international buyers, which account for

about 23% of total surveyed firms (7 out of 30) (See Table 4.7). From the result, we could see that the totally foreign owned and joint venture firms would have better conditions than the Lao owned firms in terms of market access due to their better network and cooperation with international markets. This reflects the orders received by each type of ownership that the totally foreign owned and joint venture firms usually have more orders from international buyers than the Lao owned firms. This result is consistent with the NSC and UNDP-RCC (2007, p22), the totally foreign owned and joint venture factories receive orders from their parent companies or even have orders directly from international buyers with long term contracts. The Lao owned firms receive orders through expanding the networks, particularly with the local key players in garment who work stably in garment businesses and have been successful in garment exports for a long time, which are owned by Lao, and also those that receive orders from their brother companies. Moreover, the NSC and UNDP-RCC, (2007, p. 32) also let us know that the Lao owned firms could strengthen their competitiveness by coordinating and cooperating with ALGI[22], garment exporters[23], and sub-contractors. This action could help them have regular orders, because many Lao owned factories have no direct contact or marketing offices overseas and also cannot access information about the markets (whereas, the totally foreign owned and joint venture firms can). Besides that, most Lao owned firms (83% or 5 of 6 among Lao owned firms) are producing their products by applying the CMT modality; while the totally

[22] The ALGI is the main part that provides information and direction about markets and training (for manager, and line-supervisor) to the garment factories in Lao PDR, especially for the factories that don't have ability to access the market information, production, and exports (NSC and UNDP-RCC, 2007, p. 34).

[23] The garment exporters are those who are the local key players in garment, stably work in garment businesses, and have been successful in the garment exports for long time.

foreign and joint venture firms produce the garment products by applying more FOB than CMT. A number of totally foreign owned firms (9 out of 17 among totally foreign firms) apply both FOB-1 and FOB-2 for producing, while only one Lao owned firm applies the FOB-1 (See Table 4.8). In addition, the Lao owned firms usually have orders from international buyers in Thailand, China, etc. (NSC and UNDP-RCC, 2007, p. 34), but the requested orders are only for the cut, make, and trim procession from the Lao owned firms. This modality of production could provide a proper marginal profit to Lao owned firms, but it is lower than FOB.

According to the applied theoretical framework, the lowest value added activity is Cut, Make, Trim (CMT), which is the main practicing modality that covers almost 57% – or 17 out 30 – surveyed firms (See Figure 4.3). All the supplies for producing (i.e., raw materials and intermediate goods) are provided to the garment factories by the customers (buyers), and the firms will receive only the producing fee as the profit from the mark up on the labor wage. NSC and UNDP-RCC (2007) emphasized that the profits are more guaranteed, but they are lower than the Free on Board (FOB) type. We found that the FOB type of modality is used in 43% – or 13 out of 30 – surveyed firms (Figure 4.3); of this, FOB-1 consists of 23% – or 7 out of 13 – firms of FOB type, where the local producers are responsible in the intermediate materials and production. Another one is FOB-2, which consists of 20% – or 6 out of 13 – firms of FOB type. This modality has higher value added than the FOB-1, because it will complete the production process, such as source of materials, and all levels of production and design.

Table 4.7. Exportation Methods by Ownerships, (Number and Percentage)

Type of Ownership	Export directly	International traders	international buyers	Other direction	Total	Export directly	International traders	International buyers	Other direction	Total
Lao owned	0	2	3	1	6	0.0%	33.3%	20.0%	50.0%	20.0%
Foreign owned	5	4	8	0	17	71.4%	66.7%	53.3%	0.0%	56.7%
JV	2	0	4	1	7	28.6%	0.0%	26.7%	50.0%	23.3%
Total	**7**	**6**	**15**	**2**	**30**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Field Survey, 2014

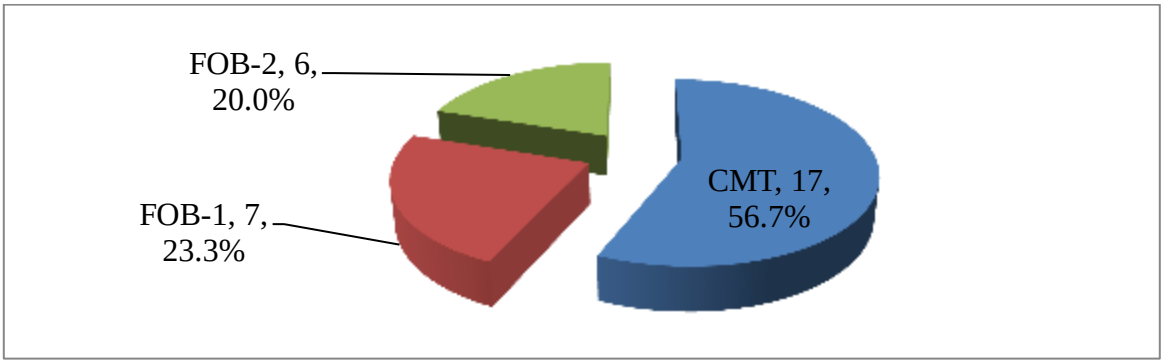
Table 4. 8. Production modality by Ownerships, (Number and Percentage)

Production Modality	Type of Ownership							
	Lao owned		Foreign owned		Joint Venture		Total	
	Number	%	Number	%	Number	%	Number	%
CMT	5	83.3%	8	47.1%	4	57.1%	17	56.7%
FOB-1	1	16.7%	5	29.4%	1	14.3%	7	23.3%
FOB-2	0	0.0%	4	23.5%	2	28.6%	6	20.0%
Total	**6**	**100.0%**	**17**	**100.0%**	**7**	**100.0%**	**30**	**100.0%**

Source: Field Survey, 2014

Despite the above, the FOB types of exports and production also have risks, such as the risk of getting below-standard fabrics and changing price of fabrics (NSC and UNDP-RCC, 2007, p. 21). Therefore, changing from CMT to FOB modality is well known for the firm's improvement, because it gives firms a more active role in sourcing the fabrics by themselves (Natsuda, K., Goto, K., & Thoburn, J, 2010, p. 480). Nonetheless, according to the field survey in 2014, there no firms which can produce in FOB-3, which is the highest value added, because this modality acts as the perfect process, including arrangement of marketing and branding.

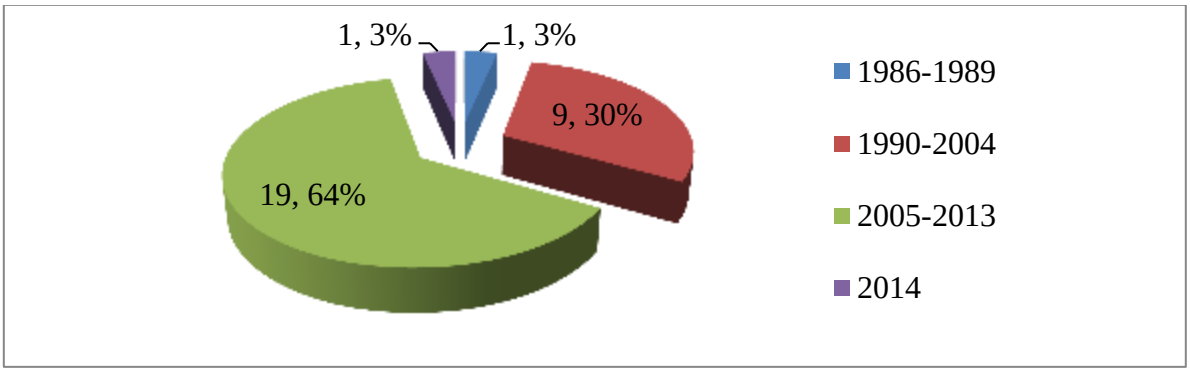
Figure 4. 3. Garment Factory's Production Modality, (Number, %)



Source: Field Survey, 2014

The survey also found that most of the garment firms established after 2005 – or in other words, most of the garment firms established after MFA period – accounted for 64% (19 out of 30) of total surveyed firms (See Figure 4.4).

Figure 4. 4. Garment firms' Establishing Time (Number, %)



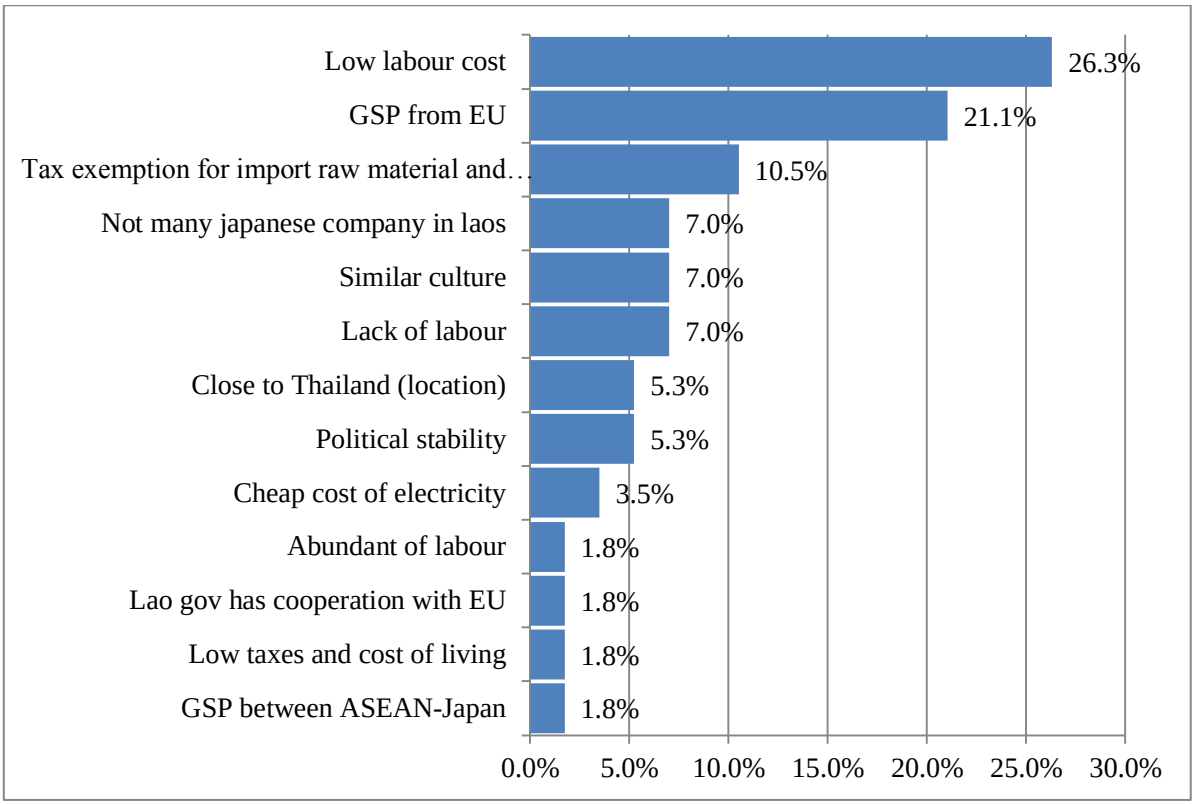
Source: Field Survey, 2014

The highest share of establishment time since 2005 is because the Lao PDR has been granted GSP, especially from the EU, which provides zero percent of import duty to the EU (responded by Mr. Bountham CHANTHAVONG, ALGI's Head of Cabinet, April 28, 2015). In addition, there are some other possible causes or reasons. (1) The EU has provided an additional special treatment to LDCs for the value content cumulation since 2005 in the context of all producers who could import raw materials and accessories for production from within ASEAN, and the produced garment products will be automatically counted as local content. For example, if Lao PDR imports materials and accessories from Indonesia to produce for exporting, when it exports the final products, they will be counted as local content or from ASEAN; however, it shall be accompanied with Form A (a certificate of origins under GSP Scheme). (2) According to the Law on Investment Promotion 2009 (Article 49-51) and Law on Tax 2011 (Article 8), the government will grant incentives related to profit tax to "*the promoted sectors are agriculture, industry,*

handicraft and services…related to the poverty reduction, improvement of living conditions of people, … human resource development, jobs creations, etc.". Thus, the garment firms will be eligible to receive tax exemption for a period of 1-4 years, commencing from the first commercial operational date of establishment (Lao PDR.b, 2009 and Lao PDR.c, 2011)[24] (3) Because of the changing of production location (especially from Thailand to Lao PDR due to Thailand not being in the LDC list), Thailand would not be granted zero percent import duty nor receive the benefits from the EU (responded by a higher officer from Ministry of Industry and Commerce, April 28, 2015). Furthermore, 57.9% of investors invested into the garment in Lao PDR because the country has relatively low labor cost, GSP granted from the EU, and tax exemption for import of raw materials, and exports of processing products granted by the government (Field Survey, 2014). Some garment factories replied that it was because there are not many Japanese companies in Lao PDR, only accounting for 7.0%. Some garment factories said that because Lao PDR has a similar culture, especially with Thailand, this accounted for 7.0%. However, some of them also said that their countries lack labor, which accounted for 7.0%; furthermore, Lao PDR has stability in politics and is close to Thailand, which accounted for 10.5%. Other reasons accounted for 10.5% (See Figure 4.5).

[24] For more detail, please see: http://www.na.gov.la/index.php?option=com_content&view=category&layout=blog&id=36&Itemid=210&lang=la

Figure 4. 5. Reasons of Foreign Companies for investing in Lao PDR*, (%)



Source: Field Survey, 2014
*Note: *The figure is from the multiple answers which replied by 30 garment firms*

4.2.3. Global Buyers and Raw Materials Imported Markets

From the field survey in 2014, most of the garment finishing goods (99.97%) is exported, and only less than 1% sold within the country. As of the data from ALGI in 2014, the main exported markets in 2013 are the EU, Japan, the US, and Canada, in that order (see Table 4.9).

Table 4. 9. Lao garment exports by Major Markets, 2012-2013

Main Markets	2012		2013	
	Mill.USD	%	Mill.USD	%
EU	153.28	83.9%	168.15	83.3%
Japan	9.75	5.3%	13.40	6.6%
USA	9.16	5.0%	8.51	4.2%
Canada	8.29	4.5%	10.33	5.1%
Others	2.28	1.2%	1.48	0.7%
Total	**182.76**	**100.0%**	**201.88**	**100.0%**

Source: ALGI, 2014

The surveyed results also found and proved that the first major export market of Lao garment products is still the EU, both during and after MFA termination, with 47.7% of the share of companies' products exported, especially after MFA. However, the second place changed from the US to Japan after MFA with the share of companies' products exported being 27.8%; on the other hand, the US turned to the fifth place, with 4.3% of the companies' products exported after MFA. The third place is Thailand, which changed from fourth place, and it shared 9.1% of the companies' products exported after MFA (See Table 4.10).

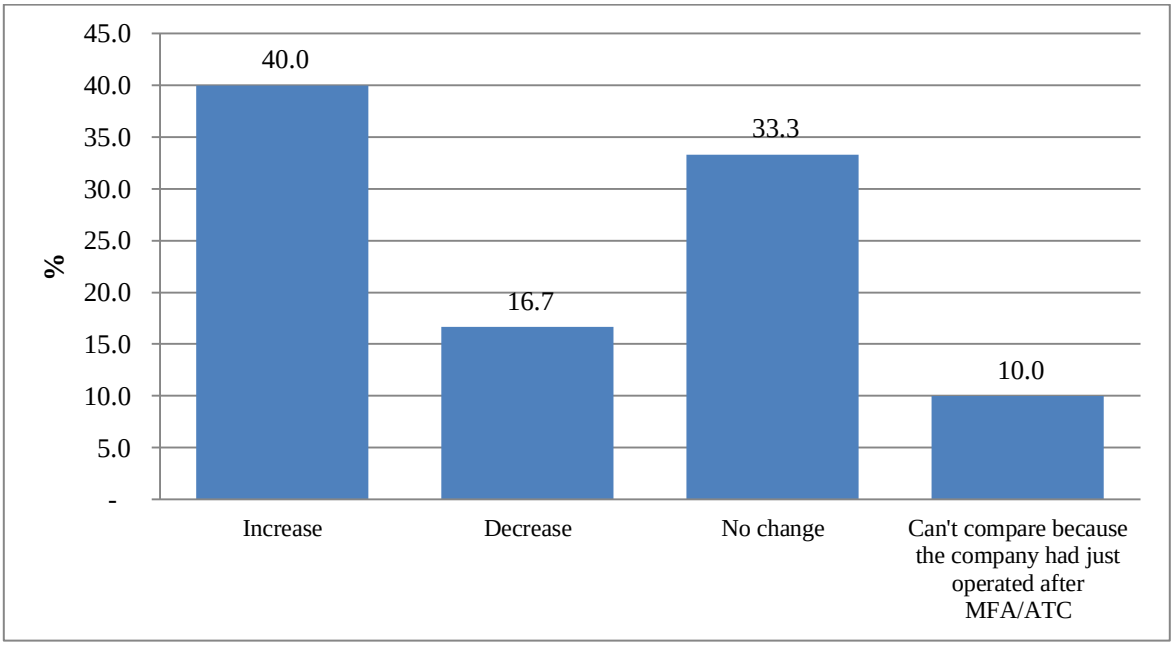
Table 4. 10. Ranking of Garment Major Exported Markets before and after MFA

Country/Region	During MFA/ATC (Rank)	After MFA/ATC (Rank)	Share of Companies' products exported (%)
EU	1	1	47.4%
USA	2	5	4.3%
Japan	3	2	27.8%
Thailand	4	3	9.1%
ASEAN	6	6	3.7%
Others	5	4	7.6%
	Total		**100.0%**

Source: Field Survey, 2014

Therefore, there seems to be no consensus of results among the garment directors/managers regarding whether or not exports to major markets, and the exports themselves, will change as a result of MFA phase out (See Box 4.1). The surveyed result found that 40% (12 out of 30) of all surveyed garment firms said their exports still increased after MFA, and even 33.3% (10 out of 30) of them said there is not any change in the exports. However, 16.7% (5 out of 30) said their exports decreased, while 10% (3 out of 30) could not say that their exports have changed because of MFA termination (this is due to having just operated their factories after MFA or in these recent years) (see Figure 4.6).

Figure 4. 6. Opinion of Garment firms on Exportation after MFA



Source: Field Survey, 2014

Box 4. 1. Opinions of Garment Firms' Directors/Managers about MFA on Exportation

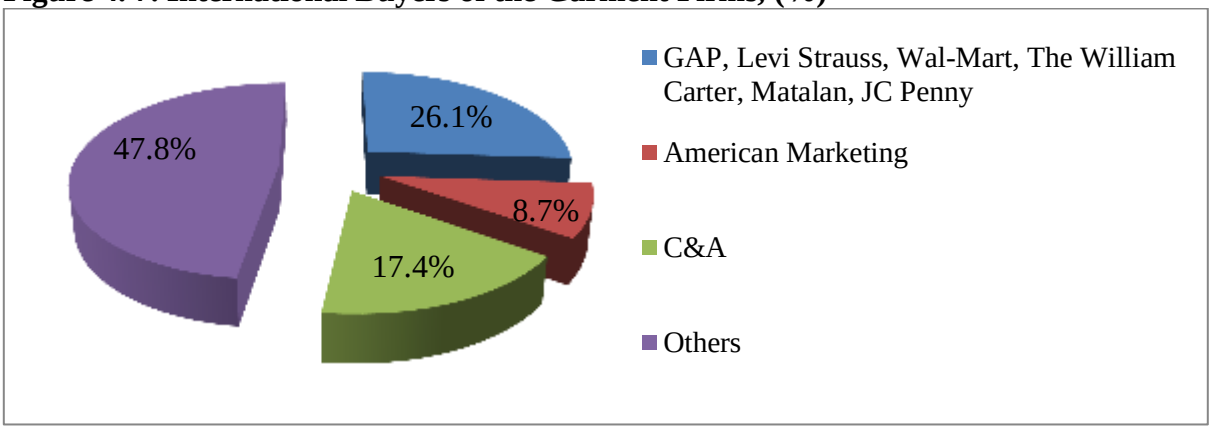
"The termination of MFA is not affecting Lao garment firms, but lack of labor is the main problem. As seen from our company, we are still having orders from our old customers; if there was any problem or effects it occurred only in the first few years" said by a long-standing garment firm's director.

Another director from a garment firm said that "there was an impact on our company as we lost many orders to Vietnam and China in the first couple of years. We had to quote better prices and give higher quality products and services for customers to continue to place orders. Now the cost in China has gone up and customers have quality issues, so they have moved back orders lately."

Source: Field Survey, 2014

As mentioned in Section 4.2.2, the major methods by which garment firms usually export is through international buyers and traders. The major buyers are mostly brand names such as C&A, American Marketing, GAP, Levi Strauss, Wal-Mart, The William Carter, Matalan, JC Penny, and others (See Figure 4.7); none of them export their own brands. The international traders include some companies mostly from Denmark, Thailand, Japan, Germany, and the US, as summarized in the Table 4.11 below.

Figure 4. 7. International Buyers of the Garment Firms, (%)



Source: Field Survey, 2014

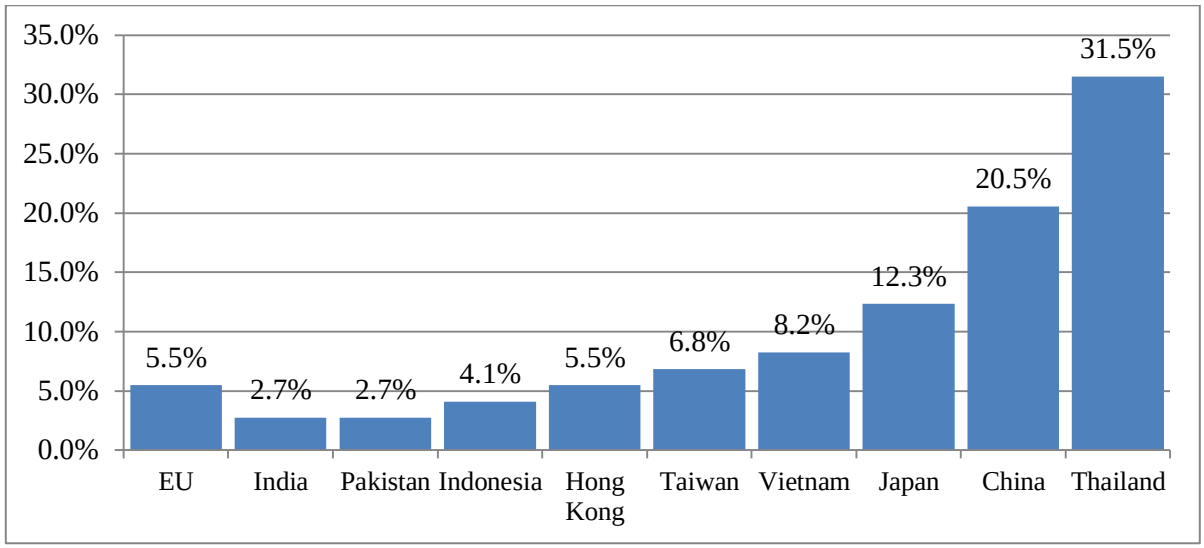
Table 4. 11. International Traders

Name of Traders	Origin country
Kik Textilien and Non-Food	Germany
Haker Rister Price	Denmark
Jensen	Denmark
Bilka	Denmark
Golden Mine Co.,Ltd	Great Britain
KH Textle Co., LTD	Japan
Haruhachi Co.,Ltd	Thailand
Sports Direct	Thailand
Signal	United States

Source: Field Survey, 2014

The garment firms in Lao PDR rely on imported raw materials such as fiber, yarn and fabrics; 90% (27 out of 30 firms) used more than 80% imported materials (Field Survey, 2014). From the responses of 30 garment firms, 31.5% of them imported raw materials from Thailand; 20.5% from China; and 12.3% from Japan (See Figure 4.8). This result is consistent with the study by UNIDO Gerzi/ALGI (2002) in that only 1% of garment firms could be self-sufficient in woven garments, while no one could be self-sufficient in knitted garments (NSC and UNDP-RCC cited inUNIDO and ALGI, 2002).

Figure 4. 8. Source of Imported Raw materials for Garment Production*

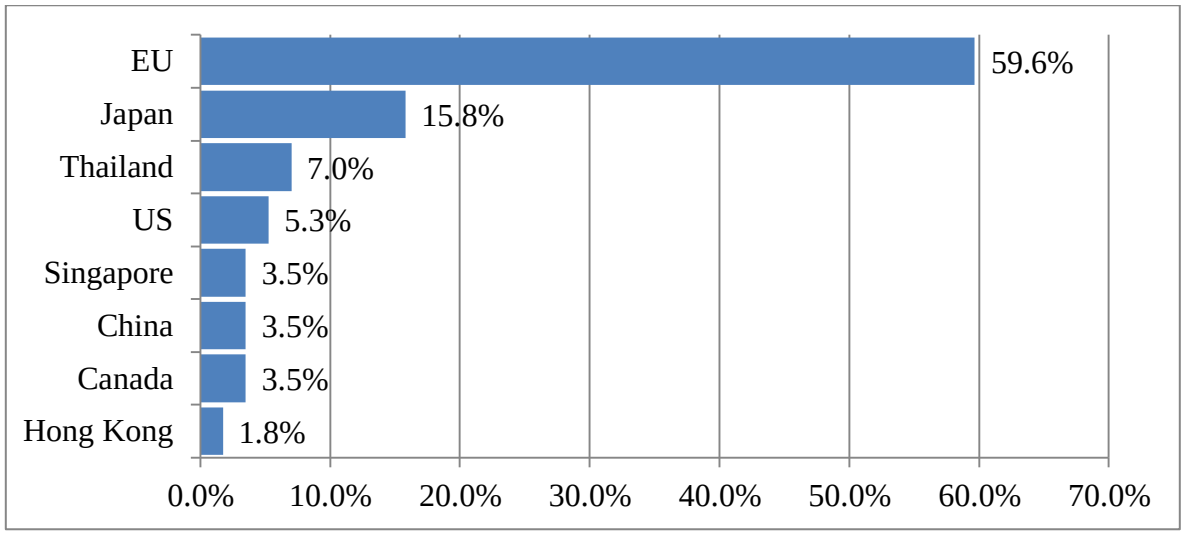


Source: Field Survey, 2014
*Note: *The figure is from the multiple answers which replied by 30 garment firms*

As mentioned above, the major export market for Lao garment exports are the EU. The survey found that almost 60% of the garment export destination is the EU (See Figure 4.9). Incidentally, the EU has removed some countries from the GSP beneficiary country list, including Thailand and China (DIMEX/MOIC, 2012)[25]. This is favorable to the garment firms in Lao PDR, who often import raw materials and accessories primarily from Thailand and China, accounting for about 50% (as Figure 4.9). This issue might affect the garment firms in terms of ASEAN Cumulation and Derogation, but might not have an effect in terms of the Processing Rules, which are defined by the EU.

[25] According to the official document No: *Ref. Ares (2014)4364482 - 29/12/2014 of the European Commission (EU) determined that "in accordance with Commission Delegated Regulation (EU) No 1421/2013 amending Regulation (EU) No 978/2012, as of 1 January 2015, China, Thailand, Ecuador and the Maldives will lose their status of beneficiary countries of the GSP of the Union revised and updated the GSP beneficiary countries"* (DIMEX/MOIC, 2012). For more information, please see: www.laotradeportal.gov.la

Figure 4. 9. Exported Destination Countries of Lao garment firms, (%)



Source: Field Survey, 2014
*Note: *The figure is from the multiple answers which replied by 30 garment firms*

4.2.4. Labor Issues

Lao PDR has the lowest labor cost if compared to other producers in Asian LDCs, and this is frequently claimed as one of the competitive advantanges for the industry, but it has to be reconsidered in the case of productivity per worker per year (NSC and UNDP-RCC, 2007, p. 8). As the survey findings show, 26.3% of the multiple answers from the 30 garment firms investing in Lao PDR were because of the low labor costs. The hourly wages for Lao garment workers are lower than neighboring countries such as Cambodia, Thailand and Vietnam, as well as other countries like Bangladesh, India, Indonesia, Pakistan and Sri Lanka. For example, the hourly wage is 0.216 USD per hour compared to China, where the wage is 1.042 USD per hour (See Table 4.12). However, Lao labor cost is increased if compared to previous times, like in 2003 and 2006, because of changes in the official

minimum labor cost from 26 USD per month in 2006 (NSC and UNDP-RCC, 2007, p. 8) to be about 77 USD per month in the current time[26]; but this issue is still in the medium level (3.70) of constraints for the Lao garment industry as replied by garment firms (Field Survey, 2014). Yet, the labor cost is still comparably low and appears to be one of the factors that could attract investment in the industry. Like a garment firm's opinion: "*DO NOT increase the wages…Thailand increased the wages to 300THB sharply and so many businesses closed and so many people lost their jobs. Don't let the same happen in Lao PDR. Learn from this example*" (Field Survey, 2014).

Table 4. 12. Labor Cost per hour by Selected Countries

Countries	Wage (USD/Hour)		
	2003*	**2006****	**2014*****
Lao PDR	0.174	0.125	0.216
Vietnam	n.a	0.260	0.560
Indonesia	0.391	0.270	0.683
Cambodia	n.a	0.330	0.626
India	4.901	0.380	0.920
Bangladesh	n.a	0.390	0.359
Pakistan	0.911	0.410	1.230
Sri Lanka	0.347	0.480	0.277-0.330
China	n.a	0.680-0.880	1.042
Thailand	1.042	n.a	1.125

*Source: * UNIDO 2003 ** NSC and UNDP-RCC, 2007*

**** Applied for this thesis based on the sources below:*

a) *Lao PDR: calcualted from the surveyed data, Field Survey 2014*
b) *Vitenam and Pakistan: labor cost data in 2012. For more detail, please see: http://www.nationmaster.com/country-info/profiles/Vietnam/Labor and http://www.nationmaster.com/country-info/profiles/Pakistan/Labor*
c) *India: labor cost data in 2010 from U.S. Bureau of Labor Statistics's Website. For more detail, please see: http://www.bls.gov/fls/india.htm*

[26] The minimum labor cost per month is 626,000 LAK, which is based on the Labor Law (2013), Lao PDR.

d) *Thailand: the labor cost is 300 THB per day as the minimum level, and it is converted from local curency. For more detail, please see: http://www.boi.go.th/index.php?page=labor_costs*
e) *Other countries:converted from local curencies to USD per hour. For more detail, please see: http://www.wageindicator.org/main/salary/minimum-wage*

Note: Wage in 2003 was converted from 'Thousand USD per year' into 'USD per hour' for this thesis, and both 2003 and 2014 were converted by considering on working time per day (8 hours per day), and number of working days (6 days per week).

Labor shortage is one of the most important problems for the garment firms in Lao PDR. As said by VIXATHEP (2011), the Lao garment firms are mostly located only in the capital city, so labor shortages will occur, especially during the farming season when workers return to their hometown for helping their families in harvesting. In addition, the garment firms expected that Lao workers will move to Thailand for working after Lao PDR implemented the obligation of AEC from 2015, which would be a big problem for the labor intensive industries like garment (Field Survey, 2014). The survey found that labor shortage is a higher level (4.30) of constraints affecting the Lao garment industry (See Table 4.6 in Section 4.2.1, Paragrap 2), and the garment firms said that it is a very hot issue for them because it directly affects their production. A garment firm's director said that "*We have lots of machines for producing, but they are still keeping as free of working because we couldn't find workers to place with them*"; so most garment firms have to encourage more workers from faraway areas by providing them with transportation from home to workplace, and a place to stay (dormitary) close to the factories, as said by garment firms' directors. However, some garment firms solve this problem by using more

advanced machinery than human workers, such as using a belting system for faster production (Field Survey and Interview, 2014).

Concerning labor productivity, a typical Lao worker can produce only 1,350 pieces per year, while those from other countries such as the Chinese can produce up to 7,500 pieces per year, as approximated in 2006 (NSC and UNDP-RCC, 2007, p. 8). The surveyed result found that this issue is affecting the Lao garment industry in a medium to higher level (3.87). There are many possible reasons why Lao labor has low productivity. As stated in the report of NSC and UNDP-RCC (2007), this is for two reasons: (1) low skills, due to the workers having completed – or partially completed – only primary and secondary schools, with a very limited experience in technical training, especially in garment; and (2) low wages, because firms have not provided vocational or technical training to staff. In addition, high labor turnover (changing of workplace) is a reason for low labor productivity. NSC and UNDP-RCC (2007) also reported that the high rates of staff turnover accounted for about 40-60% per year because of seasonal work, intensity, other job offers, and absence of work contracts. Moreover, the workers are not familiar with tedious and repetitive garment works, and the garment industry is a kind of transitory profession. The surveyed results declare that the turnover is in a higher level (4.23) of constraints affecting the Lao garment industry. Nonetheless, a garment firm's director added more points from his experience that "even though the productions from Lao PDR is slow, all of the products made from Lao PDR are meticulous and of higher quality if compared to others countries in the same region, so the orders from foreign clients (buyers) have been made in Lao PDR" (Field

Visit, 2014). As found from the field survey in 2014, Lao labor productivity increased to approximately 2,524 pieces per year per worker; moreover, the productivity of Lao owned firms (3,563 pieces per year) are higher than the totally foreign (2,567 pieces per year) and joint venture (1,621 pieces per year) firms. The higher productivity of Lao owned firms would be because Lao owned firms usually produce only the simple products which would be cheaper than the products that the totally foreign owned and joint venture firms produce (See Table 4.13). In case of increasing productivity, it is because the garment factories in Lao PDR have improved their production system by applying more high technology and upgrading their functions of garment production through arrangements such as changing from only a CMT basis to a more FOB basis. In addition, some new garment factories are using modern machinery system – from stand-alone machines to belting system – that gives higher products and faster procession. However, it would be a problem if any worker in the production line is missing without any substituted worker, as at least 10-15% of the workers are often absent from work every Monday. This equates to 3% per month, including those who are even not punctual to work. This system has to work continuously, as said by a garment firm's director (Field Survey and Visit, 2014). The punctuality of workers is in a medium level (3.80) of constraints affecting the Lao garment industry.

Table 4.13. Production Capacity of Garment Factories in Lao PDR, 2014

Ownership	No of Factories	No of Workers	No of Machines	Capacity (pieces /month)	Capacity (pieces /year)	Average labor's productivity (pieces/year)
Totally foreign firms	17	5,401	4,632	1,155,185	13,862,222	2,567
Joint Venture	7	1,703	2,348	230,000	2,760,000	1,621
Lao owned	6	1,263	1,449	375,000	4,500,000	3,563
Total	**30**	**8,367**	**8,429**	**1,760,185**	**21,122,222**	**2,524**

Source: ALGI, 2014

Note: The capacity was calculated and estimated by using data from ALGI, 2014, especially for the surveyed garment firms.

(Production Line in a Garment Factory: Belting System)

(Production Line in a Garment Factory: Stand-Alone System)

Source: Field Survey and Visit, 2014

Despite this, some of the firms use secondhand machinery that was imported from Thailand or other countries, and they could not invest in new technology because of a lack of financial accessibility. This could affect the Lao garment sector's competitiveness (NSC and UNDP-RCC, 2007).

Labor standards is an issue that has become more important in the global garment industry, because the customers have more concern on labor issues in developing countries as demonstrated in the campaigns of compliance with labor standards by international NGOs (Natsuda, K., Goto, K., & Thoburn, J, 2010, p. 486). Additionally, the NSC and UNDP-RCC (2007) expressed that buyers/traders concern themselves more about labor

standards, labor rights, health and safety issues. The garment firms have to meet the requirements above, for example ISO 9001 and SA 8000; in addition, they have to improve the factory's environment for ensuring good working condition, security and a safety system. The surveyed results found that compliance with international labor standards is in the medium level (3.33) of constraints affecting the Lao garment industry. This means that labor standards, including the working environment, are an important factor in terms of competitiveness, which the garment firms have to take into account. In Lao PDR, all labor practices are based on the labor law, which affects the garment industry at the medium level (3.23) as found from the field survey 2014. Most practices in Lao PDR on labor, is under the Law on Labor, Revision in 2013 which was improved, revised, and to which was added more mandatories (new articles) from the previous version (2006) such as: working hours should not exceed 6 days, 8 hours per day, or 48 hours per week (this excludes dangerous works, which should not exceed 6 days, 6 hours per day or 36 hours per week). In case of working overtime, it should not exceed 45 hours per month (or 3 hours per day) and not more than 4 consecutive days. The compensation for overtime work, for example, in the regular day, shall be paid at 150% of wage on regular working days from 5:00 pm to 10:00 pm, and 200% of wage on regular working day at night from 10:00 pm to 6:00 am (Lao PDR.a, 2013)[27]; there are other issues which are further defined in the law. In addition, this law tries to integrate itself with regional and international levels as well as international

[27] Based on the Law on Labor, 2013 (Revision), Lao PDR. Article 51. Hours of Work (revised), Article 53. Overtime Working, Article 61. Nighttime working and Shift, and Article 114, (new) 115-116. Calculation of Overtime Working and Compensation for Working on Holiday time. (Lao PDR.a, 2013). For more detail, please see:
http://www.na.gov.la/index.php?option=com_content&view=article&id=76%3Alaws-on-social-and-cultural-area&catid=36%3Alegislation-list&Itemid=140&lang=la

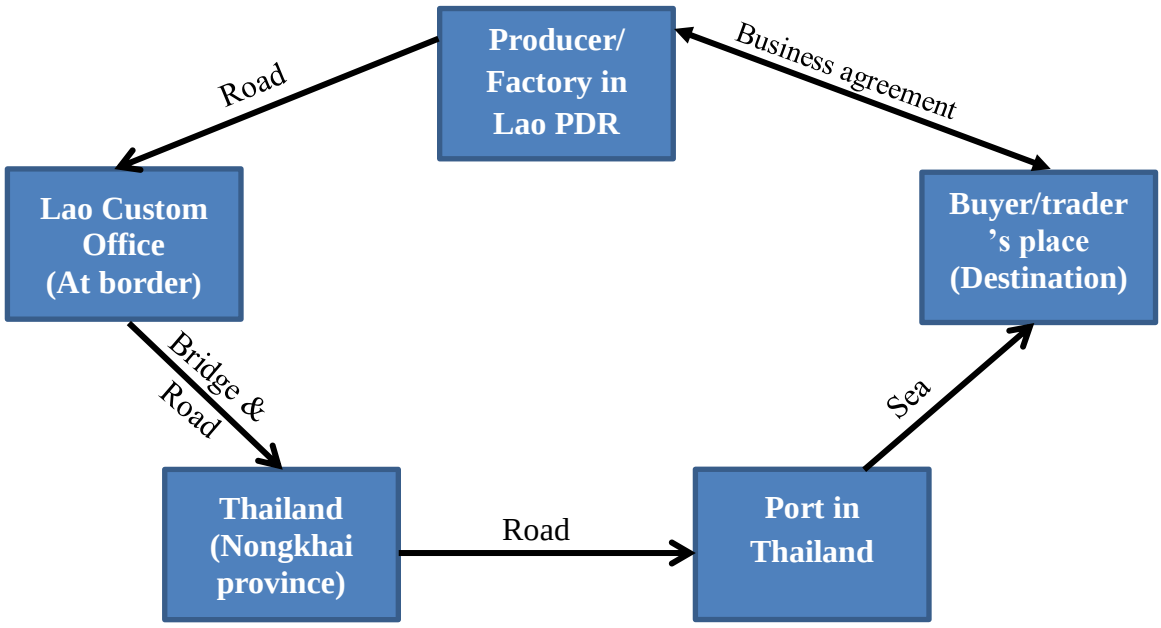
standards, if looking at the objectives of this law (as defined in Article 1. Objectives; Article 7. International Cooperation). Besides that, all labor is under the protection of labor unions, which are organizations under the Lao People's Revolution Party for guaranteeing labor rights and benefits.

4.2.5. Lead Time and Delivery Cost

The Lead Time of Lao PDR is considerably long, with an average of about 70 days from when the order is placed to actually reaching the main markets, while the standard is only between 30-45 days. However, Lao PDR is still better than Cambodia and Bangladesh, where the average time is between 90-120 days (NSC and UNDP-RCC, 2007). The longer lead time for Lao PDR is because of the transportation and distance from major markets, lack of supporting industries, and weak physical infastructue (NSC and UNDP-RCC, 2007, & Rasiah, 2009.a). These could raise the cost of delivering commodities to final destinations that could affect the loss of the firms' income.

Regarding the transportation and distance from major markets: Due to Lao PDR being a landlocked country, it means there is no sea route from the country (hence, a geographical problem), so it must export by transiting through neighboring countries, especially via Thailand and Vietnam (see Figure 4.10). The survey found that it has a higher level of constraints (3.90) affecting the garment industry (Field Survey, 2014).

Figure 4. 10. Delivering Procedures of Lao Garment finishing goods



Source: The diagram is modified from findings of NSC and UNDP-RCC, 2007 for clarifiyng a picture of how Lao garments are delevered to destination countries.

Regarding a lack of supporting industries: **The** Lao PDR lacks supporting industries, especially in the supply of raw materials and intermediate products. Therefore, the garment firms in Lao PDR have to import, which adds delivery time and a high cost of transportation. From those surveyed, the high cost of transportation is very close to a higher level of constraints (3.97) affecting the Lao garment industry (Field Survey, 2014).

Regarding a weak physical infastructure: The weak physical infrstructure could affect the trade opportunities because it leads to an increase in the cost and interrupts production, for example, the availability of railway system and better basic road system for carrying goods to the ports. In case of electricity and water, they should be supplied

regularly (NSC and UNDP-RCC, 2007, p. 9). During the field survey, some garment firms also complained about electricity and required regular supply because the garment factories could not produce continuously; this means a loss of the firms' production, which affects delivering commodities to the final destination (lead time). This factor is in the medium level of constraints (3.77) affecting the Lao garment industry (Field Survey, 2014).

The most important export market of garment commodities for the Lao PDR is the European Union (EU)[28] (NSC and UNDP-RCC, 2007; Banomyong & Beresford, 2001; Rasiah, 2009.a) through the port of Rotterdam in the Nethelands, which is the major entry port to the EU (Banomyong & Beresford, 2001, p. 663). As mentioned above, due to Lao PDR being located in a far area from the global market and also surrounded by countries (land locked), this is a factor for trade competitveness, and has an impact on the garment industry's lead time (NSC and UNDP-RCC, 2007). Therefore, for addressing the lead time problem, Banomyong & Beresford (2001) did examine the alternative routes and methods for Lao garment exporters with the Multimodal Transport Model for finding alternative shorter routes to deliver the garment commodities. It found that Lao garment firms do not necessarily have to use the route via Bangkok (Thailand) to deliver the garments, because there is a better alternative route via Port Klang (Malaysia) in terms of time and cost (see Table 4.14 and Map 4.1) for delivering the garments to Europe; in addition, it also helps

[28] The major market for garments export, in order, is the European Union, Asia, Canada and United States (NSC and UNDP-RCC, 2007)

Lao PDR in terms of increasing the openness to the global market and gain a higher percentage of competitiveness on trade[29].

Table 4. 14. Transportation Cost and Times for delivering garment commodities from Lao PRD (Vientiane) to European Union (Rotterdam)[30]

No	Route	Transportation Cost (USD)	Transit Time (days)
1	Via Danang (Vietnam)	3,420	31/32
2	Via Bangkok (Thailand)	2,476.8	30/31
3	Via Laem Chabang (Thailand)	2,503	30/31
4	Via Lad Krabang (Thailand)	2,518.5	30/31
5	Via Port Klang (Malaysia)	2,467.5	27/28

Source: Multimodal Transport by Banomyong & Beresford, 2001, p. 682

[29] Transit and local charges via Thailand are up to 10% of total transportation cost, for Tea Money is about 2%. So, this 2% will be considered a loss to the competitiveness for Lao trade as well as garment exports (Banomyong & Beresford, 2001).

[30] Sea transportation is the cheapest cost per kilometer, rail is the second, and road is the most expensive (Banomyong & Beresford, 2001)

Map 4. 1. Alternative Routes for Delivering the Lao Garments

Road transport
Sea transport
Rail transpot

Source: Multimodal Transport by Banomyong & Beresford, 2001

4.2.6. Technological Development and Upgrading

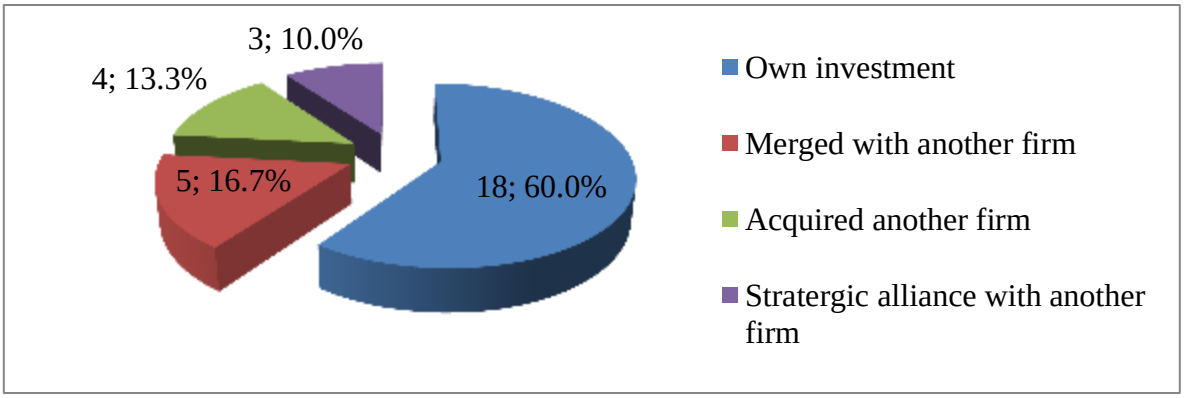
From the theoretical framework regarding the *upgrading* for the garment industry, the garment producers would be assisted by executing guidance, supporting the technology and finance from the international buyers, especially to improve and develop the modality on producing for better constancy of garment firms (as well as the industry) and products' quality. Thus, international buyers show a very significant role in industrial upgrading. As Rasiah (2009.a) said, Lao PDR is slow in developing a basic and high-tech infrastruture, and it has high unemployment (and underemployment) rates. These issues restrict the improvement of indepth knowledge for garment firms, so the country should focus on pushing technological upgrading and productivity by improving the basic infrastruture, high-tech infrastructure, network cohesion, and intergration in the global market and value chains. Moreover, Rasiah (2009.a and 2009.b) also suggested that the garment industry in Lao PDR should be upgraded in firm levels for sustaining competitiveness. The field research found that the factories have tried to upgarde themselves through their "process" in producing. For example, some factories use the modern technology such as using new machines or applying new production systems – from Stand Alone System to Belting System. However, these actions are implemented only in the new factories (i.e., Japanese factories and Thai factories), which have been operating only in recent years. Other types of upgrading, such as the "Product, Function, or Inter-sectoral", have not yet been implemented in the case of Lao PDR. The field research found that upgrading in regards to technological development has a medium level effect on the Lao garment industry (3.57), and the garment firms are trying to use new machinery and technology for production.

However, the use is still in a medium level (3.87), as replied by the garment firms. This means that some of them have to improve their production system, and there are more rooms/gaps for improvement in terms of industrial upgrading. In order to improve the technology, however, a huge amount of funds is needed, as said by a garment firm during the survey. This is consistent with VIXATHEP (2011), in that the Lao garment industry is still having a wide gap in efficientcy upgrading and production expansion, but the country should focus on improving the human resource as basic skills improvment for Lao PDR. The survey found that the Lao workers are in a medium level in terms of quality (3.37) as replied by the surveyed garment firms. Moreover, VIXATHEP (2011) also mentioned that Lao PDR should attract more efficient foreign companies to invest in the country, because Lao could be benifit from the technological transfer, including knowledge; however, we should carefully consider the terms and effects of the investment before approval. This could help in enhancing the garment industry in Lao PDR. These actions are aimed at continuing faster industrialization and development of the country.

Some garment factories could receive orders from international buyers and have cooperation with international traders, as proved and mentioned from the surveyed results in the previous sub-section. These could be a good sign for the Lao garment industry due to being a possible opportunity to learn and gain more technology from experienced countries, especially in terms of technology improvement. However, less than half (47%, or 7 out of 15) of all garment firms which export through international buyers could receive the support from the international buyers themselves. The support consists of: technical

methods on sewing techniques, expertise on designing, and machinery, accounting for 57% (4 out of 7 firms), financial support is 14.3% (1 out of 7 firms), and equipment 14.3% (1 out of 7 firms). The support is usually provided once or twice a year (Field Survey, 2014). Nonetheless, all surveyed garment firms (including the firms which do not receive any support from buyers or traders), mostly invest their own capital (56%, or 18 out of the total) for improving the factories and accessing new technologies; while some of them (30%, or 9 out of the total) merged and/or acquired with/from another firm (See Figure 4.11).

Figure 4. 11. Access to New Technology of Garment Firms, (Number, %)



Source: Field Survey, 2014

4.2.7. Involvement of Government

The Lao government has tried to provide better facilitation for both local and foreign investors and businesses as seen in their efforts in improving the concerned laws and regulations (i.e., the law on investment promotion, which has been improved since 1994 until the third edition in 2009) for better clarification and consistency with other

relevant laws and real situations of economic development. The important point of this law is to enhance the benefits and protect the rights of investors (Lao PDR.b, 2009); this includes the labor law, which was revised from 2006 to 2013. In addition, the government is at the frontier in negotiating with other countries at bilateral and multilateral levels. For example, trade negotiation and agreement between Lao PDR and the EU has led to some benefits for the investors and businesses, such as the GSP provision since the 1990s. These can facilitate all the entrepreneurs in the country and lead to competitiveness in terms of an attractive place for investment, also for the garment producers. This can also help in opening more opportunities to the world markets. A garment firm's director said that *"…the government should be very careful to help protect all the industries both new and old. By this I mean the garment industry is one of the oldest industries and has helped the Lao economy from the late 80's. Decisions made quickly affect our industry since we are labor intensive*" (Field Survey, 2014). The survey also found that government policies are also constraints affecting the Lao garment industry, which is in the medium level (3.53), and unexpected policies and regulation is the highest constraints affecting the Lao garment industry (5.00). Therefore, the statement above and the findings show that the government is a major agent that can influence through policies, laws, and regulations.

Chapter 5. Conclusions, Suggestions and Recommendations

5.1. Conclusion

The garment industry is a labor intensive sector where lots of labor is concentrated in producing for exports. After the implementation of the reformed policy in 1986 (NEM), trade and investment have been liberalized, so there were more investments in Lao PDR. One of them is the garment industry, which has been in steady growth since the 1990s. Foreign inflow capital was 80%, but only 0.1% went into the garment industry because all foreign investments were focused in mining and hydropower, accounting for more than 50% (agriculture and forestry was 14%, service sector was almost 14%, and other sectors 16%). Despite this, the garment industry is a crucial industry in Lao PDR because it is also a leader of income generation both into the country through exports and for Lao people through employment. The employment number has increased by almost two times from the time of establishment to the present; poverty reduction comes through workers' remittances, particularly for the uneducated young women from rural areas, and it is a basic step to a modernized pathway and industrialization due to being one of the oldest industries in Lao PDR.

This research tries to examine the competitiveness of the Lao garment industry after MFA termination, including the challenges that will affect the sustainable competitiveness of the garment industry in the future. Besides that, this research would like to figure out the reasons why the investments are still made in this industry in Lao PDR after MFA. From the research, we can conclude as follows:

5.1.1. Regarding the Based-Competitiveness and Challenges of the Lao Export-oriented Garment Industry.

The fundamental competitiveness of the Lao export-oriented garment industry comes from the relatively low labor cost and GSP-EBA from major markets. However, this competiveness is risky for two reasons: 1) the labor cost is projected to increase; and 2) the GSP-EBA from major markets – particularly from the EU – will be automatically removed after the Lao PDR graduates from the LDC list.

The most significant challenge to the garment industry is labor shortage (4.30), because the export-oriented garment firms are mostly located only in the capital city. This shortage occurs during farming season due to wokers who return to their home town for helping their families in harvesting. In addition, the garment firms expect that Lao workers will move to Thailand for working after the Lao PDR implements the obligation of AEC from 2015, which would be a big problem for the labor intensive industries like the garrment industry. The high turnover rate (4.23) is one challenge due to its effects on the changing number of workers working in the factories; this problem occurs due to most of the labor coming to work as a group; when one changes, another one might follow. The geographic issue is also a challenge for export-oriented garment firms (3.90), because it leads to a high transportation cost and long lead-time; for addressing the lead time problem, Banomyong & Beresford (2001) found an alternative shorter route to deliver the garment commodities. While Lao garment products normally use the route via Bangkok (Thailand), the found alternative route is via Port Klang (Malaysia), which would be better in terms of time and cost for devering the garments to Europe. In addition, it would help the Lao PDR in terms

of increasing the openness to the global market and gain a larger percentage of the competition on trade.

5.1.2. Regarding the Sustaining in the Future of the Lao Garment Export-oriented Garment Industry.

Based on the research, the Lao export-oriented garment industry could possibly be sustained if the country could keep the main competitiveness, and improve or address the mentioned challenges above. However, the research also found some good signs in terms of improving the garment industry in Lao PDR, such as the garment firms changed their processing modality to be more higher value added, particularly to be FOB based which shared almost half (43%) of the processing modality applied in production; of which 54% is FOB-1, and 46% is FOB-2. For CMT is 57%.

Lao PDR has been granted some benefits from the trade agreement, especially GSP-EBA from the EU, which grants duty-free and quota-free to all products (except arms and ammunitions) with no time limit for the Lower Income Economies and LDCs, including Lao PDR. If Lao PDR is no longer a least developed country (as defined in the UN's list), the EU will also provide *a generous transition period of three years*. This would help to mitigate the possible trade flow shocks (European Commission, 2014), and the garment firms in Lao PDR will have more times for adapting. However, Lao PDR still has other markets, such as the US and Japan; for the US market, Lao PDR will receive the US-NTR which reduces tariff from 45% to 12.5% on average, particularly for the garment sector;

and the GSP from Japan, respectively. In addition, most investment companies are foreign companies (64%); only 18% are Lao companies, and the rest are joint venture. The investment from foreign countries could attract more investors to invest in Lao PDR and would encourage the domestic enterprises to diversify the base of the Lao garment industry. This is especially true by providing access to modernized technology or industrial upgrading, as the step to the industrialization of a country's perspective and initiative; in the case of the Lao garment industry, Japan and Thailand are the major countries that have invested.

5.1.3. Regarding the Reasons to Invest in the Garment Industry in Lao PDR after MFA.

Most of the garment firms were established after the MFA period (64%) because of the following possible reasons:

1. Lao has a low labor cost with the rate of 0.216 USD per hour (however, this has to be reconsidered in case of productivity per worker per year)
2. GSP from the EU that provides zero percent of import duty to the EU
3. The EU has provided an additional special treatment to LDCs for the value content accumulated since 2005, in the context that all producers could import the raw materials and accessories for producing in ASEAN, and the produced garment products will be automatically counted as local content

4. The government will grant incentives related to profit tax to the promoted sectors with a tax exemption period of 1-4 years, commencing from the first commercial operational date
5. The movement of production sites from Thailand to Lao PDR, due to the fact that Thailand is not on the LDC list, so it would not enjoy the benefit from the EU

However, the field survey also found more reasons, such as tax exemptions for the import of raw materials and exports of processing products granted by the Lao government. Also, there were not many Japanese companies in Lao PDR, Lao PDR has similar culture and is close to Thailand, and it has political stability.

5.2. Suggestions and Recommendations

For ensuring the competitiveness and sustainable development of the Lao garment industry, this research could provide some possible suggestions and recommendations as follows:

5.2.1. Regards to the Lao garment industry

1. All concerned parts – the government and garment firms, including the workers – have to cooperate tightly in improving the skills of workers by expanding the curriculum on garment works and production into existing training centers, providing and undertaking on-the-job training within the factories, and encouraging knowledge transfer from foreign expatriates to Lao workers. These actions will lead to an increase in labor productivity;

2. Strong support from the government to organize training on doing business for garment entrepreneurs regularly, especially for the local entrepreneurs;
3. Garment companies should prepare themselves based on lessons learned from experienced countries in garments, such as Korea and Hong Kong, in order to reduce any risks that could happen in the future;
4. As Lao PDR has received scholarships from many countries such as Japan, Korea, EU and so forth, we should extend this support to a higher knowledge on clothing (i.e., Fashion design); and
5. Improve the awareness of working and jobs for Lao workers in such an industry.

5.2.2. Regards to the Providing an Attractive Business Environment

1. Regarding the existing plans on infrastructure, relevant agencies should increase the effectiveness as well as the monitoring system for this implementation.
2. The government should make relaxed and proper policies, laws and regulations related to investment, taxation, etc. This is so that it will attract effective investors from foreign countries to invest in the country in order to exchange knowledge, skills, mechanisms, and technology in terms of production, as well as upgrading the industry of Lao PDR.
3. In terms of real implementation of concerned competent authorities, they should be more flexible and motivated in some cases.

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Appendices

1. Questionnaire on Lao Garment and Textile Industry – 2014
2. In-depth questions for the Managing Directors of Garment Companies
3. Exchange Rate between Lao Kip (LAK) and Dollar (USD)

Questionnaire ID: __ __ __

Questionnaire on Lao Garment and Textile Industry – 2014

This Questionnaire is designed for collecting data in garment industry of Lao PDR. The data is going to use for the researching on "*Providing an Attractive Business Environment: The Competitiveness of Lao Garment Industry in the Global Value Chain after the Multi-Fiber Arrangement Termination*". Its results will be benefit for the government in economic planning and developing, and supporting the enterprises in Laos; in addition, it will be evidences for entrepreneurs in term of making initiatives and improving strategies, and other researches. Thus, on behalf of a researcher, I would like to request all garment and textile managing directors please answer and fill in the company information to this questionnaire. All personal information will keep as confidentially and the data will use in the research only.

Remark: MFA: Multi-Fiber Arrangement/Agreement on Textile and Clothing-MFA

I. General Information

Name of Company……..…….

Address: ……..……

(Province) (District) (Village)

Contact No: ……..……...

(Telephone No) (Fax No)

Name of owner or Managing Director

(Mr/Ms/Mrs)….……...……...……

Nationality…….…….....

Name of interviewee……Position……....……..

Email (if any): ……..…..……..……..……

Website (if any)……..……..……

In case of any query (who should contact with):

Contacted person (Name&Surname): …….Position……..…….....

Telephone No:……..…… Cellphone……..Email……..

II. Background of the firm

1. What are your main company's produces? (Multiple choices, please tick):

☐ Shirt	☐ Underwear
☐ Trouser	☐ Jackets
☐ T-shirts	☐ Knitted items
☐ Uniform	☐ Babies/children's clothed items
☐ Sweaters	☐ Others (Specify)……

2. What process of production does your company do? (Please tick only one as the main process)
   - ☐ Cut, Make, & Trim (CMT)
   - ☐ FOB-1 (including arrangement of input but excluding design)
   - ☐ FOB-2 (including arrangement of input and design)
   - ☐ FOB-3 (including arrangement of marketing and branding)

3. Legal Organization (Types of ownership).
   - 3.1. Domestics. ☐ Yes ☐ No
     - 3.1.1. If yes, please clarify more on your owner type (tick only one)
       - ☐ Domestic Single Proprietorship
       - ☐ State and Domestic Private Partnership
       - ☐ State Owned Enterprises
   - 3.2. Totally Foreign Owned ☐ Yes ☐ No
     - 3.2.1. If Yes, from what country?.....
     - 3.2.2. If your company have share with other foreign companies, what countries have you shared with and how many percentage of the share?
       Country's name……
       Percent of the share……%

3.3. Joint Venture. ☐ Yes → Please fill in the table below ☐ No

Joint Venture Type	1:Yes 2: No	Percent share (%)		In case of foreign share, is it from only one foreign country or not? 1: Yes 2: No	If No, where are the countries from? And how much of the share?	
		Domestic	Foreign		Country's name	Percent share (%)
Private Domestic and Foreign Partnership						
State Owned and Foreign Partnership						

4. Type of company (foreign subsidiary or Lao affiliation). Please tick one answer
   ☐ Lao affiliation → if yes, how many factories do you have? ..... factories
   ☐ Foreign subsidiary → If yes, where's the headquarter? ……..…….

5. When did your company establish? (please tick one answer)
   ☐ Before 1986
   ☐ 1986-1989
   ☐ 1990 – 2004
   ☐ 2005 – 2013
   ☐ 2014. How many month did you operate your activity? …… months

6. Capital at the time of establishment (in Mill. Kip):…….……...…….
7. Current capital (in Mill. Kip):……..……...……..

8. In case of foreign company, why do you choose Laos for investment in this industry?
   ……
   ……
   ……
   ……
   ……

9. Employment (exclude: employment in branches/agency office/support organization)
   9.1. Number of employees **at the time of establishment**, include managers (please fill in)

		Total	Female	Permanent Employees		Temporary Employees	
				Total	Female	Total	Female
1	Total						
2	Manager(s)						
	Lao manager						
	Foreign manager						
3	Employees						
	Lao employees						
	Foreign employees						

   9.2. Number of employees **at current time**, include managers (please fill in)

		Total	Female	Permanent Employees		Temporary Employees	
				Total	Female	Total	Female
1	Total						
2	Manager(s)						
	Lao manager						
	Foreign manager						
3	Employees						
	Lao employees						
	Foreign employees						

10. What's the average age level of employees?
    ☐ 15-19 ☐ 20-24 ☐ 25-29 ☐ 30-34
    ☐ 35-39 ☐ 40-44 ☐ 45-49 ☐ 50-54
    ☐ >=55

11. Please fill the average wage per month (including overtime):
    11.1. For the workers who are working in production area…….…… Kips
    11.2. Officer in administration office (exclude the owner)..... Kips

12. How much of the company's sales in average per year (in Mill. Kip)? (Please fill in the value in each year)

Year	Value (Mill.Kips)
2004	
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	

III. Impact from MFA

13. Where does your company export after MFA?
    - ☐ Domestic sales only
    - ☐ Export only
    - ☐ Both domestic sales and export

    13.1. If any export, which countries? (if there are more than 3 countries, please give the main countries up to three)

    Country name……

    Country name……

    Country name……

14. What does your company export? (Multiple choices, please tick)

☐ Shirt	☐ Underwear
☐ Trouser	☐ Jackets
☐ T-shirts	☐ Knitted items
☐ Uniform	☐ Babies/children's clothed items
☐ Sweaters	☐ Others (Specify)……

15. Please rank the major markets during and after the Multi Fiber Agreement/Agreement on Textile and Clothing (MFA/ATC) period
(Please rank by using number from 1-6 as the most to less major markets).

Country/Region	During MFA/ATC	After MFA/ATC	
	Rank	Rank	Share of export among country/region (%)
USA			
EU			
Thailand			
Japan			
ASEAN			
Others (specify)…….……..			

16. How do you export your products? (Please tick only one answer)
- ☐ Export directly
- ☐ Export through international traders
- ☐ Export through international buyers
- ☐ Export as mixed methods from above
- Any other (specify)…….

16.1. If you export through international traders, please indicate the name of the firms and their originate countries?

Trader name	Original country
1.	
2.	
3.	
4.	
5.	

16.2. If you export through international buyers, could you mention the name of them as given below? (Multiple choices).

☐ GAP	☐ H & M	☐ Levi Strauss
☐ Adidas	☐ Target	☐ Children's Place
☐ Wal-Mart	☐ The William Carter	☐ VF jeans wear
☐ Matalan	☐ Blue Star	☐ Nike
☐ PVH	☐ C&A	☐ JC Penny
☐ khol's	☐ MGT	☐ American Marketing

☐ Others (please Specify)……

17. If you export over the international buyers, do you get any support from the international buyers? (Please tick one answer)

☐ Yes → Go to Q17.1 and Q17.2

☐ No → Go to Q17.3

17.1. What kind of support did your company receive? (Please specify on the line below)

……

……

……

……

17.2. How often global buyers practice labor and environmental compliance in buying from your firm? (Please tick only one)

☐ Never ☐ Once a year

☐ Twice a year ☐ More → how many times? ……. Times

17.3. How would you gain access to new technology?

☐ Own investment
☐ Merged with another firm
☐ Acquired another firm
☐ Strategic alliance with another firm

18. Has your company exportation increased after MFA end?

☐ Yes ☐ No ☐ No Change

19. How is your current profitability of the firm?

☐ Bearing net loss ☐ Bearing net profit ☐ No change

20. Does your factory use the imported raw materials for producing?
☐ Yes → go to Q20.1 & 20.2 No ☐

20.1.If yes, how many percentage used?

☐ 1% - 20%
☐ 21% - 50%
☐ 51% - 80%
☐ More than 80%

20.2. Where do you import the raw materials?

Major imported country……..……
The Second……...…….
The Third……...……

21. How do you rate your firm's competitiveness relate to the following criteria? (Please tick only one range in each category)

Competitiveness criteria	**Not important**				**Very important**
	1	**2**	**3**	**4**	**5**
Cost of labor					
Quality of labor					
Low price of product					
Good firm's services					
Production flexibility					
Production capacity					
Designing of product					
Fabric sourcing					
Lead-time					
Market Access					
New Machinery and Technology					
Management skills					

Government Support (Cash Incentive, Import substitution and prompt Bureaucracy)					
Others (specify)……					

IV. Firms' opinion on the impact to the garment industry

22. How would you rate the following macroeconomic factors impact to garment and textile industry? (Please tick only one range in each category)

	Not important				**Very important**
	1	**2**	**3**	**4**	**5**
i. Labor cost					
ii. Labor productivity					
iii. Interest rate					
iv. Taxes and duties					
v. Exchange rate					
vi. Infrastructure					
vii. International trade policy					
viii. Economic growth					

23. How would you rate the following criteria affect to the Lao on garment and textile industry? (Please tick only one range in each category)

Factors	**Not important**				**Very important**
	1	**2**	**3**	**4**	**5**
Increase of labor cost					
Low workers' productivity					
Technological development					

Compliance with international labor standards					
Production capacity					
Lead time					
Government policy					
Law on Labor					
Taxes (high)					
Infrastructure (electricity, water supply, internet, etc)					
Geographical problems (far from ports)					
Transportation (expensive)					
Labor shortage (include seasonal workers)					
Turnover (labor move to different firms)					
Punctuation of labor					
Custom process (Import-export clearance)					
Others (specify)……..……..					

Thank You for your kindly cooperation and Support

Wish you happy, fortunate and successful in your duties and businesses

In-depth Questions
(For the Managing Directors of Garment Companies)

1. How do you think about Lao economy and its industry in the current time?

2. What are the advantages and disadvantages (challenges) of Lao garment industry in your opinion?

3. After the Muti-Fiber Arrangement and the Agreement of Textile and Clothing (MFA/ATC) were ended, has your company faced any difficulties? How did you adapt your company? Please elaborate

4. Do you think your company has any competitiveness? If yes, what are they? If no, what are the constraints? (please specify and elaborate the reason)

5. What do you think about labor in your company? What should they improve themselves?

6. Does your company provide any training to employees for better working? What are they? How often per year?

7. Have you had any strategy and plan for improving your business especially after MFA/ATC? Please elaborate

8. Do you have any plan to invest more in the garment and textile business? If yes, where and why?

9. What problem will affect to your company in case of being a member of AEC in 2015? And how will you adapt your company? Please elaborate

10. What should government and related institutions do for better improving in garment and textile business?