LARGE U.S. APPAREL COMPANIES’ FACTORY MONITORING METHODS

by

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A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Science in Fashion and Apparel Studies

Spring 2017

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ACKNOWLEDGMENTS

I would like to thank first and foremost my advisor Dr. Marsha A. Dickson, whose encouragement, guidance, and support enabled me to complete my thesis. I am also very grateful for Dr. Hye-Shin Kim and Prof. Kelly Cobb, who served on my committee and showed me their warm hearts and support. In addition, my thanks go to Dr. Eunah Yoh at Keimyung University in South Korea who encouraged me greatly. I would also like to express my special gratitude to Dr. Belinda T. Orzada who showed quiet but continuous support. Lastly, I offer my deepest appreciations, regards, and blessings to my loving family.
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Globalization and outsourcing trends in the textile and apparel industry have resulted in the migration of manufacturing facilities to less developed countries. Geographically dispersed and complex supply chains in the industry have reduced visibility and transparency and have resulted in labor right violations and appalling working conditions in factories. To prevent the abuses and ensure compliance with codes of conduct detailing labor rights and safe working conditions, many apparel companies have adopted codes of conduct and factory monitoring methods. This research investigated what factory inspection methods have been adopted among large U.S. apparel companies and found a correlation between monitoring methods and company characteristics. As companies characteristics, net sales, profit margins, and factory ownership were chosen. Data such as annual, Corporate Social Responsibility (CSR), or sustainability reports were collected from company websites and content analysis was conducted. Analysis results indicated that a majority of companies had supplier codes of conduct and conducted internal and/or external monitoring. In addition to this, while the positive correlation between net sales and factory monitoring was found, no relation was identified between monitoring and either profit margins or factory ownership. Future research areas were suggested, including similar research with small size and/or non-U.S. apparel firms and developing other research methods such as employee and field expert interviews, surveys, or focus group to obtain more data. The study results suggested that continuous efforts to increase the monitoring effectiveness are necessary, more supplier involvement in monitoring process was encouraged. Moreover, monitoring methods for small and medium size firms need be taken into consideration.
Chapter 1
INTRODUCTION

1.1 Study Background

The textile and apparel industry is one of the oldest and largest industries in the world (Gereffi, 2002), providing for the basic human needs of clothing to the conspicuous consumption by people concerned with displays of social status and classes. The industry supply chain comprises various value added processes and global sourcing is active in the entire process; fiber production, manufacturing yarns and fabrics, dyeing, printing and finishing of fabric, manufacturing clothes, logistics and distribution, and finally consumption and disposal (Frederick, 2010). Although all countries participate in the inputs and outputs of textile and apparel production at different levels, the total world apparel consumption is highly concentrated in the United States and the European Union. North America accounts for 25 percent of world’s clothing retail (International Labor Organization, 2014) and especially, the United States was ranked as the top country of clothing and textile importers in 2015 aside from European Union (World Trade Organization, 2016). Most of the apparel products available in U.S. market are imported from other countries and less than 5% is produced in the United States (Ha-Brookshire, 2017). It has become apparent that the United States is the greatest textile and apparel consumption giant in the globe, but a very small proportion of the goods is produced within the nation and U.S. apparel retailers and brands are actively conducting global sourcing.
Compared to the vigorous consumption of textile and apparel in the United States, the less developed countries are mostly engaged in upstream of supply chain activities; fibers, yarns, and fabrics productions, manufacturing clothes, and others. According to World Trade Organization (2015), some countries function as major sourcing bases and exporters of the textile and apparel products, accounting for 52.3% of world textile and clothing exports and reaching the value of $797 billion. The exports are highly concentrated on five leading countries; China, India, Turkey, Bangladesh, and Vietnam (WTO, 2015). However, the retailers and brands in the developed countries such as the United States seek cheap labor in exporting countries, but at the same time top quality, lowest price, high flexibility and fast production to meet volatile consumer demands and increase their profits. Accordingly, to meet the contradictory demands, garment factory workers in less developed countries have been exposed to labor exploitation and unsafe working conditions; compromising labor rights by lowering wages and forcing workers to do overtime, engaging in child labor, providing unsafe working conditions, and more (ILO, 2014).

For over two decades, labor activists and consumer pressure groups’ campaigns highlighting negative social impacts confronted by workers in the global supply chains of large and renowned apparel retailers and brands have been vigorous (Dickson et al., 2009). As the top apparel importers, many U.S. apparel brands have been involved in sweatshop issues and criticism as well. Nike Inc. was intensively denounced with its sweatshop practices in the 1990s (DeTienne & Lewis, 2005). Likewise, Gap Inc. was also accused of labor violations (Bartley, 2005). Being aware that publicity of labor issues results in detrimental effects on company sales and reputations, U.S. apparel companies have long adopted private codes of conduct and
factory monitoring methods to regulate the operations of their manufacturing facilities abroad (Dickson, 2013). However, as the apparel supply chain has been highly fragmented, complex, and geographically disperse due to multiple layers of subcontracting and global sourcing, the labor compliance oversight in production factories has been enormously challenging to companies (Esbenshade, 2004). Multinational apparel brands such as Nike Inc. source significant amount of their productions abroad directly or indirectly (Nike Inc., 2016), often contracting with intermediaries such as Li & Fung Limited and sourcing agents that subcontract with thousands of factories worldwide (McFarlan, Chen, & Wong, 2012; PVH Corp, 2016, p. 14). Accordingly, inhumane treatments to the workers in the upstream of the supply chain have been invisible and hidden. The efforts have been made to increase transparency, and thus the apparel companies have applied multiple methods to oversee factories in more effective ways: codes of conducts, factory audits using internal employees, and third party organization or audits companies (Dickson, 2013).

1.2 Statement of Research Problem

Since the 1990s, codes of conduct and factory audits have been the main oversight methods of labor compliance in garment factories. Currently, many U.S. and E.U. apparel companies have their supplier codes of conduct to ensure and monitor labor standards and safe working conditions compliance in supplier factories (Dickson, 2013; Erwin, 2011; Kozlowski, Searcy, & Bardecki, 2015; Turker & Altuntas, 2014). Also, many of them are using internal staff, external third party organizations, or both to inspect factory social labor compliance. For instance, Nike Inc. and Gap Inc. have supplier codes of conduct to regulate labor standards in foreign
factories and additionally, the two companies use internal staff and third party organizations such as Fair Labor Association (FLA) to ensure compliance (Dickson, Loker, & Eckman, 2009). In contrast, The Buckle Inc. has only vendor codes of conduct as means of securing supplier labor compliance (The Buckle Inc., 2016), whereas Carter’s Inc. actively employs third party organizations to ensure its codes of conducts (Carter’s Inc., 2016).

As stated above, the United States has been the dominant importer in the apparel industry but U.S. apparel companies are mostly outsourcing its production from overseas, and they have long adopted codes and monitoring tools to inspect factories overseas. Despite several decades of codes and monitoring history, the academic research on each apparel company’s factory monitoring methods choices is very limited. Accordingly, there is also a lack of research analysis on what company characteristics affect each apparel company’s factory monitoring adoptions.

1.3 Research Purpose and Implications

Given that U.S. apparel companies are dominant importers in the global textile and clothing industry, the purpose of this study is to investigate the current U.S. apparel companies’ factory monitoring choices and the correlation between company characteristics such as sourcing type and financial statuses and the monitoring choices. The following research questions are developed accordingly.

RQ 1. What factory inspection methods have been adopted among U.S. apparel companies?

RQ 2. What are the company characteristics of large U.S. apparel companies?
RQ 3. Are there any specific patterns or correlations between companies’ factory inspection methods and company characteristics?

As there has not been enough literature on apparel companies’ supplier monitoring choices and factors affecting these choices, this research will make contributions to the literature. In addition, this has strong implications for multinational apparel companies by assisting their choices on monitoring methods. Factory monitoring is a costly and time-consuming process and companies are generally circumspect in monitoring selections. Therefore, having knowledge of monitoring choices of other companies, especially the companies that have similar characteristics, will play roles as reference and guidance. Employees in charge of overseeing foreign contractors or in sustainability department will be particularly interested in other apparel companies’ monitoring practices and examples.

1.4 Definition of Terms in the Study

Codes of conduct. In general, corporate codes of conduct are a set of statements of regulations or policies serving as the expression of responsibility to particular enterprise conduct (Diller, 1999). For the purpose of this thesis, the term, codes of conduct, implies the regulations or principles applied to a company’s vendors or suppliers under contractual relationships.

Factory audit, inspection, and monitoring. Normally, factory audit, inspection, and monitoring are conducted during the production process to control the quality of products or to assess labor and environmental standards compliance (Dickson et al., 2009). For the purpose of this study, factory audit, inspection, and
monitoring concepts imply ascertaining whether factories comply with codes of conduct with regards to labor standards and work environment security not relevant to product quality control.

1.5 Assumptions and Limitations

The assumption of this study is that there are certain company characteristics or predictable patterns that affect U.S. apparel companies in determining how they monitor their factories.

The study has two limitations. One major limitation is that U.S. apparel companies investigated for this study are limited to 54 among numerous companies. In particular, the companies used in samples of this study are restricted to U.S. companies with a large proportion of sales and great influence. Presumably, it must be acknowledged that the research findings and its potential application should be used with discretion. Another limitation is that the data collected for this research was all obtained from company websites publicly available therefore certain information that companies do not disclose were exclude from data analysis.
2.1 Global Sourcing in the Textile and Apparel Industry

Globalization is characterized as the process of international interaction and integration among people, companies, and governments in a wide range of countries (Friedman, 2005). The increase in international business and investment and the development of innovative technologies such as information technology have facilitated globalization (Tyagi, 2003), and additionally the need for increased productivity and capacity have also accelerated global sourcing trends in textile and apparel businesses (Ansett, 2007). Most companies nowadays do not limit themselves within their geographical borders and are involved in international relations to compete in global markets.

In textile and apparel industry, the lift of Multi-Fiber Agreement in 2005 removed all quotas on garments provided more flexibility for multinational companies to expand new sourcing markets overseas. Since then, the industry supply chains have continued to migrate to less developed countries in search of cheap labor and raw materials, and higher quality products and faster productivity to obtain competitive advantages. Garment factories have spread across almost every continent with a striking concentration in Asia, as well as many factories in Southeast Asia, Central America, and a much smaller number in Africa, and South America (Bonacich & Appelbaum, 2000). Commonly, these countries are delineated as having a dearth of government enforcement on national and international labor laws because of resource constraints, insufficient infrastructure, government corruption, and concern about losing foreign investment. The result of the globalization in the garment industry is a
dramatic growth in the number of producers, increasing competition among the factories worldwide (Locke, 2013).

2.1.1 Sourcing Strategies

Sourcing strategies can generally be classified into two main categories. Internal sourcing, where manufacturing takes place in company-owned facilities either domestically or internationally (Parkhe, 2007), and external sourcing which implies purchasing products either from domestic or international suppliers (Antras & Helpman, 2004; Duening & Click, 2005). Though textile and apparel firms have implemented both internal and external sourcing separately or concurrently depending on their strategic decisions, external sourcing has increasingly been identified as a management strategy in order to save labor costs and enhance competitive advantages (Elmuti & Kathawala, 2000). As such, the textile and apparel industry is globally dispersed and fragmented. Massive parts of production and manufacturing have been externally sourced. According to World Trade Organization (2015), some countries are seen as major sourcing bases and exporters of the textile and apparel products, thus accounting for 52.3% of total value of world textile and clothing exports. Specifically, the total value reached $797 billion in 2014, 52.3% of which were exported by five leading countries: China, India, Turkey, Bangladesh, and Vietnam (WTO, 2015). In comparison, Gereffi and Fredrick (2010) pointed out that the apparel consumption was highly concentrated in two main regions: The United States and the European Union.

Global sourcing refers to trade between the buyer companies and suppliers taking place at the international level (Golini & Kalchschmidt, 2011; Peng, 2006). This implies that the source and the destination of goods are situated in diverse countries and the products have to cross borders. In recent decades, global sourcing
has been one of the universal strategies applied by companies to create and maintain a sustainable competitive advantage (Ferdows, 1997). Labor costs in developing countries have offered firms the benefit of saving money. Furthermore, often sourcing destinations in other countries have provided propitious chances with multinational companies due to lower labor costs and taxes, accessing superior quality inputs or processes, and less government regulations (Porter, 1990, as cited in Alguire, Frear, & Metcalf, 1994; Su, Gargeya, & Richter, 2005).

In the apparel industry, competitive markets and low-cost opportunities have pushed the majority of the businesses towards global sourcing. Many companies have maintained their competitive position and taken advantages of their production and manufacturing processes and services from the countries, such as China, India, Pakistan, and Bangladesh as a result of their global sourcing strategies. Nike Inc. is an example company who has a successful global sourcing strategy where it subcontracts most of its manufacturing to independent vendors in Vietnam, China, and Indonesia (Nike Inc., 2016).

2.1.2 Problems Issued by Global Sourcing

Global sourcing trend in the textile and apparel industry has rapidly expanded among a majority of companies today that strives to obtain considerable advantages of the possibility of reduced production costs and availability of abundant labor forces. However, some critical risks with globalization have arisen. Global sourcing requires additional skills and knowledge to deal with international vendors disparate in languages, cultures, politics, environments, and other issues (Kotabe & Helsen, 2004; Wisner, Tan, & Leong, 2005). Among them, sweatshop practices including labor exploitation, low wages, child labor, unsafe working conditions, and environmental
damages have made the consumers in the Global North outraged and are regarded as critical matters. As a result, the global corporations began to make an enormous effort to manage affirmative brand reputation and images, and accordingly, Corporate Social Responsibility (CSR) has been the preoccupation in business management (Dickson et al., 2009).

2.2 Corporate Social Responsibility (CSR)

2.2.1 CSR Concept

CSR is a controversial topic in the business field and academic literature because there has not been a clear definition or consensus of what CSR entails (Van Marrewijk, 2002). The argument encompassing CSR includes concepts such as sustainable development, corporate citizenship, social entrepreneurship, and ethical business practices (Van Marrewijk, 2002). Bowen (1953) used the term social responsibility for the first time in his book, Social Responsibilities of the Businessman, stating that large companies have significant impacts on society, and therefore, they are obliged to comply with societal values and the welfare of the public. Since then, there has not been one all-encompassing agreement on the concept of CSR. Nevertheless, the most commonly cited in the literature is Carroll’s definition:

The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time (Carroll, 1979, p. 500).
Freeman (1984) took a stakeholder approach to CSR, claiming that corporations are responsible both to shareholders and to a wide range of stakeholders in pursuit of economic gains. Stakeholders are comprised of company owners, employees, governments, unions, suppliers, academics, investors, and so on. From Freeman’s perspective, the textile and clothing industry, which is one of the most globalized and labor intensive industry sectors, has heavy social responsibility throughout its supply chains. Nonetheless, in the apparel industry, CSR and social responsibility are still an alien concept and relatively new term (Dickson et al., 2009).

2.2.2 CSR in the Textile and Apparel Industry

Without a homogenized definition, Dickson and Eckman (2006) collected 74 professors’ and graduate students’ view to standardize CSR definition for the apparel industry. “Socially responsible businesses consider the entire system of stakeholders associated with apparel supply chains, including production workers, sales help, and consumers, and the entire product life cycle from the inception of raw materials and components to product design, use and discard” (Dickson et al., 2009, p. 30). Dickson et al. (2009) found that the lack of an industry-wide accepted agreement on CSR definition has led to vagueness over whether social responsibility includes the environment. They have concluded that the environment is generally included under the umbrella of social responsibility, and the pursuit of profit should balance with business ethics through the apparel production so that minimizes harms on humans and the environment (Dickson & Eckman, 2006).

This view is further enhanced by the Business for Social Responsibility (BSR), an organization that assists businesses within the apparel industry to become socially responsible. The BSR has claimed that to accomplish social responsibility, companies
must integrate practices into all aspects of their business activities. Businesses should be “achieving commercial success in ways that honor ethical values and respects people, communities and the natural environment” which is presented through a set of policies and practices for all facets from the top management to mid-level business operations to supply chains (White, 2006).

As the textile and apparel industry has repeatedly been criticized for labor exploitations (Dirnbach, 2008) and environmental pollution, CSR is highly relevant throughout the industry supply chain from manufacturing to retailing to consumption. Emmelhainz and Adams (1999) studied sweatshop issues for the first time and claimed development of corporate code of conduct and monitoring of factory facilities to improve working conditions and protect labor rights in developing countries.

Dickson et al. (2009) also stated that in the 1990s and early 2000s, this code and monitoring movement were the prevalent trends in CSR in textile and apparel industry. In the late 2000s, the CSR concentration on code and monitoring evolved into the company strategy and competitive advantage perspectives. That is, apparel companies operating under social justice and ethics can protect themselves from negative reputation and publicity that frequently lead to boycotts and management risks (Arnold & Hartman, 2006). Later, many scholars also have argued that the companies, which choose to pursue CSR in their core management, can have competitive advantages (Fassin, 2008). Accordingly, more corporations have participated in investing human and monetary resources in CSR as a response (Dickson et al., 2009). Well-known apparel corporations such as GAP Inc. have begun to provide information about their CSR-related activities and/or labor compliance programs on their web-pages and/or in more detailed CSR reports that can be
downloaded (Dickson & Kovaleski, 2007). Company CSR activities are used as a means of public relations to target shareholders, investors, and consumers. In addition to traditional channels such as TV and product packaging, company websites are also used for a promotion and communication tool due to widespread internet access. Company CSR activities are frequently publicized in the form of CSR or sustainability reports and presented on the company websites (Gaskill-Fox, Hyllegard, & Ogle, 2014; Mann, Byun, Kim, & Hoggle, 2013).

2.3 Codes of Conduct

2.3.1 The Rise of Codes of Conduct

CSR has expanded at both the national and international level as non-governmental organizations (NGOs), governments, and organizations such as the United Nations Global Compact (UNGC) and International Labour Organization (ILO), have developed guidelines to encourage or ensure companies act as responsible corporate citizens. The first establishment of codes of conduct regarding worldwide labor rights took place in 1919, when the ILO was founded for the first time, adopting the first internationally binding convention (International Labour Organization, 2016). The ILO has adopted 185 conventions for the protection of workers’ rights until now. In 1998, the ILO adopted the “Declaration on the Fundamental Principles and Rights at Work” which ties all ILO member countries. Due to their lack of enforcement mechanisms, however, the ILO Conventions have often been ineffective in practice. Similar deficiencies have impeded attempts by the Organisation for Economic Co-operation and Development (OECD), United Nations Conference on Trade and
NGOs and unions informed the public of inhumane labor practices in factories of developing countries in the 1990s. In many cases, the companies involved in denied labor rights violations and simply terminated business relations with their suppliers in the less developed countries. However, as negative public opinion started producing economic loss, multinational retailers and brands started taking steps to set up their internal codes to apply to their suppliers (Appelbaum & Lichtenstein, 2014). They first emerged in the early 1970s when major U.S. companies such as IBM, Ford, and GM confronted the accusations that their operations condoned apartheid in South Africa. In accordance with the reputational threat, these multinational corporations have developed their codes of conduct, staffed by hundreds of internal company employees at home and overseas (Appelbaum & Lichtenstein, 2014).

Afterward, prompted by rapid globalization in the 1990s, sweatshops and child labor issues in the garment factories have been raised frequently and criticized by the public and consumers. In response to this, Levi Strauss & Co. first developed supplier codes of conduct among U.S. apparel companies in 1991 and later, more multinational brands like Nike Inc. and Gap Inc. spontaneously developed their supplier codes of conduct (Bartley, 2005; U.S. Department of Labor, 1996; Wick, 2005).

Codes of conduct for multinational corporations have been proliferating since the early 1990s as it became apparent that many of the apparel and footwear imported from Central America and East Asia regions were manufactured under appalling conditions. Eighty-six percent of the Fortune Global 200 had some corporate code of conduct by 2007, which doubles the rate of a decade before (Appelbaum &
Lichtenstein, 2014). Although these codes of conduct have some impacts on the margins, particularly in terms of environmental and working hour standards, but research conducted by sociologists on the ground in Asia and other regions have found that in actual operation, such codes bring no major transformation in the way large retailers go about purchasing their products or in the way their contractors and sub-contractors go about producing goods (Appelbaum & Lichtenstein, 2014). Worker exploitations remain intact. These days, many companies are now involved in the conduct codes issued by multi-stakeholder initiatives such as Fair Labor Association (FLA) and Worldwide Responsible Apparel Production (WRAP) (Wick, 2005).

2.3.2 Law Regarding Codes of Conduct: The California Transparency in Supply Chains Act of 2010

In October 2010, The California Transparency in Supply Chains Act was signed into law and went into effect in January 2012 (U.S. Department of Labor “California Transparency in Supply Chains Act,” 2016). This Act applies to all retailers and manufacturing companies with annual global revenues of more than $100 million that do business in California and requires these businesses to report their efforts publicly to eradicate slavery and human trafficking from the direct supply chains where they manufacture tangible products for sale (U.S. Department of Labor “California Transparency in Supply Chains Act,” 2016).

Many U.S. apparel companies headquartered in California or doing business in the state are subjected to the California Transparency in Supply Chains Act and are asked to report the following according to United States Department of Labor,

Specifically, a company must disclose to what extent it: (1) engages in verification of product supply chains to evaluate and address risks of
human trafficking and slavery; (2) conducts audits of suppliers; (3) requires direct supplies to certify that materials incorporated into the product comply with the laws regarding slavery and human trafficking of the countries in which they are doing business; (4) maintains accountability standards and procedures for employees or contractors that fail to meet company standards regarding slavery and human trafficking; and (5) provides employees and management training on slavery and human trafficking (U.S. Department of Labor “California Transparency in Supply Chains Act,” 2016).

The Act has legally enforced disclosure and reporting of corporations’ efforts to eradicate slavery and human trafficking in workplace and supply chains. Accordingly, many U.S. apparel companies have obeyed the law and stipulated the contents of their supplier codes of conduct. For instance, Christopher & Banks Corporation reported its adaptation of a Social Responsibility Code for Vendors prohibiting forced, human trafficking or slavery under its supply chain and stating other workers’ rights such as freedom of association and health and safety as well (Christopher & Banks Corporation, 2014). To ensure compliance with the law, the company employees and third parties visit its factories on a regular basis (Christopher & Banks Corporation, 2016).

2.3.3 Contents of Codes of Conduct

In general, corporate codes of conduct are developed in reference to ILO’s core standards and basic principles regarding discrimination, the abolition of forced and child labor, and freedom of association (Dickson, 2013). Codes of conduct mainly covered conflicts of interest, bribery, and sexual harassment in the 1980s but in 1990s, their contents extended to labor standards and human rights due to the active globalization of multinational corporations (Dickson, 2013).
In 1998, the ILO produced the Declaration on Fundamental Principles and Rights at Work. In the Declaration, it is stated that states should all respect, promote, and realize core labor standards. The core labor standards comprise eight conventions (Clean Clothes Campaign “What are ILO conventions and core labour standards?,” 2013; Dickson et al., 2009).

The eight fundamental Conventions are:

1. Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)

2. Right to Organise and Collective Bargaining Convention, 1949 (No. 98)

3. Forced Labour Convention, 1930 (No. 29)

4. Abolition of Forced Labour Convention, 1957 (No. 105)

5. Minimum Age Convention, 1973 (No. 138)

6. Worst Forms of Child Labour Convention, 1999 (No. 182)

7. Equal Remuneration Convention, 1951 (No. 100)


Table 2.1 indicates the codes of conduct based on ILO eight fundamental Conventions that ten U.S. major apparel corporations have developed. Most companies prohibit forced labor, child labor, discrimination, and harassment in workplace while workers’ health and safety, fair compensation, standard working hours, forming associations, and collective bargaining are considered as matters of much account.
<table>
<thead>
<tr>
<th>Company</th>
<th>Freedom of association (No.87)</th>
<th>Collective bargaining (No.98)</th>
<th>No forced labor (No.29, No.105)</th>
<th>No child labor (No.138, No.182)</th>
<th>Wages and hours (No.100)</th>
<th>No discrimination and no harassment (No. 111)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cintas Corporation</td>
<td>No mention</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Gildan Inc.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>L Brands Inc.</td>
<td>Yes</td>
<td>No mention</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Nike Inc.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>PVH Corp.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>The Buckle Inc.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>The Gap Inc.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>The TJX Companies Inc.</td>
<td>No mention</td>
<td>No mention</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Under Armour Inc.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Urban Outfitters Inc.</td>
<td>No mention</td>
<td>No mention</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Author’s elaboration on companies’ codes of conduct for suppliers or vendors
2.4 Factory Monitoring

2.4.1 Practices of Past and Present

As global production began to expand decades ago, the Organization for Economic Cooperation and Development (OECD) and the International Labor Organization (ILO) issued the principles for the ethical operation of transnational corporations, including the protection of workers’ rights (Cavanagh, 1997; Dickson, 2013). Although these bodies developed the codes governing multinational companies’ activities in global stages, still there are no enforcement mechanisms, and moreover, multinational corporations were reluctant to adopt the rules, therefore consequently, the principles failed to have great effectiveness in textile and apparel industry (Dickson, 2013; Esbenshade, 2004). In the 1990s, garment manufacturers began to form individual company codes to protect themselves from growing negative publicity about the labor conditions in their contracting factories abroad (Dickson, 2013; Esbenshade, 2004). For instance, Nike Inc. and Levi Strauss & Co. adopted a "Memorandum of Understanding and Codes of Conduct for Indonesian Business Partners" and a comprehensive code covering all of its suppliers worldwide respectively (Dickson et al., 2009; Shaw, 1999; Schoenberger, 2000). Since 1992, hundreds of companies have emulated the cases and especially in 1995, President Clinton released his Model Business Principles encouraging all companies to adopt and implement codes of conduct voluntarily. Accordingly, the adoption of codes led to implementation efforts in the form of monitoring. Clinton continuously pushed the codes by establishing a presidential task force of a monitoring body, which consists of brand-name apparel companies and NGOs, the Fair Labor Association (FLA) (Esbenshade, 2004). Around the same time, other oversight organizations had been
formed in the United States and Europe such as Social Accountability International (SAI), the Ethical Trading Initiative (ETI), and the Worldwide Responsible Apparel Production (WRAP) (Wick, 2005). All include private corporations in their decision making and factory inspection (Esbenshade, 2012). Monitoring organizations based in the United States are the FLA, SAI, which was created by the Council on Economic Priorities, and WRAP launched by the American Apparel Manufacturers' Association (Wick, 2005). The FLA and the SAI are "multi-stakeholder" initiatives in that they have involved companies as well as human and labor rights organizations in their development and governance, while WRAP is an industry-run program (Dickson et al., 2009; Wick, 2005).

All three organizations accredit the certification of compliance and monitors with their particular codes of conduct. In the initial stage of code monitoring, monitoring implement is dominated by private firms, but there was increasing interest in independent monitoring conducted by NGOs. Local labor rights experts, labor lawyers, human rights activists, and academics focused on labor rights participated in these organizations as monitors. Unlike private firms' monitoring, independent monitors like Workers’ Rights Consortium (WRC) built longer term relationships with workers over weeks or months, counted on workers' testimony as a basis of inquiry to be verified, and conducted off-site worker interviews. Furthermore, independent monitors produced publicly available reports for transparency, which document violations and remediation efforts (Esbenshade & Bonacich, 1999).

Independent monitoring first began in 1996, after the National Labor Committee's campaign asking the Gap to agree to monitoring by a coalition of human rights, and labor rights NGO's, and local religious in El Salvador. This case was
followed by the development of independent organizations in Honduras, Guatemala, and Nicaragua (Esbenshade, 2004). Independent monitoring opened up a channel between garment factory workers and students, activists, and university administrators. Vigorous advocacy for improved worker health and safety and upholding labor standards emerged from students at U.S. colleges and universities who united their schools to join efforts to make certain that products bearing school logos were not produced in sweatshops (Doorey, 2011). As a result, all licensees making the products of more than 200 schools are required to comply with codes of conduct for labor standards and worker rights (Milne, Dickson, & Keene, 2013).

In the year 2000, the Workers' Rights Consortium (WRC) was established as an alternative to the FLA and other monitoring systems. The WRC does not inspect factories or coordinate monitoring activities; instead, it monitors or certifies factory workers’ complaints and has conversations with them to reflect their voices. The main WRC participants are U.S. students and universities in the United States, and local labor experts such as labor lawyers, academics, and human rights workers. The WRC, as crucial and the most stringent monitoring body, has challenged the confidential and superficial nature of factory monitoring and given a significant impact on the field of monitoring, leading the success of several anti-sweatshop campaigns around the world (Esbenshade, 2012).

The expansion of codes and monitoring has continued and apparel companies have conducted code monitoring either by sending their employees – internal monitoring - to inspect contracting facilities, or by hiring external third parties such as audit firms or organizations. Various methods are currently used to implement codes of conduct through the whole of global production chains. The most dominant form of
code implementation internationally requires vendors to sign a guarantee of compliance. Afterward, companies further investigate code observance by using internal control staff, or hiring audit firms or organizations to check conditions on a regular basis. Some apparel corporations have employed both inspection method, internal staff and third party monitoring. Also, a growing number of companies now are motivated by independent organizations such as FLA, SAI, and WRAP (Esbenshade, 2012).

Nowadays, tens of thousands of factories have been operating under these systems in the apparel industry, consumers have become more aware, and corporations have acknowledged some extent of responsibility for labor conditions in their facilities (Esbenshade, 2012).

### 2.4.2 Internal, External, and Independent Monitoring

According to a report released by U.S. Department of Labor, Bureau of International Labor Affairs, there are four monitoring methods for U.S. apparel companies to implement their supplier codes of conduct, which are as follows:

(i) internal audits by company personnel (who may or may not be trained in monitoring compliance with labor standards)

(ii) external monitoring conducted by buying agents or suppliers

(iii) outside audits conducted by independent firms hired by the company

(iv) NGO monitoring conducted by human rights, consumer and/or labor groups (U.S. Department of Labor, 1996).
However, Harvey, Collingsworth, and Athreya (2000) classified the monitoring methods into three categories, internal, external, and independent monitoring. The researchers redefined (ii) external monitoring conducted by buying agents or suppliers as a type of (i) internal monitoring by company personnel and (iii) outside audits conducted by independent firms hired by the company as a type of external monitoring, and (iv) NGO monitoring conducted by human rights, consumer and/or labor groups as independent monitoring.

Generally, company or suppliers that own and control factories implement factory monitoring (U.S. Department of Labor, 1996). According to Harvey et al. (2000), the advantage of internal monitoring may be allowing free access to all information relevant to the production process. Nonetheless, the basic problem with internal monitoring is that even those firms with the best of intentions will not have any incentives to disclose their bad practices to the public. To avoid negative publicity and company reputation threat, the detrimental internal monitoring outcomes might be concealed and fabricated internally. Also, the monitoring might be done merely to placate a hostile consumer audience and might be restricted to a simple exercise in public relations (Harvey et al., 2000).

Accounting and auditing companies have a long tradition of making field visits and accessing financial records of client firms. Based on this expertise, some of U.S. accounting and auditing companies have expanded their services to include monitoring of social compliance with supplier codes of conduct; child labor, safety and health regulations, and others. This was the very beginning of audits monitoring (U.S. Department of Labor, 1996). Monitoring conducted by audit firms hired by retailers, brands, suppliers, or buying agents has an information flow problem
analogous to that of internal monitoring conducted by inside company staff. Since the external accounting and auditing firms are on contract to the company, they are not free to disseminate outcomes publicly (Harvey et al., 2000).

Independent monitoring method emerged when internal and external monitoring were criticized for not being in the best position to ascertain that a supplier has violated codes as they are not free from and paid by the hiring companies (U.S. Department of Labor, 1996). Katz, Higgins, Dickson, and Eckman (2009) found from their research that society values independent monitoring results disclosed and published in public as considering independent organization’s external reports to be reliable information. The authors’ research finding was regarded important to business and society because monitoring by independent organization reduces the gap in knowledge about how voluntary compliance programs of enterprises can be supplemented by independent monitoring and reporting (Katz et al., 2009).

Aside from the charge that these monitoring methods may have a vested interest in not disclosing violations, some have noted that internal company employees and staff and auditors from external monitoring firms may not speak the local language and not have knowledge of the cultural differences, which can result in overlooking noncompliance (U.S. Department of Labor, 1996). To ease these problems, some companies have developed monitoring methods where they hire local and international NGOs, or religious or human rights organizations to conduct or oversee in garment factory monitoring. In principle, external monitoring may be regarded as independent monitoring if the monitor is not serving as an agent of the apparel company it is monitoring, or is not subject to some interests with commercial relationships with the company (Harvey et al., 2000).
Grounded on and referenced from the factory monitoring classification of both U.S. Department of Labor (1996) and Harvey et al. (2000), this study classified factory monitoring method into two categories, internal and external monitoring. The factory audits performed by retailers or brands personnel were defined as ‘Internal monitoring’ and the audits conducted by outside employees or outside experts of retailers or brands such as NGOs, audit firms, or buying agents or supplier staff were all defined as ‘External monitoring.’

2.4.3 Monitoring Organizations

In many industries, the strategy of using voluntary codes of conduct to improve labor rights and working conditions has failed (Katz et al., 2009). Internal factory monitoring raised credibility challenges (O’Rourke, 2003). Thus, there has been a call for a “multinational framework that could help private-sector initiatives contribute more effectively to upholding recognized standards of social justice” (Diller, 1999, p. 99). Bring a variety of stakeholders together such as NGOs, government, academia, companies, and others, Multi-Stakeholder Initiatives (MSIs) addressing labor standards and working conditions in the apparel supply chain emerged in the mid-1990s (Katz et al., 2009). MSIs like the FLA and SAI identify and correct human rights abuses in factories consisting of the global supply chains of apparel companies (Katz et al., 2009). There are several prominent and respected MSIs: the FLA, SAI, and WRC (Katz et al., 2009).

2.4.3.1 Fair Labor Association (FLA)

The FLA was originally established in 1997 to address labor issues in sweatshops (Greenhouse, 1997). Convened originally by the Clinton administration in
1996 as the Apparel Industry Partnership (AIP), the FLA is the oldest current monitoring and verification organization (MacDonald, 2011; O'Rourke, 2003). The FLA monitors its codes of conduct named as “Workplace Code of Conduct and Principles for Monitoring,” in member corporations’ workplaces (MacDonald, 2011). The FLA originally focused on the apparel and footwear industries but has expanded to university-logo goods and other industries production (MacDonald, 2011).

The major crucial traces which the FLA have made are the first public disclosure of the compliance results of the companies including Adidas and Nike Inc. in 2003, the FLA accreditation of the Reebok footwear labor compliance program in 2004, and the second public release of 25 member companies’ compliances in 2004 (Katz et al., 2009). These FLA activities and performances have increased transparency in working conditions information to consumers. Currently, the FLA consists of representatives from six companies, six NGOs, and six universities on the board (FLA “About,” 2017). The participating companies, suppliers, and colleges and universities are 43, 15, and 161 respectively (FLA “Affiliates,” 2017). The main organizational goals of the FLA are described on the FLA website as below:

The Fair Labor Association believes that all goods should be produced fairly and ethically, and brings together three key constituencies - universities, civil society organizations (CSOs) and companies - to find sustainable solutions to systemic labor issues. Since 1999, FLA has helped improve workers' lives by:

• Holding affiliated companies accountable for implementing FLA’s Codes of Conduct across their supply chains.

• Conducting external assessments so that consumers can be assured of the integrity of the products they buy.
• Creating a space for CSOs to engage with companies and other stakeholders to find viable solutions to labor concerns (FLA “About,” 2017).

2.4.3.2 Social Accountability International (SAI)

The SAI, which was formerly the Council on Economic Priorities Accreditation Agency (CEPAA), was founded in 1997 and developed SA8000 standards on the basis of the International Organization for Standardization (ISO) 9000 norm to improve international standard for workplace conditions and establish an independent verification system (Ito, Katz, & Wegemer, 2014; O’Rourke, 2003). The SAI seeks to motivate both factories and member brands in a wide array of industries to be audited by accredited auditors and to apply the SA8000 codes of conduct (Kaan, 2010). These auditing firms are accredited by the SAI responsible for conducting training for auditors, factory managers, and workers and for publishing factory lists in accordance with the SA8000 standards (O’Rourke, 2003). Currently, the number of SA8000-certified facilities are 3,888 across 68 countries worldwide (Social Accountability Accreditation Services “SA8000 certified organizations,” 2017). The SAI have partnerships with a wide range of organizations such as trade unions, fair trade, development charities, NGOs, multi-stakeholder initiatives, and anti-corruption groups to perform research and training (SAI “Who we are,” 2017).

In contrast with the FLA, the SAI does not perform SA8000 workplace social audits and certifications. These activities are conducted by certification bodies, or auditing firms, which obtains an accreditation from the department, Social Accountability Accreditation Services (SAAS), within SAI (SAI “SA8000® certification process,” 2016). Instead, SAI is the owner of the SA8000 Standard and updates it every five years to respond to new and emerging social and human rights
issues (SAAS “The framework for SA8000 accredited certification,” 2017). The SAAS is an independent and not-for-profit organization performing evaluations, accreditations, and monitoring to conform to social standards. To increase external accountability, in 2007 SAI delegated its accreditation activities for the standard to the SAAS (Kaan, 2010; SAI “Accreditation services,” 2016).

2.4.3.3 Worldwide Responsible Accredited Production (WRAP)

WRAP is an independent and non-profit organization that consists of global social compliance experts committed to promoting sustainable and ethical manufacturing environment through certification and education (WRAP “About,” 2017). WRAP was initially formed to help apparel and footwear factories worldwide verify whether their operations are in compliance with local laws and international labor standards (WRAP “About,” 2017). When reports surfaced of sweatshop conditions in numerous garment factories around the globe, the American Apparel Manufacturers Association, which is now the American Apparel and Footwear Association, coordinated a task force comprised diverse stakeholders including brands, suppliers, NGOs, academia, and government officials. Based on the recommendation of the task force, WRAP, an independent third-party organization free of government or corporate influence to identify and reduce the prevalent sweatshop conditions, officially incorporated in 2000 (WRAP “History,” 2017). To ensure program credibility and objectivity, WRAP is specifically organized to be independent. The majority of the Board is consists of individuals not affiliated with the industry and the apparel industry is represented to provide insight and perspective. Further, structurally, its revenue is entirely generated through facility registration fees and training (WRAP “Board members,” 2017; WRAP “History,” 2017).
Similar to the FLA and SA8000, WRAP has created its codes of conduct named as the WRAP Principles. Common standards for forced and child labor, workplace conditions, and environmental protections are contained in the twelve WRAP Principles (WRAP “WRAP’s 12 principles,” 2017). However, unique requirements such as strict security controls over suppliers and shipments for drug interdiction and customs compliance are included in the principles (O’Rourke, 2003). WRAP has received criticism by unions and NGOs as being a weaker industry-driven system and applying lax auditing system, capitulating too much to local laws, and being an industry-dominated project that lacks transparency. In addition, the approach of WRAP placing full responsibility for labor compliance on suppliers has been criticized by other initiatives such as the FLA and ETI (Ethical Consumer “What is WRAP?,” 2017).

WRAP certifies factories, not brands. WRAP certification board accredits external monitors of factory facilities. External monitors submit inspection reports to the certification board, which then reviews all reports and determine certification on external audits firms. Upon certification, factories may or may not be subject to unexpected monitoring (O’Rourke, 2003). According to WRAP statistics in 2013, over 2,300 facilities from 50 countries participated (WRAP “History,” 2016), and there are currently around 2,200 WRAP-certified facilities, found throughout the world, employing over 2 million workers (WRAP “History,” 2017). WRAP is operating its certification program containing three certification levels to monitor and certify compliance of social standards (WRAP “Certification program,” 2017). Certification of facilities is valid for from six months to two years and the below indicates WRAP’s certification levels:
Table 2.2 WRAP’s certification levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Valid time</th>
<th>Certification condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platinum</td>
<td>2 years</td>
<td>Demonstrating full compliance with WRAP’s 12 principles for three consecutive certification audits&lt;br&gt;Passthrough every audit with no corrective actions or observations&lt;br&gt;Maintaining continuous certification with no gaps between certification periods</td>
</tr>
<tr>
<td>Gold</td>
<td>1 year</td>
<td>Standard WRAP certification level&lt;br&gt;Demonstrating full compliance with WRAP’s 12 principles</td>
</tr>
<tr>
<td>Silver</td>
<td>6 months</td>
<td>Demonstrating substantial compliance with WRAP's 12 principles&lt;br&gt;There are minor non-compliances in policies, procedures, or training that must be addressed.</td>
</tr>
</tbody>
</table>

Note: Adapted from WRAP website, http://www.wrapcompliance.org/en/certification

2.4.3.4 Worker Rights Consortium (WRC)

The WRC was founded in 2000 in New York on the initiative of United Students Against Sweatshops (USAS) to protect the rights of workers in factories producing apparel and sportswear products for U.S. universities (Wick, 2005; WRC, 2000). The WRC ensures compliance with basic codes of conduct in manufacturing facilities, in particular, regarding rights to freedom of association and collective bargaining. Educating workers about codes so that workers can report code violations to the WRC or NGOs is their another organizational goal. To identify problems and to correct them, the WRC works collectively with its university affiliates, local NGOs, and the manufacturers (O’Rourke, 2003; Wick, 2005).

The WRC supports and conducts independent and in-depth investigations to ensure that the licensed goods sold on campuses are manufactured under right working
conditions (Wick, 2005). The WRC is not a certification organization, rather, investigates labor conditions at factories producing products for the United States. The WRC encourages participating universities to adopt codes of conduct that includes fair wage, women’s rights, and freedom of association. The WRC requires university members to commit to extensive public disclosure and to develop systems to verify information reported by companies and their vendors (O’Rourke, 2003). Once complaints from factory workers are received, the WRC investigations are coordinated by the WRC staff. The representatives of the local community such as local labor lawyers, officials, and academic experts are included in the activities (WRC “WRC factory assessment program,” 2016). To date, the WRC has the support of over 175 college and university affiliates (WRC “Mission,” 2016).

2.4.3.5 Private Factory Inspection Companies

Unlike the non-profit factory inspection organizations such as the FLA and WRAP, there are private companies implementing factory monitoring in pursuit of profit. They vary in size, from large, multinational firms to very small, local companies. These private audit firms are numerous all over the world and ALGI, British Standards Institution (BSI), and SGS SA are operating globally (Center for the Study of Work, Labor, and Democracy “Factory auditing,” 2017). These audit firms conduct factory inspection applying their inspection method (BSI “Our services,” 2017) or obtain accreditations from the SAI (SAAS “SA8000 Accredited Certification Bodies,” 2017) or WRAP to conduct inspections based on accreditors’ regulations (ALGI “Certifications,” 2017).
2.4.4 Comparison of Non-profit Monitoring Organizations

The majority of non-profit third party monitoring organizations emerged in the mid-1990s and early 2000s addressing labor standards and working conditions in the textile and clothing industry. They have several things in common in that various actors are involved in, their main goals are improvements and protection in human rights in workplaces, and the assessment procedures include site visits, worker interviews, visual observations.

Table 2.3 Comparison of non-profit monitoring organizations

<table>
<thead>
<tr>
<th></th>
<th>Fair Labor Association (FLA)</th>
<th>Social Accountability International (SAI)</th>
<th>Worldwide Responsible Accredited Production (WRAP)</th>
<th>Worker Rights Consortium (WRC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo image</td>
<td><img src="fair_lab" alt="Logo Image" /></td>
<td><img src="social_acc" alt="Logo Image" /></td>
<td><img src="worldwide_responsible_production" alt="Logo Image" /></td>
<td><img src="worker_rights" alt="Logo Image" /></td>
</tr>
<tr>
<td>Type of organizations</td>
<td>Non-profit collaboration of universities, civil society organizations, and businesses</td>
<td>Non-governmental, international, multi-stakeholder organization</td>
<td>American Apparel and Footwear Association</td>
<td>Independent labor rights monitoring organization (affiliated with 175 colleges and universities)</td>
</tr>
<tr>
<td>Purpose</td>
<td>To protect workers’ rights around the world</td>
<td>To protect the integrity of workers around the world by building local</td>
<td>To help apparel and footwear factories around the world verify that they are</td>
<td>To combat sweatshops and protect the rights of workers who make apparel</td>
</tr>
</tbody>
</table>
capacity and developing systems of accountability through socially responsible standards operating in compliance with local laws and internationally-accepted standards of ethical workplace practices

<table>
<thead>
<tr>
<th>Standards</th>
<th>Workplace Code of Conduct:</th>
<th>Social Accountability</th>
<th>WRAP’s 12 Principles:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Process or methodology</th>
<th>SCI assessment:</th>
<th>Model Code of Conduct:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Reviewing factory self-assessments and other documents</td>
<td>I. Applying to a SAAS-accredited auditing firm (as a certification body)</td>
<td>I. Conducting comprehensive interviews with workers and managers</td>
</tr>
<tr>
<td>II. Mapping the factory</td>
<td>II. Scoping and I. A facility submits an application</td>
<td>II. Reviewing relevant records and</td>
</tr>
</tbody>
</table>

33
2.5 Classification of Factory Inspection Model

Based on the previous literature review, this study created standardized inspection models and classified each company to the models relying on its inspection method utilizations. The following classification with regard to each company’s codes of conduct adoption and monitoring selection is identified.
Table 2.4 Company inspection method models

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Codes of conduct</th>
<th>Internal monitoring</th>
<th>External monitoring</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 2</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>The companies that have supplier codes of conduct and internal monitoring tool but do not have external monitoring tool.</td>
</tr>
<tr>
<td>Model 3</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>The companies that have supplier codes of conduct and external monitoring tool but do not have internal monitoring tool.</td>
</tr>
<tr>
<td>Model 4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>The companies that have supplier codes of conduct, and both internal and external monitoring tools.</td>
</tr>
</tbody>
</table>

‘Model 1’ means the companies that have or do not have their supplier codes of conduct but are not conducting any factory monitoring.

‘Model 2’ indicates the companies that have supplier codes but adopting only internal monitoring tool.

‘Model 3’ refers to the companies that have supplier codes but adopting only external monitoring tool.

‘Model 4’ refers to the apparel companies that have their supplier codes of conduct and adopt both internal and external monitoring methods.
2.6 **Company Characteristics That May Affect the Selection of Inspection Model**

Some company characteristics may affect a company’s selection of specific inspection model. First, one company characteristic might be the size of the company. Small companies have constraints on human and financial resources compared to large global companies, thus causing difficulties in performing CSR (Milne et al., 2013). Conversely, large-scale corporations have more power to enforce socially responsible practices among their suppliers since having strong bargaining power (Leoputre & Heene, 2006) and can afford expensive factory monitoring costs compared to small business enterprises (Ciliberti, Pontrandolfo, & Scozzi, 2008). Furthermore, large-scale multinational apparel companies such as Nike Inc. and Gap Inc. have prominent presence in global textile and clothing industry, and thus being an easy target of public criticism (O’Rourke, 2003), whereas small companies are much relatively free from reputation to diminish and public and such criticism (Milne et al., 2013). Small companies have much fewer impacts than large corporations and are not visible. Thus, they are less subject to pressure from external stakeholders in regard to CSR and do not diminish their reputations if they fail to address (Milne et al., 2013). Hence, it can be assumed that large-scale companies are more likely to employ factory monitoring tools to prevent labor abuses overseas and therefore, protect company reputation from publicity.

Grounded on the assumptions above, the following hypotheses are developed.

**H1a.** The larger the company size, the more likely the company conducts internal monitoring.

**H1b.** The larger the company size, the more likely the company conducts external monitoring.
H1c. The larger the company size, the more likely the company has inspection Model 4.

Another company characteristic affecting company’s selection of specific inspection models might be the profit margin of the company. Costs are incurred to perform factory monitoring and costs increase as the number of factories increases (U.S. Department of Labor, 1996). Especially for internal monitoring, it costs a great deal to operate and maintain factory audit department and train employees (O’Rourke, 2006; U.S. Department of Labor, 1996). Considering this, from a financial point of view, companies with a high profit margin generally have smooth cash flow and thus, can afford to conduct costly factory monitoring compared to the companies with low profit margins. In regard to company profit margin, therefore, it can also be assumed that companies with high profit margins are more affluent, and thus can better afford the costly factory monitoring expenses.

Grounded on the assumptions above, the following hypotheses are developed.

H2a. The higher the company profit margin, the more likely the company conducts internal monitoring.

H2b. The higher the company profit margin, the more likely the company conducts external monitoring.

H2c. The higher the company profit margin, the more likely the company has inspection Model 4.

Whether or not the company owns factory facilities might be a company characteristic affecting company’s selection of specific inspection models. In general,
companies that own their manufacturing facilities have company policies in regard to quality control, safety and security, facility operations, workforce management, and others. to effectively control the entire production process. Factory monitoring is one of the tools to check if these policies are being abided by. Since labor problems and safety accidents in factories are directly linked to company reputation and brand image (U.S. Department of Labor, 1996), companies that have their production plants make efforts to prevent these problems through monitoring.

Grounded on the assumptions above, the following hypotheses are developed.

**H3a.** The more the company owns manufacturing facilities, the more likely the company conducts internal monitoring.

**H3b.** The more the company owns manufacturing facilities, the more likely the company conducts external monitoring.

**H3c.** The more the company owns manufacturing facilities, the more likely the company has inspection Model 4.
Chapter 3

METHODOLOGY

3.1 Research Approach

This research used content analysis technique to collect and analyze data on major U.S. apparel company websites. Content analysis is defined as “a research technique for making replicable and valid inferences from data to their context” (Krippendorff, 2004, p. 18). Content analysis has frequently been used in research because it is unobtrusive and allows providing valuable and insightful analysis through texts (Krippendorff, 2004). Gao (2011), Kozlowski et al. (2015), Mann et al. (2014), and Sweeney and Coughlan (2008) used content analysis for their CSR studies to collect and analyze data from CSR reports, annual reports, and websites.

3.2 Sample Companies

The United States has a prevalent presence in the global apparel industry as an importer and consumption entity. Therefore, this research investigated U.S. apparel companies’ disparate factory monitoring methods initially to identify whether company characteristics were correlated with companies’ factory monitoring choices. Since the time and resources were limited and needed immensely to investigate all U.S. apparel companies, the representative U.S. companies with a large proportion of sales and great influences were selected from ‘Apparel Magazine.’ Below is the introduction of Apparel Magazine posted on official website of EnsembleIQ that owns Apparel Magazine brand.
Apparel offers technology and business insights from concept to consumer, providing competitive, actionable information to executives representing the world's most successful apparel brands, retailers and manufacturers. Its targeted content addresses Retail Intelligence, Supply Chain, Sourcing & Logistics, Concept-to-Spec, and Fiber-to-Fabric.

Apparel also produces the Apparel East and West Conferences, Apparel’s Sourcing Summit at MAGIC, the Apparel Executive Forum and annual Share Groups. It also delivers numerous web events, eNewsletters, apparelmag.com, a variety of leading-edge industry research and thought leadership reports, buyer’s guides, infograms, whitepapers, and more. Apparel has been continuously published since 1959 (EnsembleIQ “Apparel Magazine,” 2017).

The magazine lists 50 top-performing apparel firms based on overall performance and profit margins every year and to be eligible, companies have to record at least $100 million in annual sales and be publicly traded on U.S. stock exchange (Speer, 2016). This study chose the top 50 apparel companies listed in Apparel Magazine published in July 2014, July 2015, and July 2016 as research samples. Among the 150 companies examined, many companies overlapped on the lists and eventually, 58 companies were chosen as the research samples. Also, among the 58 companies, four companies were excluded from the sample. In 2014, Jos A. Bank Clothiers, Inc., currently Tailored Brands Inc., was ranked 20 among the 50 top-performing apparel firms. However, the company has not published annual reports since 2015 due to the acquisition of Tailored Brands Inc., and therefore enough data was not available for content analysis. Additionally, Ann Inc. was ranked 37 among the 50 top-performing apparel firms was excluded. This is because as a subsidiary of Ascena Retail Group Inc., Ann Inc. does not publish their annual report. Zuoan Fashion Limited was excluded from the research sample because the company does
not have an official website and annual reports were only available for the year of 2014. Although the official website of Duluth Holdings Inc., which was ranked 9 in 2016, was available, 2016 annual report was not. Therefore, Duluth Holdings Inc. was excluded from the sample. As a result, among the 58 companies ranked as top U.S. companies from 2014 to 2016, 54 were finalized in research sample because the four companies do not have enough data for content analysis. To ensure the credibility and reliability of the research, this study analyzes the 54 U.S. apparel companies’ annual reports in three consecutive fiscal years of 2013, 2014, and 2015 and recent official website resources such as CSR or sustainability reports.

Table 3.1 2014 – 2016 top 50 U.S. apparel companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Ranking 2014</th>
<th>Ranking</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abercrombie &amp; Fitch Co.</td>
<td>47</td>
<td>43</td>
<td>41</td>
</tr>
<tr>
<td>American Eagle Outfitters Inc.</td>
<td>42</td>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>Ann Inc.</td>
<td>33</td>
<td>37</td>
<td>Not ranked</td>
</tr>
<tr>
<td>Ascena Retail Group Inc.</td>
<td>38</td>
<td>34</td>
<td>Not ranked</td>
</tr>
<tr>
<td>Carter's Inc.</td>
<td>21</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Chico's FAS Inc.</td>
<td>41</td>
<td>38</td>
<td>43</td>
</tr>
<tr>
<td>China Xiniya Fashion Limited</td>
<td>15</td>
<td>Not ranked</td>
<td>Not ranked</td>
</tr>
<tr>
<td>Christopher &amp; Banks Corporation</td>
<td>44</td>
<td>5</td>
<td>Not ranked</td>
</tr>
<tr>
<td>Cintas Corporation</td>
<td>16</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Citi Trends Inc.</td>
<td>Not ranked</td>
<td>44</td>
<td>35</td>
</tr>
<tr>
<td>Columbia Sportswear Company</td>
<td>26</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Delta Apparel Inc.</td>
<td>45</td>
<td>47</td>
<td>36</td>
</tr>
<tr>
<td>Destination Maternity Corporation</td>
<td>32</td>
<td>41</td>
<td>47</td>
</tr>
<tr>
<td>Destination XL Group Inc.</td>
<td>Not ranked</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Company Name</td>
<td>Price</td>
<td>Market</td>
<td>Earnings</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>Duluth Holdings Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever-Glory International Group Inc.</td>
<td>40</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>Express Inc.</td>
<td>27</td>
<td>33</td>
<td>26</td>
</tr>
<tr>
<td>Francesca's Holdings Corporation</td>
<td>5</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>G&amp;K Services Inc.</td>
<td>28</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>G-III Apparel Group Ltd.</td>
<td>31</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Gildan</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Gordmans Stores Inc.</td>
<td>48</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Guess? Inc.</td>
<td>23</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Hanesbrands Inc.</td>
<td>17</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>J.Crew Group, Inc.</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jos. A. Bank Clothiers, Inc.</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kate Spade &amp; Company</td>
<td>25</td>
<td>3</td>
<td>39</td>
</tr>
<tr>
<td>L Brands Inc.</td>
<td>11</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Lands' End Inc.</td>
<td></td>
<td>28</td>
<td>49</td>
</tr>
<tr>
<td>Levi Strauss &amp; Co.</td>
<td>30</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td>Lululemon athletica Inc.</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Michael Kors Holdings Limited</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York &amp; Company Inc.</td>
<td>50</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>Nike Inc.</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Nordstrom Inc.</td>
<td>22</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Oxford Industries Inc.</td>
<td>29</td>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td>Perry Ellis International Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVH Corp.</td>
<td>46</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Ralph Lauren Corporation</td>
<td>7</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Ross Stores Inc.</td>
<td>12</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Stage Stores Inc.</td>
<td>49</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Stein Mart Inc.</td>
<td>43</td>
<td>40</td>
<td>37</td>
</tr>
<tr>
<td>Superior Uniform Group</td>
<td>34</td>
<td>23</td>
<td>21</td>
</tr>
</tbody>
</table>
Tailored Brands Inc. & 37 & 46 & Not ranked
The Buckle Inc. & 3 & 2 & 3
The Cato Corporation & 24 & 22 & 18
The Children's Place Inc. & 39 & 32 & 32
The Gap Inc. & 13 & 14 & 24
The Gymboree Corporation & Not ranked & Not ranked & 46
The TJX Companies Inc. & 14 & 15 & 16
Tilly's Inc. & 35 & 35 & 40
Under Armour Inc. & 18 & 18 & 23
UniFirst Corporation & 10 & 9 & 12
Urban Outfitters Inc. & 9 & 17 & 19
V. F. Corporation & 6 & 10 & 7
Vince Holding Corp. & Not ranked & Not ranked & 38
Zumiez Inc. & 19 & 26 & 31
Zuoan Fashion Limited & 4 & 45 & Not ranked Excluded

Note: Adapted from *The Apparel Top 50 for 2014 – 2016*. An EDGELL Publication.

### 3.3 Data Collection of Factory Monitoring Methods

In general, apparel companies disclose the information in regard to suppliers, factories, financial status, and others. through annual reports (Neu, Warsame, & Pedwell, 1998) and official websites. Sharing company information through the internet is widely used these days because it has the advantage of disclosing company CSR practices to shareholders and the public in a practical way at low cost (Gaskill-Fox et al., 2014; Mann et al., 2013). In addition, some apparel companies such as Nike Inc., PVH Corp., and Guess? Inc. publish Sustainability reports or CSR reports on a regular basis detailing their CSR practices, allowing for more detailed factory
monitoring information to be obtained. Also, the California Transparency in Supply Chains Act enforces certain companies to report on their efforts to eradicate human trafficking, slavery and forced labor in their supply chains (U.S. Department of Labor “California Transparency in Supply Chains Act,” 2016). Consequently, substantial numbers of U.S. apparel companies disclose their initiatives in regard to the elimination of slavery and human trafficking within their direct supply chain. Therefore, each company’s factory inspection methods were analyzed from annual reports and official company websites. The relevant information was generally described in the sourcing or manufacturing sector. However, the quality of information considerably varied according to each company and even some companies did not mention anything about vendor management or factory monitoring. In the case of official company websites, the relevant information was described mostly under CSR category, and like the case of factory inspection methods data, the quality of information considerably varied to each company.

Data collection was performed in August 2016 initially, and updated information of official company websites and new publishing of annual, CSR, sustainability reports were collected again in January 2017.

The collected data was organized as follows: All file format data such as annual, CSR, sustainability reports was stored in PDF under the folders named by company. All Hyper-Text Transfer Protocol (HTTP) link data relevant to codes of conduct, factory audit, social responsibility, and CSR was stored in Microsoft Excel file using the Excel fields named by company, page titles, HTTP links, and retrieval dates.
3.4 Coding

3.4.1 Codes of Conduct, Internal and External Monitoring

Most companies are posting supplier codes of conduct on their official websites. In case that companies refer to or post codes of conduct in annual reports or webpage resources, this study assumed that the companies have supplier codes of conduct. In the case of internal monitoring and external monitoring, this study assumed that the companies are conducting these monitoring methods, only when monitoring implementations were specifically referred in annual reports or websites resources. Additionally, this study only included the monitoring and audits of labor standards and workplace safety and product quality control monitoring has excluded. If there were no descriptions or explanations provided regarding factory monitoring, this research assumed that the companies were not conducting internal or external monitoring.

For example, the following is internal monitoring example of Gildan described in their official website.

Internal audits, which are conducted on an unannounced, are conducted by internal regional monitors who are thoroughly trained on our monitoring guidelines and social compliance programs. Internal compliance auditors are selected and hired based on the job description, which includes a list of required competencies established for the position (Gildan “Auditing methodology,” 2017).

Since “Internal regional monitors” and “Internal compliance auditors” explicitly indicate that internal company employees are conducting factory monitoring, Gildan will be coded as conducting internal monitoring.
An additional example of internal monitoring from Oxford Industries Inc. described in their annual report.

On an ongoing basis we assess vendors' compliance with the applicable code of conduct and applicable laws and regulations through audits performed by either our employees or our designated agents. This assessment of compliance by vendors is directed by our corporate leadership team (Oxford Industries Inc., 2016, p. 20).

The sentence, “On an ongoing basis we assess vendors' compliance with the applicable code of conduct and applicable laws and regulations through audits performed by either our employees or our designated agents,” indicates that Oxford Industries Inc. is performing monitoring by company employees. Thus, Oxford Industries Inc. will be coded as conducting internal monitoring.

For example, below is external monitoring example of G&K Services Inc. indicated on its official website.

G&K is committed to ensuring the ethical and fair treatment of its employees and supply partners around the world. That’s why we are proud that our manufacturing facility in the Dominican Republic has been recognized with a Worldwide Responsible Accredited Production (WRAP) Gold Certificate of Compliance. The facility was initially certified in 2013 and earned re-certification in 2014. G&K’s facility in Santo Domingo, Dominican Republic, earned WRAP recognition because of its adherence to WRAP’s international workplace standards, including workplace safety and environmental stewardship (G&K Services Inc. “G&K receives WRAP gold certificate of compliance,” 2017).

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As the manufacturing facility of G&K Services Inc. in the Dominican Republic received Gold Certificated of Compliance from WRAP, the company will be coded as performing external monitoring.

An additional example of external monitoring from Nike Inc. indicated in their CSR report.

With the knowledge and agreement of our contract factories, we also work with accredited third parties, such as the Fair Labor Association (FLA), to conduct independent monitoring. We’re also using insights gained from our labor pilot research programs (see page 54) to inform our approach to factory modernization (Nike Inc., 2016).

As it was stated that Nike Inc. performed independent monitoring by hiring third parties like the FLA, Nike Inc. will be coded as conducting external monitoring.

3.4.2 Company Size

The size of a company is usually measured by the number of employees, net sales, the amount of capital employed, market share, and others. This study investigated all figures indicating company size. However, the number of employees and net sales were the only substantial information which can be consistently found. In the case of employee numbers, each company applied different standards to calculate its employee number. Some companies included both full-time and part-time whereas others included only full-time employees as their total number of employees.
Therefore, the number of employee figures could not be used for this study due to lack of consistency. After all, the only available data regarding company size was company net sales.

The recent three years’ (2013 – 2015) annual reports (Form 10-K) of each company were analyzed to obtain net sales information. These annual reports are disclosed on U.S. Securities and Exchange Commission’s EDGAR (The Electronic Data Gathering) System. Along with net sales, major financial information such as profit margin and net income is disclosed. The month that a company finishes its fiscal year varies and to maintain consistency in research contents, the month is not considered yet financial data from the year of 2013 to 2015 is collected. This study calculated the mean of company net sales for the three years to measure company size.

3.4.3 Profit Margin

Generally, profit margins are an indicator of a company’s business performance. Profit margin information can be collected from company annual reports. Similar to net sales, this study calculated the mean of company profit margins for the three years from the year of 2013 to 2015 to measure company’s available cash flow. It was assumed that the companies with high profit margins are able to better afford to factory monitoring expenses.

3.4.4 Factory Ownership

Whether a company has their own factory facilities is investigated from company owned real-estate properties. Company-owned manufacturing facilities were usually described in Item 2 – Properties section of annual reports. This section enumerates all properties that a company holds possession and the usages of each
As of January 2, 2016, we owned and leased properties in 37 countries, including 47 manufacturing facilities and 37 distribution centers, as well as office facilities. Our products are manufactured through a combination of facilities we own and operate and facilities owned and operated by third-party contractors who perform some of the steps in the manufacturing process for us, such as cutting and/or sewing. Our most significant manufacturing facilities include an approximately 1.1 million square-foot owned facility located in San Juan Opico, El Salvador, an approximately 1.1 million square-foot owned facility located in Nanjing, China, and an approximately 600,000 square-foot owned facility located in Bonao, Dominican Republic (Hanesbrands Inc., 2016, p. 21).

### 3.4.5 Summary of Coding Scheme

The coding scheme used for the collected data is summarized in Table 3.2.
Table 3.2 Coding scheme

<table>
<thead>
<tr>
<th>Data name</th>
<th>Data domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes of conduct</td>
<td>0 – no presence or no mention 1 – presence</td>
</tr>
<tr>
<td>Internal monitoring</td>
<td>0 – no presence or no mention 1 – presence</td>
</tr>
<tr>
<td>External monitoring</td>
<td>0 – no presence or no mention 1 – presence</td>
</tr>
<tr>
<td>Inspection model</td>
<td>1 – 4 (regarding codes of conduct, internal monitoring, and external monitoring)</td>
</tr>
<tr>
<td>Whether inspection Model 4</td>
<td>0 – non-inspection Model 4 1 – inspection Model 4</td>
</tr>
<tr>
<td>Net sales</td>
<td>Mean value (recent three years)</td>
</tr>
<tr>
<td>Profit margin</td>
<td>Mean value (recent three years)</td>
</tr>
<tr>
<td>Factory ownership</td>
<td>The number of owned manufacturing facilities</td>
</tr>
</tbody>
</table>

3.4.6 Coding Process

The coding process for data analysis was performed by a single researcher. First, keywords search approach was used to investigate presence or absence of company codes of conduct and both internal and external factory monitoring. The keywords used for coding were as follows: audit, code, compliance, conduct, factory, factories, facility, facilities, FLA, independent, labor, monitor, SAI, social, supplier, third-party, vendor, and WRAP. The ‘Find function’ of Adobe Acrobat (version XI), the software for editing PDF files, was used. When the keywords in relation to company codes of conduct and factory monitoring were found in the collected data such as annual or CSR reports, or company web pages stored as PDF files, the sections including the keywords were investigated to determine presence or absence of
company codes of conduct and both internal and external factory monitoring. Coding results were organized, according to the coding scheme, in Microsoft Excel file using Excel fields named by company, codes of conduct, and internal and external monitoring. In addition, the sections of data and data sources such as HTTP links containing keywords were stored in the same Microsoft Excel file as well for coding data. Last, each company was coded as Inspection model 1, 2, 3, or 4 depending on whether a company has codes of conduct, or perform internal or external factory monitoring.

The coding process for net sales and profit margins was performed using each company’s financial information figures in annual reports. Net sales and profit margins were organized annually (2013, 2014, and 2015) in one Microsoft Excel file. Some companies do not state profit margin figures directly and in these cases, profit margins were calculated using the formula: \( \text{Profit margin} \ (\%) = \frac{\text{Net income}}{\text{Net sales}} \). To calculate mean net sales for the three years, the following formula was used: mean net sales for the three years = \( \frac{\sum \text{Net sales}}{3} \). To calculate mean profit margin for the three years, the following formula was used: mean profit margin for the three years = \( \frac{\sum \text{Net incomes}}{\sum \text{Net sales}} \).

The coding for factory ownership was performed by analyzing 2015 annual reports, which were the most recent published data at the time of data collection and coding. The ‘Item 2 – Properties’ section in each company annual report discloses all the company properties. When the identified properties were used for manufacturing purpose, the company was considered as having its owned manufacturing facilities and the number of facilities was identified and coded. When a company did not have manufacturing facilities, the case was coded as ‘0’.
3.5 Data Analysis

Regression analysis is used to estimate outcome through measurement of correlation between independent variables (IVs) and a dependent variable (DV). In general, the linear regression analysis is used when a DV is an interval variable or a ratio variable. Therefore, the linear regression is not appropriate to use in this study because the hypotheses predict categorical DVs, not interval or ratio DVs. Hence, the logistic regression analysis was used in this research which contains the categorical DVs of whether a company conducts factory monitoring (conducting = 1, non-conducting = 0) or adopts factory inspection Model 4 (inspection Model 4 = 1, non-inspection Model 4 = 0). In statistics, the logistic regression is used to predict probabilistic outcomes in a regression model with more than one variable when a dependent variable (DV) has the form of a categorical variable (Hosmer & Lemeshow, 2000). The software package, IBM® SPSS® Statistics version 23 was used for data analysis of this study. The results were considered to be statistically significant when $p$ level is $p < .05$. Hosmer and Lemeshow test is a goodness of fit test for logistic regression and tells how well the research data fits the regression model. In the case of Hosmer and Lemeshow test, when estimated test result is $p > .05$, regression models are regarded statistically significant (Hosmer & Lemeshow, 2000). The effect size of the explanatory variables was measured by Nagelkerke $R^2$ (Peng, Lee, & Ingersoll, 2002).
Chapter 4
RESULTS

4.1 Coding Results to Create Dependent Variables

4.1.1 Codes of Conduct, Internal Monitoring, and External Monitoring

Data analysis results showed that a large majority of apparel companies have their own codes of conduct and applies these codes to factory monitoring (see Table 4.1). Fifty-one out of 54 companies (94.4%) had corporate code of conduct for social compliance. Thirty-one out of 54 companies (57.4%) adopted internal monitoring tool while 41 companies (75.9%) conducted external monitoring.

Table 4.1 Coding results regarding codes of conduct and factory monitoring

<table>
<thead>
<tr>
<th>Coding value</th>
<th>Codes of conduct</th>
<th>Internal monitoring</th>
<th>External monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (companies do not have or conduct)</td>
<td>3</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>1 (companies have or conduct)</td>
<td>51</td>
<td>31</td>
<td>41</td>
</tr>
</tbody>
</table>

4.1.2 Inspection Models

As a result of the analysis on the factory monitoring inspection model regarding the top U.S. apparel companies, 26 out of 54 companies were categorized into Model 4, which refers to the adoption of both internal and external monitoring, accounting for 48.1% of the companies studied (see Table 4.2). Fifteen out of 54 companies were categorized into Model 3 (27.8%), which refers to the adoption of external monitoring, and eight out of 54 companies into Model 1 (14.8%) which
means no adoption of any monitoring tools respectively. Five out of 54 companies were classified into Model 2 (9.3%), which refers to the adoption of internal monitoring. This result indicates that many apparel companies use both internal and external factory monitoring to inspect supplier codes of conduct compliance in factories.

Table 4.2 Coding results of inspection models

<table>
<thead>
<tr>
<th>Classification</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>8</td>
<td>14.8</td>
</tr>
<tr>
<td>Model 2</td>
<td>5</td>
<td>9.3</td>
</tr>
<tr>
<td>Model 3</td>
<td>15</td>
<td>27.8</td>
</tr>
<tr>
<td>Model 4</td>
<td>26</td>
<td>48.1</td>
</tr>
</tbody>
</table>

The following Table 4.3 indicates inspection model of each company.

Table 4.3 Distribution of company inspection model

<table>
<thead>
<tr>
<th>Company</th>
<th>Inspection model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abercrombie &amp; Fitch Co.</td>
<td>Model 3</td>
</tr>
<tr>
<td>American Eagle Outfitters Inc.</td>
<td>Model 4</td>
</tr>
<tr>
<td>Ascena Retail Group Inc.</td>
<td>Model 4</td>
</tr>
<tr>
<td>Carter's Inc.</td>
<td>Model 3</td>
</tr>
<tr>
<td>Chico's FAS Inc.</td>
<td>Model 3</td>
</tr>
<tr>
<td>China Xiniya Fashion Limited</td>
<td>Model 1</td>
</tr>
<tr>
<td>Christopher &amp; Banks Corporation</td>
<td>Model 4</td>
</tr>
<tr>
<td>Cintas Corporation</td>
<td>Model 3</td>
</tr>
<tr>
<td>Citi Trends Inc.</td>
<td>Model 1</td>
</tr>
<tr>
<td>Columbia Sportswear Company</td>
<td>Model 4</td>
</tr>
<tr>
<td>Delta Apparel Inc.</td>
<td>Model 3</td>
</tr>
</tbody>
</table>
Destination Maternity Corporation  Model 4
Destination XL Group Inc.  Model 3
Ever-Glory International Group Inc.  Model 2
Express Inc.  Model 3
Francesca's Holdings Corporation  Model 1
G&K Services Inc.  Model 3
G-III Apparel Group Ltd.  Model 2
Gildan  Model 4
Gordmans Stores Inc.  Model 1
Guess? Inc.  Model 4
Hanesbrands Inc.  Model 4
J.Crew Group, Inc.  Model 3
Kate Spade & Company  Model 4
L Brands Inc.  Model 4
Lands' End Inc.  Model 2
Levi Strauss & Co.  Model 4
Lululemon athletica Inc.  Model 4
Michael Kors Holdings Limited  Model 4
New York & Company Inc.  Model 3
Nike Inc.  Model 4
Nordstrom Inc.  Model 4
Oxford Industries Inc.  Model 4
Perry Ellis International Inc.  Model 2
PVH Corp.  Model 4
Ralph Lauren Corporation  Model 4
Ross Stores Inc.  Model 3
Stage Stores Inc.  Model 1
Stein Mart Inc.  Model 3
Superior Uniform Group  Model 4
Tailored Brands Inc.  Model 4
The Buckle Inc.  Model 1
The Cato Corporation  Model 1
The Children's Place Inc.  Model 4
The Gap Inc.  Model 4
The Gymboree Corporation  Model 4
Below explain several company examples adopting different factory inspection models.

The Buckle Inc. is an example of Model 1. Their annual report in 2015 states only their vendor codes of conduct. The content of the code primarily included employment practice, health and safety, subcontracting, and customs (The Buckle Inc. “Code of conduct and standards of engagement,” 2017). However, no information on any current factory inspection adoptions was described or referred to in the collected data. In other words, there is no indication that the Buckle Inc. has conducted either internal or external factory inspections.

Urban Outfitters Inc. is an example of Model 2. Urban Outfitters Inc. uses their inside buying offices to monitor its manufacturer social compliance program (Urban Outfitters Inc., 2016). Urban Outfitters Inc. named their code of conduct as Statement of Corporate Policy and Code of Conduct and the code includes compliance with law, no child labor, no forced or compulsory labor manufacturing, nondiscrimination, minimum wages, hours and benefits, health and safety, no corporal punishment, and environmental protection. Aside from supplier codes of conduct, Urban Outfitters Inc. has terms of the purchase agreement that suppliers must abide by. In terms of external
factory inspection, no relevant information was found from the collected data. Hence, the company was considered as not conducting any external monitoring.

As an example of Model 2, conducting of internal monitoring was described in Urban Outfitters Inc.’s annual report in 2015 as below:

We have a manufacturer compliance program that is monitored on a regular basis by our buying offices. Our production facilities are either certified as in compliance with our program, or areas of improvement are identified and corrective follow-up action is taken. All manufacturers are required to follow applicable national labor laws, as well as international compliance standards regarding workplace safety, such as standards that require clean and safe working environments, clearly marked exits and paid overtime (Urban Outfitters Inc., 2016).

Carter’s Inc. is an example of Model 3. The company does not have any of the factories but they developed a supplier policy and launched a social responsibility program to ensure supplier commitment to labor standards in factories (Carter’s Inc. “Social responsibility,” 2017). The policy outlines the standards that suppliers must meet in order to do business with Carter’s Inc. The contents of Carter’s Inc.’s supplier policy include a prohibition of child labor, forced labor, slave labor, and human trafficking, discrimination, harassment or abuse, working hours, and health and safety. From the collected company data, no information relevant to internal monitoring was found, and thus the company was regarded as not conducting internal monitoring. As an example of Model 3, conducting of external monitoring was described in Carter’s Inc.’s official website as below:
Factory audits are a central pillar of our monitoring program. Since we do not own any of the factories that produce merchandize for our stores, regular audits are conducted to verify that a Supplier is complying with our policy as well as to strengthen working conditions and labor practices in factories. We contract with an accredited and internationally recognized audit provider to execute these audits (Carter’s Inc. “Social responsibility,” 2017).

Guess? Inc. is an example of Model 4. Guess? Inc. falls in ‘Model 4’ category because the firm has their own supplier code of conduct applied to their supplier factories and internal and third-party auditors monitor factory sites annually (Guess? Inc., 2015). To ensure the protection of workers in facilities, Guess? Inc. has created a statement of standards in its Supplier Code of Conduct and Global Sourcing Vendor Manual clearly and operated Social Compliance Program (Guess? Inc., 2015). The contents of supplier codes include regulations against child or forced labor and unsafe working conditions (Guess? Inc., 2015). Generally required annually, Guess? Inc. conducts internal or external factory monitoring based on the supplier or specific supplier factory’s compliance history and level of risk (Guess? Inc., 2015).

In 2014, the total of 317 audits was performed for 287 plants regarding the compliance with labor, health, safety and environment. A large majority of audits was performed by external auditors, accounting for 93% (294 audits) whereas internal audits number reached only 7% (23 audits). The audited factories locations were dispersed with more than 85% in China, Guatemala, India, Mexico, Vietnam, Indonesia, Turkey, Tunisia, Italy, Portugal, Romania, Bulgaria and Cambodia (Guess? Inc., 2015). The most prevalent non-compliance issues were health and working environment safety, working hours, and benefits; first aid kits availability, hygiene, and chemical issues were found (Guess? Inc., 2015).
4.2 Description of Independent Variables

4.2.1 Net Sales and Profit Margin

According to the outcomes of financial statistics, net sales sizes largely differ among apparel companies. The sum of top ten U.S. apparel companies’ net sales ($141.5 billion) was greater than the rest 44 U.S. apparel companies’ net sales ($76.3 billion). Each company’s net income was rather volatile every year compared to net sales. Consequently, as profit margin is calculated with net sales taken as a base and net income taken as a numerator, profit margin values were affected by the volatility. Especially the companies that have low net sales showed a great fluctuation on profit margin for the last three years. Table 4.4 indicates the distribution of net sales and profit margins.

Table 4.4 Distribution of net sales and profit margin

<table>
<thead>
<tr>
<th>Description</th>
<th>Range</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(billion USD)</td>
<td>0 – Less than 1</td>
<td>18</td>
<td>33.33</td>
</tr>
<tr>
<td></td>
<td>1 – Less than 2</td>
<td>9</td>
<td>16.67</td>
</tr>
<tr>
<td></td>
<td>2 – Less than 3</td>
<td>8</td>
<td>14.81</td>
</tr>
<tr>
<td></td>
<td>3 – Less than 4</td>
<td>6</td>
<td>11.11</td>
</tr>
<tr>
<td></td>
<td>4 – Less than 5</td>
<td>3</td>
<td>5.56</td>
</tr>
<tr>
<td></td>
<td>5 – Less than 10</td>
<td>3</td>
<td>5.56</td>
</tr>
<tr>
<td></td>
<td>10 – Less than 20</td>
<td>5</td>
<td>9.26</td>
</tr>
<tr>
<td></td>
<td>20 or more</td>
<td>2</td>
<td>3.70</td>
</tr>
<tr>
<td>Profit margin (%)</td>
<td>Under 0</td>
<td>7</td>
<td>12.96</td>
</tr>
<tr>
<td></td>
<td>0 – Less than 5</td>
<td>20</td>
<td>37.04</td>
</tr>
<tr>
<td></td>
<td>5 – Less than 10</td>
<td>21</td>
<td>38.89</td>
</tr>
<tr>
<td></td>
<td>10 – Less than 15</td>
<td>5</td>
<td>9.26</td>
</tr>
<tr>
<td></td>
<td>15 or more</td>
<td>1</td>
<td>1.85</td>
</tr>
</tbody>
</table>
Table 4.5 indicates descriptive statistics on mean values of net sales and profit margins between 2013 and 2015.

Table 4.5 Descriptive statistics of financial items

<table>
<thead>
<tr>
<th>Description</th>
<th>Net sales (billion USD)</th>
<th>Profit margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0.14</td>
<td>-24.66</td>
</tr>
<tr>
<td>Maximum</td>
<td>29.15</td>
<td>19.66</td>
</tr>
<tr>
<td>Mean</td>
<td>4.03</td>
<td>3.58</td>
</tr>
<tr>
<td>Variance</td>
<td>36.41</td>
<td>67.28</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.03</td>
<td>8.20</td>
</tr>
</tbody>
</table>

Figure 4.1 shows the scatter plot of 54 companies’ net sales and profit margins.

Figure 4.1 Scatter plot for net sales and profit margin
4.2.2 Factory Ownership

Thirteen of 54 companies have company-owned manufacturing facilities and domestic and overseas locations of these facilities varies; these facilities were in North America, South America, and Asia. Due to geographical advantage, many factory facilities were located in Central America and South America relatively nearby from the United States. Among the sample companies, Hanesbrands Inc. has the greatest number of owned factories, reaching the number of 47. Only five among the 13 apparel companies owning facilities indicated the proportion of products that was manufactured in their owned manufacturing plants. Of those, Delta Apparel Inc. demonstrated the highest proportion of owned manufacturing accounting for 84% of its production. Table 4.6 below indicates data concerning 13 companies’ owned manufacturing facilities.

Table 4.6 Summary of owned manufacturing facilities

<table>
<thead>
<tr>
<th>Company</th>
<th>No. of countries</th>
<th>No. of owned factories</th>
<th>Portion of production</th>
<th>Region</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cintas Corporation</td>
<td>No mention</td>
<td>5</td>
<td>No mention</td>
<td>No mention</td>
<td>No mention</td>
</tr>
<tr>
<td>Delta Apparel Inc.</td>
<td>4</td>
<td>10</td>
<td>84%</td>
<td>No mention</td>
<td>U.S., Honduras, El Salvador, Mexico, China</td>
</tr>
<tr>
<td>Ever-Glory International Group Inc.</td>
<td>1</td>
<td>3</td>
<td>No mention</td>
<td>No mention</td>
<td>No mention</td>
</tr>
<tr>
<td>G&amp;K Services Inc.</td>
<td>1</td>
<td>1</td>
<td>45%</td>
<td>No mention</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Company</td>
<td>No mention</td>
<td>Owned manufacturing facilities</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------</td>
<td>-------------------------------</td>
<td>---------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gildan</td>
<td>No mention</td>
<td>26</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanesbrands Inc.</td>
<td>No mention</td>
<td>47</td>
<td>Asia, North America, Central America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levi Strauss &amp; Co.</td>
<td>2</td>
<td>2</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxford Industries Inc.</td>
<td>1</td>
<td>1</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVH Corp.</td>
<td>1</td>
<td>1</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superior Uniform Group</td>
<td>2</td>
<td>3</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailored Brands Inc.</td>
<td>No mention</td>
<td>1</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UniFirst Corporation</td>
<td>2</td>
<td>3</td>
<td>No mention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.F. Corporation.</td>
<td>7</td>
<td>28</td>
<td>South America, Caribbean, Europe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7 indicates descriptive statistics of the 13 companies’ owned manufacturing facilities.

**Table 4.7 Descriptive statistics of the 13 companies with factory ownership**

<table>
<thead>
<tr>
<th>Description</th>
<th>Owned manufacturing facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>47.00</td>
</tr>
<tr>
<td>Mean</td>
<td>10.08</td>
</tr>
<tr>
<td>Variance</td>
<td>209.07</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>14.45</td>
</tr>
</tbody>
</table>

62
Table 4.8 indicates inspection model distribution of the 13 companies. Eight
out of 13 companies were classified into Model 4.

Table 4.8 Distribution of inspection model of the companies owning manufacturing
facilities

<table>
<thead>
<tr>
<th>Inspection model</th>
<th>The number of companies</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>1</td>
<td>Ever-Glory International Group Inc.</td>
</tr>
<tr>
<td>Model 3</td>
<td>4</td>
<td>Cintas Corporation, Delta Apparel Inc., G&amp;K Services Inc., UniFirst Corporation</td>
</tr>
</tbody>
</table>

4.3 Correlation Between Independent Variables

In order to investigate the relationship between net sales, profit margins, and
the number of company-owned factories, correlation analysis was performed. As a
result, no significant relation was found between independent variables (see Table
4.9).
Table 4.9 Correlation results between net sales, profit margins, and the number of company-owned factories

<table>
<thead>
<tr>
<th>Variables</th>
<th>Net sales</th>
<th>Profit margin</th>
<th>The number of owned manufacturing facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit margin</td>
<td>.245 (.074)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>.065 (.640)</td>
<td>.172 (.214)</td>
<td>1</td>
</tr>
</tbody>
</table>

***p < .001; **p < .01; *p < .05

4.4 Hypotheses Testing

**H1a.** The larger the company size, the more likely the company conducts internal monitoring.

Binomial logistic regression was performed to examine the relation between internal monitoring implementation and net sales. The following is the regression model: \( Y (\text{Predicted logit of internal monitoring}) = B_0 + B_1 \text{Net sales} \). The goodness of fit test for logistic regression, Hosmer and Lemeshow test, was performed. The model Hosmer and Lemeshow was \( X^2 (df) = 8.734 (8), p = .365 \). When estimated test result is \( p > .05 \) in Hosmer and Lemeshow test, regression models are considered statistically significant (Hosmer & Lemeshow, 2000). Hence, the regression model was statistically significant because the \( p \)-value \( (p = .365) \) was greater than .05.

Net sales variable was also significant, \( p < .05 \) (see Table 4.10). Therefore, **H1a** was accepted. Nagelkerke \( R^2 \) was .193 \( (R^2 = .193) \), indicating that 19.3% of the
variation in the probability of internal monitoring is explained by the independent variable, \( Net sales \).

Table 4.10 Logistic regression result between internal monitoring implementing and net sales variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E. ( b )</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig. ( c )</th>
<th>95% CI ( d )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>0.253</td>
<td>0.128</td>
<td>3.925</td>
<td>1.288</td>
<td>.048</td>
<td>1.003 – 1.655</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.440</td>
<td>0.407</td>
<td>1.169</td>
<td>0.644</td>
<td>.280</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test

Hosmer-Lemeshow \( X^2 (df) = 8.734 (8), p = .365 \)

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

Table 4.10 indicates that odds ratio value (1.288) of \( Net sales \) variable is larger than 1, which means \( Net sales \) variable has a positive relation to the probability of implementing internal monitoring. This result means that when a company net sales grow one unit (one billion USD), the company’s probability of implementing internal monitoring increases by 28.8%.

**H1b.** The larger the company size, the more likely the company conducts external monitoring.

Binomial logistic regression was performed to examine the relation between external monitoring implementation and net sales. The following is the regression model: \( Y (Predicted \ logit \ of \ external \ monitoring) = B_0 + B_1 Net sales \). The model Hosmer and Lemeshow was \( X^2 (df) = 2.943 (8), p = .938 \). The regression model was statistically significant because the \( p \) value \( (p = .938) \) was greater than .05. \( Net sales \)
variable was also significant, \( p < .05 \) (see Table 4.11). Therefore, **H1b** was accepted. Nagelkerke \( R^2 \) was .286 (\( R^2 = .286 \)), indicates that 28.6% of the variation in the probability of external monitoring is explained by the independent variable, *Net sales*.

Table 4.11 Logistic regression result between external monitoring implementing and net sales variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E.(^b)</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.(^c)</th>
<th>95% CI(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>0.744</td>
<td>0.346</td>
<td>4.637</td>
<td>2.104</td>
<td>.031</td>
<td>1.069 – 4.142</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.231</td>
<td>0.563</td>
<td>0.168</td>
<td>0.794</td>
<td>.682</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test

Hosmer-Lemeshow \( X^2 \) (df) = 2.943 (8), \( p = .938 \)

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

Table 4.11 indicates that odds ratio value (2.104) of *Net sales* variable is larger than 1, which means *Net sales* variable has a positive relation to the probability of implementing external monitoring. This result means that when a company net sales grow one unit (one billion USD), the company’s probability of implementing external monitoring increases by 110.4%.

**H1c.** The larger the company size, the more likely the company has inspection Model 4.

Binomial logistic regression was performed to examine the relation between inspection Model 4 and net sales. The following is the regression model: \( Y (Predicted logit of inspection Model 4) = B_0 + B_1\text{Net sales} \). The model Hosmer and Lemeshow was \( X^2 \) (df) = 6.271 (8), \( p = .617 \). The regression model was statistically significant
because the \( p \)-value (\( p = .617 \)) was greater than .05. \emph{Net sales} variable was also significant, \( p < .05 \) (see Table 4.12). Therefore, \textbf{H1c} was accepted. Nagelkerke \( R^2 \) was .267 (\( R^2 = .267 \)), indicates that 26.7\% of the variation in the probability of inspection Model 4 is explained by the independent variable, \emph{Net sales}.

Table 4.12 Logistic regression result between inspection Model 4 and net sales variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E.( ^b )</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.( ^c )</th>
<th>95% CI( ^d )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>0.305</td>
<td>0.132</td>
<td>5.359</td>
<td>1.357</td>
<td>.021</td>
<td>1.048 – 1.757</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.000</td>
<td>0.430</td>
<td>5.395</td>
<td>0.368</td>
<td>.020</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow \( X^2 (df) = 6.271 \) (8), \( p = .617 \)

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

Table 4.12 indicates that odds ratio value (1.357) of \emph{Net sales} variable is larger than 1, which means \emph{Net sales} variable has a positive relation to the probability of inspection Model 4. This result means that when a company net sales grow one unit (one billion USD), the company’s probability of implementing inspection Model 4 increases by 35.7\%.

\textbf{H2a.} The higher the company profit margin, the more likely the company conducts internal monitoring.

Binomial logistic regression was performed to examine the relation between internal monitoring implementation and profit margin. The following is the regression model: \( Y (\text{Predicted logit of internal monitoring}) = B_0 + B_1 \text{Profit margin} \). The model
Hosmer and Lemeshow was $X^2 (df) = 2.064 (8), p < .05$. The regression model was not statistically significant because the $p$-value ($p < .05$) was less than .05. Neither the regression model nor Profit margin variable was significant (see Table 4.13). **H2a** was rejected.

Table 4.13 Logistic regression result between internal monitoring implementing and profit margin variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B^a$</th>
<th>S.E.$^b$</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.$^c$</th>
<th>95% CI$^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit margin</td>
<td>0.051</td>
<td>0.037</td>
<td>1.846</td>
<td>1.052</td>
<td>.174</td>
<td>0.978 – 1.131</td>
</tr>
<tr>
<td>Constant</td>
<td>0.120</td>
<td>0.312</td>
<td>0.147</td>
<td>1.127</td>
<td>.702</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow $X^2 (df) = 2.064 (8), p < .05$

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

**H2b.** The higher the company profit margin, the more likely the company conducts external monitoring.

Binomial logistic regression was performed to examine the relation between external monitoring implementation and profit margin. The following is the regression model: $Y (Predicted logit of external monitoring) = B_0 + B_1\text{Profit margin}$. The model was statistically significant because the $p$-value ($p = .872$) was greater than .05. However, Profit margin variable was not significant (see Table 4.14). **H2b** was rejected.
Table 4.14 Logistic regression result between external monitoring and profit margin variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B^a$</th>
<th>S.E.$^b$</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.$^c$</th>
<th>95% CI$^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit margin</td>
<td>0.029</td>
<td>0.036</td>
<td>0.616</td>
<td>1.029</td>
<td>.432</td>
<td>0.958 – 1.105</td>
</tr>
<tr>
<td>Constant</td>
<td>1.059</td>
<td>0.335</td>
<td>9.991</td>
<td>2.884</td>
<td>.002</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow $X^2 (df) = 3.835 (8), p = .872$

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

**H2c.** The higher the company profit margin, the more likely the company has inspection Model 4.

Binomial logistic regression was performed to examine the relation between inspection Model 4 and profit margin. The following is the regression model: $Y (Predicted logit of inspection Model 4) = B_0 + B_1Profit margin$. The model Hosmer and Lemeshow was $X^2 (df) = 7.472 (8), p = .487$. The regression model was statistically significant because the $p$-value ($p = .487$) was greater than .05. However, Profit margin variable was not significant (see Table 4.15). **H2c** was rejected.

Table 4.15 Logistic regression result between inspection Model 4 and profit margin variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B^a$</th>
<th>S.E.$^b$</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.$^c$</th>
<th>95% CI$^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit margin</td>
<td>0.056</td>
<td>0.040</td>
<td>1.953</td>
<td>1.058</td>
<td>.162</td>
<td>0.978 – 1.145</td>
</tr>
<tr>
<td>Constant</td>
<td>0.291</td>
<td>0.327</td>
<td>0.795</td>
<td>0.747</td>
<td>.373</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow $X^2 (df) = 7.472 (8), p = .487$

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval
**H3a.** The more manufacturing facilities the company owned, the more likely the company conducts internal monitoring.

Binomial logistic regression was performed to examine the relation between internal monitoring implementation and the number of owned manufacturing facilities. The following is the regression model: \( Y (\text{Predicted logit of internal monitoring}) = B_0 + B_1 \text{The number of owned manufacturing facilities} \). The model Hosmer and Lemeshow was \( X^2 (df) = 2.486 (2), p = .288 \). The regression model was statistically significant because the \( p \)-value \( (p = .288) \) was greater than .05. However, *The number of owned manufacturing facilities* variable was not significant (see Table 4.16). **H3a** was rejected.

Table 4.16 Logistic regression result between internal monitoring implementing and the number of owned manufacturing facilities variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E.(^b)</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.(^c)</th>
<th>95% CI(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>0.068</td>
<td>0.064</td>
<td>1.117</td>
<td>1.070</td>
<td>.291</td>
<td>0.944 – 1.214</td>
</tr>
<tr>
<td>Constant</td>
<td>0.179</td>
<td>0.288</td>
<td>0.387</td>
<td>1.196</td>
<td>.534</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test

Hosmer-Lemeshow \( X^2 (df) = 2.486 (2), p = .288 \)

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

**H3b.** The more manufacturing facilities the company owned, the more likely the company conducts external monitoring.
Binomial logistic regression was performed to examine the relation between external monitoring implementation and the number of owned manufacturing facilities. The following is the regression model: \( Y (Predicted \ logit \ of \ external \ monitoring) = B_0 + B_1The \ number \ of \ owned \ manufacturing \ facilities \). The model Hosmer and Lemeshow was \( X^2 (df) = 1.955 \ (2), \ p = .376 \). The regression model was statistically significant because the \( p \)-value (\( p = .376 \)) was greater than .05. However, \( The \ number \ of \ owned \ manufacturing \ facilities \) variable was not significant (see Table 4.17). \( H_3b \) was rejected.

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E.(^b)</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.(^c)</th>
<th>95% CI(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>0.307</td>
<td>0.369</td>
<td>0.694</td>
<td>1.360</td>
<td>.405</td>
<td>0.660 – 2.802</td>
</tr>
<tr>
<td>Constant</td>
<td>0.949</td>
<td>0.339</td>
<td>7.838</td>
<td>2.582</td>
<td>.005</td>
<td></td>
</tr>
</tbody>
</table>

**Goodness-of-fit test**

Hosmer-Lemeshow \( X^2 (df) = 1.955 \ (2), \ p = .376 \)

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E.(^b)</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.(^c)</th>
<th>95% CI(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>0.307</td>
<td>0.369</td>
<td>0.694</td>
<td>1.360</td>
<td>.405</td>
<td>0.660 – 2.802</td>
</tr>
<tr>
<td>Constant</td>
<td>0.949</td>
<td>0.339</td>
<td>7.838</td>
<td>2.582</td>
<td>.005</td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.17 Logistic regression result between external monitoring implementation and the number of owned manufacturing facilities variable**

\( a. \) Regression coefficient; \( b. \) Standard error; \( c. \) Two-tailed test; \( d. \) Confidence interval

**H3c.** The more manufacturing facilities the company owned, the more likely the company has inspection Model 4.

Binomial logistic regression was performed to examine the relation between inspection Model 4 and the number of owned manufacturing facilities. The following is the regression model: \( Y (Predicted \ logit \ of \ inspection \ Model \ 4) = B_0 + B_1The \ number \ of \ owned \ manufacturing \ facilities \). The model Hosmer and Lemeshow was \( X^2 \)
The regression model was statistically significant because the \( p \)-value (\( p = .089 \)) was greater than .05. However, the number of owned manufacturing facilities variable was not significant (see Table 4.18). \textbf{H3c} was rejected.

Table 4.18 Logistic regression result between inspection Model 4 and the number of owned manufacturing facilities

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E. ( ^b )</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig. ( ^c )</th>
<th>95% CI ( ^d )</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of owned manufacturing</td>
<td>0.078</td>
<td>0.063</td>
<td>1.543</td>
<td>1.082</td>
<td>.214</td>
<td>0.956 – 1.224</td>
</tr>
<tr>
<td>facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.220</td>
<td>0.288</td>
<td>0.582</td>
<td>0.803</td>
<td>.446</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow \( X^2 (df) = 4.838 (2), p = .089 \)

\(^a\) Regression coefficient; \(^b\) Standard error; \(^c\) Two-tailed test; \(^d\) Confidence interval

### 4.5 Additional Data Analysis

The test results of nine hypotheses were examined through simple logistic regression with one independent variable. As demonstrated in Table 4.8, it was identified by correlation analysis that there is no significant relation between the three independent variables, Net sales, Profit margin, and The number of owned manufacturing facilities. However, in order to examine the probability of internal or external monitoring implementation or inspection Model 4, multiple logistic regression with three independent variables was performed. First, the following regression model was developed to estimate the probability of internal monitoring: \( Y \)
(Predicted logit of internal monitoring) = B_0 + B_1Net sales + B_2Profit margin + B_3The number of owned manufacturing facilities. Binomial logistic regression was performed to examine the relation between internal monitoring implementation and independent variables which were net sales, profit margin, and the number of owned manufacturing facilities. The model Hosmer and Lemeshow was \( X^2 (df) = 5.485 (8), p = .705 \). The regression model was statistically significant because the \( p \)-value \( (p = .705) \) was greater than .05. However, all independent variables were not significant (see Table 4.19).

Table 4.19 Logistic regression result between internal monitoring implementing, net sales, profit margin, and the number of owned manufacturing facilities variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>( B^a )</th>
<th>S.E. ( ^b )</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig. ( ^c )</th>
<th>95% CI ( ^d )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>0.220</td>
<td>0.125</td>
<td>3.105</td>
<td>1.246</td>
<td>.078</td>
<td>0.976 – 1.590</td>
</tr>
<tr>
<td>Profit margin</td>
<td>0.020</td>
<td>0.037</td>
<td>0.298</td>
<td>1.205</td>
<td>.585</td>
<td>0.949 – 1.098</td>
</tr>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>0.057</td>
<td>0.073</td>
<td>0.601</td>
<td>1.058</td>
<td>.438</td>
<td>0.917 – 1.221</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.515</td>
<td>0.412</td>
<td>1.567</td>
<td>0.597</td>
<td>.211</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow \( X^2 (df) = 5.485 (8), p = .705 \)

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

Second, the following regression model was developed to estimate the probability of external monitoring: \( Y \ (Predicted \ logit \ of \ external \ monitoring) = B_0 + B_1Net \ sales + B_2Profit \ margin + B_3The \ number \ of \ owned \ manufacturing \ facilities \). Binomial logistic regression was performed to examine the relation between external
monitoring implementation and independent variables which were Net sales, Profit margin, and The number of owned manufacturing facilities. The model Hosmer and Lemeshow was $X^2 (df) = 4.825 (8), p = .776$. The regression model was statistically significant because the $p$-value ($p = .776$) was greater than .05. Net sales variable was significant, $p < .05$ whereas the other two variables were not significant (see Table 4.20).

Table 4.20 Logistic regression result between external monitoring implementing, net sales, profit margin, and the number of owned manufacturing facilities variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B^a$</th>
<th>S.E. $^b$</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig. $^c$</th>
<th>95% CI $^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>0.835</td>
<td>0.000</td>
<td>4.439</td>
<td>2.305</td>
<td>.035</td>
<td>1.060 – 5.011</td>
</tr>
<tr>
<td>Profit margin</td>
<td>-0.014</td>
<td>0.043</td>
<td>0.101</td>
<td>0.987</td>
<td>.750</td>
<td>0.907 – 1.073</td>
</tr>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>0.454</td>
<td>0.417</td>
<td>1.185</td>
<td>1.575</td>
<td>.276</td>
<td>0.695 – 3.570</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.556</td>
<td>0.640</td>
<td>0.754</td>
<td>0.574</td>
<td>.385</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test
Hosmer-Lemeshow $X^2 (df) = 4.825 (8), p = .776$

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

Finally, the following regression model was developed to estimate the probability of inspection Model 4: $Y (Predicted logit of inspection Model 4) = B_0 + B_1Net sales + B_2Profit margin + B_3The number of owned manufacturing facilities$.

Binomial logistic regression was performed to examine the relation between inspection Model 4 and independent variables which were Net sales, Profit margin, and The number of owned manufacturing facilities. The model Hosmer and Lemeshow
was $\chi^2 (df) = 7.299 (8), p = .505$. The regression model was statistically significant because the $p$-value ($p = .505$) was greater than .05. *Net sales* variable was significant, $p < .05$ whereas the other two variables were not significant (see Table 4.21).

Table 4.21 Logistic regression result between inspection Model 4, net sales, profit margin, and the number of owned manufacturing facilities variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B^a$</th>
<th>S.E.$^b$</th>
<th>Wald</th>
<th>Odds ratio</th>
<th>Sig.$^c$</th>
<th>95% CI$^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>0.270</td>
<td>0.000</td>
<td>4.389</td>
<td>1.310</td>
<td>.036</td>
<td>1.018 – 1.686</td>
</tr>
<tr>
<td>Profit margin</td>
<td>0.016</td>
<td>0.039</td>
<td>0.168</td>
<td>1.016</td>
<td>.682</td>
<td>0.941 – 1.098</td>
</tr>
<tr>
<td>The number of owned manufacturing facilities</td>
<td>0.070</td>
<td>0.076</td>
<td>0.865</td>
<td>1.073</td>
<td>.352</td>
<td>0.925 – 1.244</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.088</td>
<td>0.439</td>
<td>6.148</td>
<td>0.337</td>
<td>.013</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit test

Hosmer-Lemeshow $\chi^2 (df) = 7.299 (8), p = .505$

a. Regression coefficient; b. Standard error; c. Two-tailed test; d. Confidence interval

### 4.6 Summary of Hypotheses Testing

Table 4.22 summarized the results of logistic regression and Table 4.23 summarized the hypotheses of this study (H1a – H3c). Consequently, among the three company characteristics affecting factory monitoring choices, net sales was the sole statistically significant explanatory variable.
Table 4.22 Summary of results of logistic regression

<table>
<thead>
<tr>
<th>Regression model with net sales</th>
<th>Regression model with profit margin</th>
<th>Regression model with the number of owned manufacturing facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OR</strong></td>
<td><strong>Sig.</strong></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>Internal monitoring implementation</td>
<td>1.288</td>
<td>.048*</td>
</tr>
<tr>
<td>External monitoring implementation</td>
<td>2.104</td>
<td>.031*</td>
</tr>
<tr>
<td>Inspection Model 4</td>
<td>1.357</td>
<td>.021*</td>
</tr>
</tbody>
</table>

a. Odds ratio; b. Two-tailed test

***p < .001; **p < .01; *p < .05

Table 4.23 Summary of results of hypotheses testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Testing result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1a.</strong> The larger the company size, the more likely the company conducts internal monitoring.</td>
<td>Net sales</td>
<td>The probability of internal monitoring implementation</td>
<td><strong>H1a</strong> accepted</td>
</tr>
<tr>
<td><strong>H1b.</strong> The larger the company size, the more likely the company conducts external monitoring.</td>
<td>Net sales</td>
<td>The probability of external monitoring implementation</td>
<td><strong>H1b</strong> accepted</td>
</tr>
<tr>
<td><strong>H1c.</strong> The larger the company size, the more likely the company has inspection Model 4.</td>
<td>Net sales</td>
<td>The probability of inspection Model 4</td>
<td><strong>H1c</strong> accepted</td>
</tr>
<tr>
<td><strong>H2a.</strong> The higher the company profit margin, the more likely the company conducts internal monitoring.</td>
<td><strong>Profit margin</strong></td>
<td>The probability of internal monitoring implementation</td>
<td><strong>H2a rejected</strong></td>
</tr>
<tr>
<td><strong>H2b.</strong> The higher the company profit margin, the more likely the company conducts external monitoring.</td>
<td><strong>Profit margin</strong></td>
<td>The probability of external monitoring implementation</td>
<td><strong>H2b rejected</strong></td>
</tr>
<tr>
<td><strong>H2c.</strong> The higher the company profit margin, the more likely the company has inspection Model 4.</td>
<td><strong>Profit margin</strong></td>
<td>The probability of inspection Model 4</td>
<td><strong>H2c rejected</strong></td>
</tr>
<tr>
<td><strong>H3a.</strong> The more the company owns manufacturing facilities, the more likely the company conducts internal monitoring.</td>
<td><strong>The number of owned manufacturing facilities</strong></td>
<td>The probability of internal monitoring implementation</td>
<td><strong>H3a rejected</strong></td>
</tr>
<tr>
<td><strong>H3b.</strong> The more the company owns manufacturing facilities, the more likely the company conducts external monitoring.</td>
<td><strong>The number of owned manufacturing facilities</strong></td>
<td>The probability of external monitoring implementation</td>
<td><strong>H3b rejected</strong></td>
</tr>
<tr>
<td><strong>H3c.</strong> The more the company owns manufacturing facilities, the more likely the company has inspection Model 4.</td>
<td><strong>The number of owned manufacturing facilities</strong></td>
<td>The probability of inspection Model 4</td>
<td><strong>H3c rejected</strong></td>
</tr>
</tbody>
</table>
Chapter 5
DISCUSSION AND CONCLUSIONS

The purpose of this study was to explore large U.S. apparel companies’ current factory monitoring method choices and the correlation between company characteristics and monitoring choices. The desktop research was conducted to collect data from major U.S. apparel company websites and content analysis was used to analyze data from CSR, sustainability and annual reports of three consecutive fiscal years (2013 – 2015) and recent official resources. The 54 major U.S. apparel brands and retailers listed in Apparel Magazine from 2014 to 2016 were selected for the research sample.

Whether each company had code of conduct, and internal or external monitoring tools to assess vendor compliance with labor standards and working conditions was investigated and based on the investigation, the 54 sample companies were classified into four factory inspection models. Each company’s monitoring selection, net sales, profit margins, and factory ownership were investigated to examine company characteristics. Lastly, the correlation between the company characteristics and factory monitoring selection was examined.

The remainder of this chapter provides an overview of the literature that served as a basis for this study. Next, a summary and discussion of the research results are presented. Finally, limitations and future research are presented, followed by conclusions and implications of the research.
5.1 Summary of Review of Literature

Global sourcing trends in the textile and apparel industry have led to the migration of apparel supply chains to less developed countries. Complexity and dispersion of the supply chains have resulted in little visibility and transparency within members of the supply chain (Valero & Dickson, 2014). Also, the majority of power and value is dominated by a smaller number of lead apparel corporations in the industry, while the suppliers and their workers own little power and value added (Gereffi & Frederick, 2010; Hurley, 2005; Hurley & Miller, 2005). In particular, labor right violations and appalling working conditions in garment factories within upstream of the supply chain have continuously obtained media attention and been criticized.

Many members of the apparel industry have recognized that they need to take steps to improve labor standards level and working conditions throughout their supply chains. Past efforts to address issues regarding labor rights and working conditions have consisted of top down private governance from leading brands and retailers in the form of code of conduct, internal or external auditing (Valero & Dickson, 2014). Although individual code of conduct has proliferated since the early 1990s (Appelbaum & Lichtenstein, 2014), monitoring methods to ensure code compliance vary. Some companies have used internal staff, while others hire private audit firms or independent organizations (Esbenshade, 2012). It is also identified that a considerable number of apparel firms has adopted multiple inspection methods, internal staff, private third-party firms, and independent organizations (Esbenshade, 2012).

Past literature has suggested that company size affects factory inspection method selection. Compared to small firms, large companies have more bargaining power to enforce compliance with labor standards to their suppliers (Leoputre & Heene, 2006), can afford costly factory monitoring expenses (Ciliberti et al., 2008),
and are more sensitive to company reputation being diminished due to their conspicuous presence, which easily leads them to an easy target of public criticism.

Other company characteristics discussed in this study are company profit margins and factory ownership. In general, companies with a high profit margin have smooth cash flow and are more affluent, thus being able to afford expensive factory monitoring (O’Rourke, 2006; U.S. Department of Labor, 1996). In addition to this, the companies that own manufacturing facilities are more concerned about labor issues and safety accidents in factories under their ownership. This is because these practices are directly linked to company reputation and brand image (U.S. Department of Labor, 1996). Therefore, those companies that have their own manufacturing facilities make more efforts to prevent these problems through monitoring.

5.2 Summary and Discussion of Results

The research findings are discussed according to the research questions developed in this study: factory inspection methods of current U.S. apparel companies, company characteristics affecting the methods, and correlations between factory inspection method choices and company characteristics. Major and significant findings in relation to factory inspection tools and company characteristics are addressed. Main points are compared to past research presented within the literature review of this thesis.

RQ 1. What factory inspection methods have been adopted among U.S. apparel companies?
The first objective of this study was to identify current factory inspection methods adopted by large U.S. apparel companies. As Appelbaum and Lichtenstein (2014) state that company use of codes of conduct has proliferated, this study results showed that most apparel companies have their individual codes of conduct. Among the investigated 54, 51 companies (94.4%) had codes. These large U.S. companies more often adopt external monitoring than internal monitoring. While 41 companies (75.9%) conducted external monitoring, the number of the company that conducted internal monitoring reached only 31 (57.4%). The reason for the results can be presumed from the previous literature stating that the high expenses are incurred particularly for internal monitoring to operate and maintain factory monitoring department and train employees (O’Rourke, 2006; U.S. Department of Labor, 1996). This may lead companies to outsource responsibilities for monitoring to external organizations. Another reason can be assumed from the fact that buyer companies tend to shift social audit costs to their suppliers, and thus prefer external monitoring methods (Clean Clothes Campaign, 2005).

Twenty-six companies (48.1%), which account for almost half of sample companies, were identified as employing both internal and external monitoring tools. Only eight companies (14.8%) did not conduct any factory monitoring based on the data analysis. The fact that 51 companies (94.4%) had code of conduct and 46 companies (85.2%) adopted monitoring tools is aligned with Valero and Dickson (2014)’s claim that the majority of efforts to address labor rights and working conditions issues have consisted of supplier code of conduct, coupled with internal or external auditing.
RQ 2. What are the company characteristics of large U.S. apparel companies?

The second objective of this study was to identify characteristics of large U.S. apparel companies. The three aspects of a company, size, financial performance, and factory ownership were examined. Net sales for company size, profit margins for financial performance, and the number of company-owned manufacturing facilities for factory ownership were investigated respectively. The mean of 54 company net sales was $4 billion. However, net sales sizes greatly differ among apparel companies and a small number of companies took up a large proportion of net sales. While the net sales of the two companies, The TJX Companies Inc. and Nike Inc., were over $20 billion, the net sales of 18 companies were less than $1 billion. Moreover, the sum of top ten U.S. apparel companies’ net sales ($141.5 billion) almost doubled the rest 44 U.S. apparel companies’ net sales ($76.3 billion).

The mean of 54 company profit margins was 3.58%. Among 54, seven companies were operating at a loss and these companies showed great variability in profit margins every year. Overall, there was a wide fluctuation in profit margins compared to net sales. Thirteen out of 54 companies had company-owned manufacturing facilities and these factories were located mostly in the United States and Central and South America. According to correlation analysis, no statistically significant relation was found between the three company characteristics, net sales, profit margins and the number of company-owned factories.

RQ 3. Are there any specific patterns or correlation between companies’ factory inspection methods and company characteristics?
The third objective of this study was to find patterns or relation between factory inspection choices and company characteristics. This study examined company net sales, profit margins, and the number of factories owned as company characteristics affecting monitoring choices. Through logistic regression, only net sales variable turned out to be a company characteristic significantly affecting monitoring choices. In other words, the larger the company size, the more likely the company conducts internal, external monitoring, and follows inspection Model 4. The result supports the previous literature claiming large scale companies’ bargaining power to suppliers (Leoputre & Heene, 2006), higher affordability of monitoring costs (Ciliberti et al., 2008), and higher sensitivity to reputation and brand image (O’Rourke, 2003).

Conversely, profit margins and the number of factory owned were not significant company characteristics affecting monitoring methods. These results are not consistent with the assumptions of this study based on previous literature (U.S. Department of Labor, 1996). These inconsistencies between previous literature and this research results can be drawn from the following factors. First, among the investigated 54, seven firms of profit margins were less than 0%, which means their incomes were smaller than the sum of all expenses and taxes incurred during company operation. Additionally, 17 firms of profit margins were less than 2% and 27 firms were less than 5%. Since the investigated profit margins were low overall compared to the average profit margins of U.S. manufacturing industry, which is normally between 7–8% (Chen, 2015; United States Census Bureau, 2017), this tendency of low profits margins within investigated sample companies may have skewed the analysis result. In addition to this, it can be assumed that the low profits margins tendency among the
companies may impede monitoring adoptions of the large companies due to cash flow problems.

The profit margins fluctuations were large among the several investigated apparel firms. For instance, China Xiniya Fashion Limited had recorded the biggest fluctuation in its profit margins during the investigated period; 7.36% (2013), -20.99% (2014), and -127.15% (2014). J. Crew Group Inc. followed the record; 3.6% (2013), -25.5% (2014), and -49.6% (2015). The Gymboree Corporation also showed a great variance in profit margins; -16.31% (2013), -46.72% (2014), and -0.82% (2015). As such, the high volatility of profit margins in several companies may function as outlier resulting that profit margins are not statistically significant.

Thirteen companies owned manufacturing facilities and all adopted monitoring methods. More importantly, eight companies (61.5%) adopted inspection Model 4 conducting both internal and external factory social audits. However, regression analysis result showed that the number of factories owned was not a significant company characteristic for determining monitoring adoption and choices. The reason for inconsistency was that most companies that did not own factories also conducted internal or external monitoring and adopted inspection Model 4. Among the 41 companies without factory ownership, 33 companies (80.4%) conducted factory monitoring tools and 18 companies (43.9%) adopted inspection Model 4. As such, there was no great difference between companies with and without factory ownership.

5.3 Limitations and Future Research

There are at least three areas that should be addressed in future research. The main limitation of this study was the small number of U.S. companies investigated.
Research should expand data collection from the apparel companies with small and medium scale and outside of the United States to include a large number of retailers and brands. This would provide more accurate knowledge when looking at the relation between factory monitoring methods and company characteristics and also allow for a greater generalization and applicability of research results. Special attention should be paid to small size apparel companies, where the majority of concerns was found regarding factory inspection due to lack of financial and human resources (Milne et al., 2013), to shed more light on developing monitoring methods for small companies.

Another limitation was that the data collected for this research was all obtained from company websites publicly available. Therefore certain information that companies do not disclose were excluded from data analysis. Interviewing internal company employees or developing focus groups composed of field experts from multi-stakeholder initiatives would enhance the reliability of and provide a wealth of data.

The company characteristics used as independent variables of this study were restricted to net sales, profit margins, and factory ownership. In fact, company size can be measured by the number of employees, the amount of capital employed and market share. However, these characteristics relevant to company size were excluded due to lack of publicly available data. Also, the number of vendors or supplier manufacturing facilities of a firm assumed to have a great relation to factory monitoring audits were not used as independent variable due to lack of information. Therefore, if the data can be collected from internal company sources, more various company characteristics affecting monitoring choices can be applied.
This study classified monitoring tools into two types, internal and external monitoring. Future research may further refine monitoring types as the classification of U.S. Department of Labor, Bureau of International Labor Affairs that consists of four types; internal audits, external monitoring, outside audits, and NGO monitoring or Harvey et al. (2000) that consists of three types; internal, external, and independent monitoring.

5.4 Conclusions and Implications

Several conclusions can be drawn from this research. The first conclusion is that since the beginning of code of conduct and its social audits in the early 1990s, U.S. apparel companies dominant in the global market continue to use the methods to ensure compliance with labor rights and safe working conditions in factories. This is in accord with the analysis result of 54 sample companies by demonstrating 94.4% of code of conduct and 85.2% of audit adoption. Despite a long history of codes and social audit, there has been continuous criticism as well that monitoring is not effective and has not improved worker livelihood and working conditions (Dickson et al., 2009). Nevertheless, more suitable alternatives have not been found to secure labor standards compliance in manufacturing facilities. Therefore, abolishment of current monitoring tools for labor compliance would not be the best choice. Rather, finding ways to make improvements in monitoring methods and process would be more desirable and practical resolution.

Ongoing efforts and improvements have been made towards more effective monitoring. For instance, in the initial stage of factory inspection emergence, many audits were performed by commercial audits firms hired by manufacturers and some
problems were raised; lack of credentials of monitoring results, fraudulent efforts of suppliers to hide code violations, confidentiality of monitoring results, and others (Dickson, 2013). In comparison, these days, multi-stakeholder initiatives like FLA comprised of experts from diverse fields are actively engaged in auditing and the results are shared and publicly reported on web pages (Valero & Dickson, 2014). Furthermore, these initiatives have accumulated know-how, best practices, and expertise (Dickson et al., 2009). The involvement of multi-stakeholder initiatives in monitoring has strengthened credibility, transparency, and communications among stakeholders (Valero & Dickson, 2014). As suggested in Huq, Stevenson, and Zorzini (2014)’s research, focusing on worker capacity building rather than auditing, enforcement of laws, and harmonized code of conduct can be the direction towards improved future monitoring.

This study revealed that net sales is one company characteristic affecting monitoring selection among large U.S. apparel companies. It was also found that the larger the net sales of company, the more likely the company conducts internal or external monitoring. This suggests that the companies with a small amount of net sales may have obstacles and limitations on accessing monitoring tools and large companies with enormous net sales have a great deal of influence on the overall circumstance of factory monitoring. Moreover, lead apparel firms own the majority of power and influence in the industry, while the suppliers and workers exert little power (Gereffi & Frederick, 2010; Hurley, 2005; Hurley & Miller, 2005). Consequently, a small number of large companies would have absolute control in the industry and the imbalance of power can cause ineffectiveness of monitoring. Large multinational companies could collude and shift monitoring cost to suppliers. The pressure on suppliers would
eventually move to workers in factories. Therefore, to prevent the control of a small number of powerful buyers, supplier participations and autonomies need to be more involved in the monitoring process. The fact that suppliers have more opportunities for direct contacts and communications with factory workers provides validity of supplier engagement.

Previous research also indicated that, rather than traditional compliance approaches, collaborative partnerships among buyers and suppliers increase the effectiveness of monitoring (Dickson, 2013). For example, the qualitative field research of Adidas case showed that Adidas’ collaborative approach to suppliers increased monitoring effectiveness resulting in improvements of working conditions, reducing health and safety issues, and saving monitoring costs (Frenkel & Scott, 2002). A survey in China’s apparel company also revealed that collaborative relationships with suppliers increase compliance with buyer codes of conduct (Dickson, 2013).

Small scale firms should not be ignored in monitoring. To include small and medium size firms and use the benefits that the voice of small-scale firms bring, some standardized tools that can save costs on monitoring procedures are necessary. In that respect, the challenge of FLA to audit small size firms to their accreditation of compliance program is valuable (Milne et al., 2013). In developing and implementing monitoring strategies, enormous costs can be incurred, especially on translators, factory visits, and others. The FLA provides its members with free access to monitoring tools and training and useful resources and small companies can make use to reduce monitoring cost (Milne et al., 2013). The ways to include and assist small companies in factory monitoring should be taken into consideration.
This research revealed that a majority of large U.S. apparel firms had social code of conduct and adopted internal or external monitoring methods. There was a positive relationship between company net sales and factory monitoring and 11 out of 13 companies above the net sales mean of $4 billion had inspection Model 4. However, still many companies with relatively small net sales conducted social audits. Among 18 companies less than $1 billion net sales, 12 companies adopted internal or external monitoring. Moreover, seven companies in the red recording negative profit margins also conducted factory social audits except for one company. The fact that apparel companies conduct costly social audits to secure labor rights and healthy working conditions even under financial difficulties suggests that the companies take into account the influence of their business operations to societies. This corresponds with Suchman (1995)’s legitimacy theory. Suchman described legitimacy as,

Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995, p. 574).

Therefore, legitimacy means that a business’s actions and organizational structures must be aligned with societal expectations and the business, in return, will gain societal support, or be punished based on its ability to conform to these expectations (Valero & Dickson, 2014). In a social context, if an apparel firm is known for its excellent treatment of workers publicly, meeting the societal expectations as a business actor, it will result in a favorable evaluation of the company reputation and products. In contrast, if an apparel firm is criticized for exploitation of workers and involved in a sweatshop issue, the company will be punished by
stakeholders such as consumers. While a company can survive in the short term by being profitable and satisfying consumer needs, which can be named pragmatic legitimacy, Castello and Lozano (2011) stated that a company must earn moral legitimacy composed of norms and expectations of the community to endure in the long run. This is the reason that large U.S. apparel companies have conducted social audits regardless of their financial performance. By earning both pragmatic and moral legitimacy, the large U.S. apparel companies investigated in this study can earn the necessary support to justify the business’s existence (Valero & Dickson, 2014) and ensure long-term stability and growth.
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Appendix A

WEB LINKS OF 2015 ANNUAL REPORTS


https://www.sec.gov/Archives/edgar/data/1359841/000135984116000342/hbi-
20160102x10k.htm

https://www.sec.gov/Archives/edgar/data/1051251/000156459016014982/jcg-
10k_20160130.htm

https://www.sec.gov/Archives/edgar/data/352363/000104746916010621/a222
7505z10-k.htm

https://www.sec.gov/Archives/edgar/data/701985/000070198516000051/lb130
201610k.htm

https://www.sec.gov/Archives/edgar/data/799288/000079928816000122/le201
6012910-k.htm

https://www.sec.gov/Archives/edgar/data/94845/000009484516000047/a2015
yeform10-k.htm

https://www.sec.gov/Archives/edgar/data/1397187/000139718716000089/lulu-
20160131x10k.htm

https://www.sec.gov/Archives/edgar/data/1530721/000153072116000090/kors
421610-k.htm

https://www.sec.gov/Archives/edgar/data/1211351/000104746916012218/a22
28240z10-k.htm

https://www.sec.gov/Archives/edgar/data/320187/000032018716000336/nke-
5312016x10k.htm

https://www.sec.gov/Archives/edgar/data/72333/000007233316000260/jwn-
1302016x10k.htm

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Appendix B
WEB LINKS REGARDING CODE OF CONDUCT, CSR, AND MONITORING


Superior Uniform Group. (2014). Corporate social responsibility: The superior way!. Retrieved from http://viewer.zmags.com/publication/e82db52b#/e82db52b/1


