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New York Garment Industry in the Global Market: Trends, Challenges and Opportunities

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ABSTRACT

Over recent decades, the increased complexity in economic, global and technological forces has dramatically transformed the US apparel industry. Today, New York's Garment District is the world's capital for apparel manufacturing, fashion design and marketing. Structurally the garment (apparel) industry is evolving from domestic manufacturing towards overseas labor and large-scale production serving mass retailers and brand-based manufacturers. In this context, some of the distinct advantages enjoyed by American apparel firms (who have maintained their dominant position globally) are eroding. This paper seeks to provide a conceptual overview of the "governance structures", underlying dynamics, trends and prospects shaping the New York Garment Industry under the influence of globalization. Partly drawing on Global Value Chain (GVC) referenced by major works on globalization, this study presents four factors in the evolution of the New York fashion-apparel industry: rise of global production and retail networks (demand and supply conditions), human capital (labor), social capital (local institutional assets), and "first-mover advantages."

JEL: F13, F14, F18, F23, L6

Keywords: International Trade, Garment District, Competitive Advantage, Global Value Chain (GVC), Porter Diamond Model

INTRODUCTION

This paper seeks to provide a conceptual overview of the "governance structures" and underlying dynamics shaping the New York Garment Industry under the influence of globalization. Since the 1980s, driven by global competition and cheaper labor costs, outsourcing has had a major impact on the US garment industry. Many companies that once manufactured their products in the Garment District have relocated overseas, seeking lower labor costs. While textile and apparel manufacturers were hardest hit, small firms supplying these manufacturers (such as zipper, button, supply stores, sewing and cutting rooms, suppliers of fabric, yarn and fiber) have either closed or moved out (Bagli, 2009). Facilitated by the end of the quota system in 2005, globalization has led to a dramatic shift of production to China and to "Newly Industrializing Economies" of Asia. With its large supply of cheap labor, China was well positioned to capture an ever-increasing share of world apparel and textile exports. Meanwhile, Latin America and Caribbean suffered a major blow from Asia's

resurgence in textile and apparel exports to the US. By the end of 2005, "when about 96 percent of all apparel sold in the US was being imported, about 30 percent of that total was supplied by China" (Leach, 2007, p. 11).

In this context, some of the distinct advantages enjoyed by US garment producers (who have maintained their dominant position globally) are eroding. This study aims to provide a conceptual framework and updated data on the importance of the fashion-apparel industry in New York. Using data from New York Department of Labor, Bureau of Labor Statistics and US Census Bureau (Annual Retail Survey), this paper provides an overview of the underlying dynamics, processes and structures-- demand conditions, factors of production, global conditions, and workforce characteristics in the garment industry. Ultimately, the objective is to develop a preliminary framework that would allow a better understanding of the factors underlying the formation of "competitive advantage" in particular industries.

Since New York is the U.S.'s center for high fashion, apparel production and retailing, we choose to focus on the garment sector, particularly Manhattan's Garment District—a geographically concentrated area of production and design in New York's Midtown, between Ninth Avenue and Fifth Avenue, from 34th to 42nd Street. As a well-known fashion and apparel industry "cluster", the Garment District accounts for the majority of "local fashion production" in New York country (Gandhi *et al*., 2012). While other areas of the US, such as the Southeast (North Carolina) and California (downtown Los Angeles) have the "largest concentration" of apparel and textile manufacturing (Berdine *et al*., 2012), New York City offers distinct advantages unmatched by any other city.

Previous research indicates that "competitive advantage" is created when industrial clusters emerge in particular locations. Clusters are "groups of inter-related industries that drive wealth creation in a region, primarily through export of goods and services" (San Diego Association of Governments, 1998, p.2). Characterized by "agglomeration economies", industrial clusters embody a variety of occupations, cultures, talent, local assets, and social and human capital (Rantisi, 2004; Glaeser, 2005; Cooke and Lazzeretti, 2008). In that respect, New York's garment district forms a fashion-apparel "industry cluster", where "competing" or "complementary" firms are inter-connected by networks of businesses (goods and services) and share labor, technology and infrastructure (New York State Department of Labor, 2012b, p.1). The coexistence of agglomeration economies and local/institutional capital in one location makes New York an especially vital link in the formation of apparel value chain. Furthermore, as no other city in the world has a comparable density of wholesale market and network of local support industries (such as "trade and consumer publications, global marketing firms and media outlets"), the Garment District hosts all components of fashion business–"from design and production to wholesale selling" (NYC Fashion, 2012).

Since it is impossible to conceive apparel manufacturing independently of fashion business, the overall research queries for this paper are as follows. How has the New York fashion-apparel industry changed over time under the impact of globalization? What are the Garment District's current unique advantages? How can these advantages be leveraged to enhance and maintain New York City's position as the world's fashion capital, apparel manufacturing and design? This paper reviews public and private data to analyze the institutional, global and local underpinnings of the New York fashion-apparel industry. Prominent data vendors such as US Census Bureau, Bureau of Labor Statistics, *Market Line* provide the sources for secondary data analysis, including industry and company profiles as well as

geographical information (national/state/local). Future directions and challenges for the industry are suggested in the conclusion.

THE STRUCTURE AND ORGANIZATION OF THE US APPAREL INDUSTRY

The unit of analysis for this research is New York's garment industry placed in its local, global, social and institutional environment. Thus far, researchers have analyzed the formation of "industrial clusters" within the framework of two theories. While the conceptual model for this research draws largely from Garry Gereffi's *Global Value Chain* (GVC) analysis-- a theory referenced by major works on globalization and the apparel industry (Bonancich *et al*., 1994; Gereffi and Korzeniewicz, 1994; Abernathy *et al*., 1999; Gereffi, 1999; 2001; Gereffi and Memodovic, 2003; Gereffi and Fernandez-Stark, 2011)-- Michael Porter's Competitive Advantage of Nations (1990; 1985) has received attention within studies of apparel and textile industries in different parts of the world (Oz, 1999; Yilmaz *et al*., 2007; Berdine *et al*., 2008, to name few). While both frameworks proceed from similar concepts, such as "competitive advantage", industrial "clusters" and "value chains', GVC offers a better analysis of "a new division of labor in global economic activities" and "governance structures" that underlie the formation of labor-intensive, buyer-driven industries (Das-Ozbay, 2011).

Porter's most important contribution is the introduction of firm-level analysis to Modern Trade Theory, which includes *Ricardo's Theory of Comparative Advantage, Ohlin Theory of Factor Proportions, Vernon's Product Life Cycle Theory*. According to Porter, competitive advantage occurs when an organization or an entity outperforms its rivals by acquiring core competencies, such as distinct resources and capabilities (non-imitable/non-substitutable) that allow for "more efficient operation" or "higher quality products/or services" (Singh, 2012, p.19). In Porter's view (1985), competitive advantage "grows fundamentally out of the value of a firm is able to create for its buyers that exceeds the firm's cost of creating it" (p.3). While this definition can be applied to national, state and even city levels, Porter (1990) mainly uses it to describe advantages that firms acquire "to compete successfully against foreign rivals in particular segments and industries" (p.10).

In the *Competitive Advantage of Nations*, Porter (1990) investigates why a country or nation becomes the "home base" for effective global competition in certain industries. Since most industries represent network of firms that "cluster" in particular locations, it is important to know how "proximate environment" shapes or limits competitive success of firms in those industries (Porter, 1990, p. 29). This environment is illustrated in the *Diamond Model* that represents the most important variables that lead to the creation of "competitive advantage" (Porter, 1990, p.71): 1) demand conditions (for example, a large, growing, "trend-setting" domestic market measured in terms of industry's total revenue; retail sales), 2) factor conditions (factors of production such as capital availability, labor resources, physical resources, infrastructure), 3) related and supporting industries (suppliers of creative inputs; raw materials (cotton); clothes wholesale and retail), 4) firm strategy, market structures and competitive rivalry (threat of new entrants, barriers to entry; development of substitute products), and 5) local and/or national government (as an "exogenous" variable that influences the demand conditions in the domestic market, rivalry between firms and supply conditions and encourages firms to improve performance and innovation by enforcing regulatory standards).

Despite its widespread application, the *Diamond Model* was criticized for generalizing incorrectly from the "American experience" and misunderstanding the meaning of comparative advantage (Davies and Ellies, 2000, pp.1189-1993).

Methodologically, it suffers from the same problems in the *Global Competitiveness Report*—the "exclusion of indices that are known to offer competitive advantage but that do not fit the Anglo/US" model of competition (Bergsteiner and Avery, 2012, p.391). *Global Value Chain* (GVC) offers a more systemic framework by conceptualizing production as a set of value creating activities involving not only entrepreneurial (market-based) activities but also social and class relationships (Kaplinsky and Morris, 2000, p.42) It addresses structural disparities, distributional outcomes of competitive advantage, unevenness of international trade and a division of labor within a single nation, region or even a city. In addition, opportunities as well as constraints arise from this framework for economic upgrading and workforce development in global South (see Gereffi *et al*., 2011).

Conceptually, GVC analysis revolves around the total life cycle of commodity production, from the intellectual property involved in design to its realization at the point of production (Figure 1). This includes chain of activities that create value at different stages of production: Supply of raw materials, production/design, distribution (export/import/retail networks), marketing and consumer support. While the "nodes" on the value chain can be created within a single firm, they can be spread among different firms or "be contained within a single geographical location or spread over wider areas" (*Global Value Chains*, 2012). Territoriality is an important component of this framework because it provides an understanding of how local industries are integrated into "transnational production networks" (Palpeceur, 2002, p.53). However, these networks are more than geographically concentrated or dispersed clustering of activities; they involve "governance structures of power and authority relationships that determines how financial, material, and human resources as well as economic surplus, are allocated and flow within the chain" (Appelbaum and Gereffi, 1994, p.43).

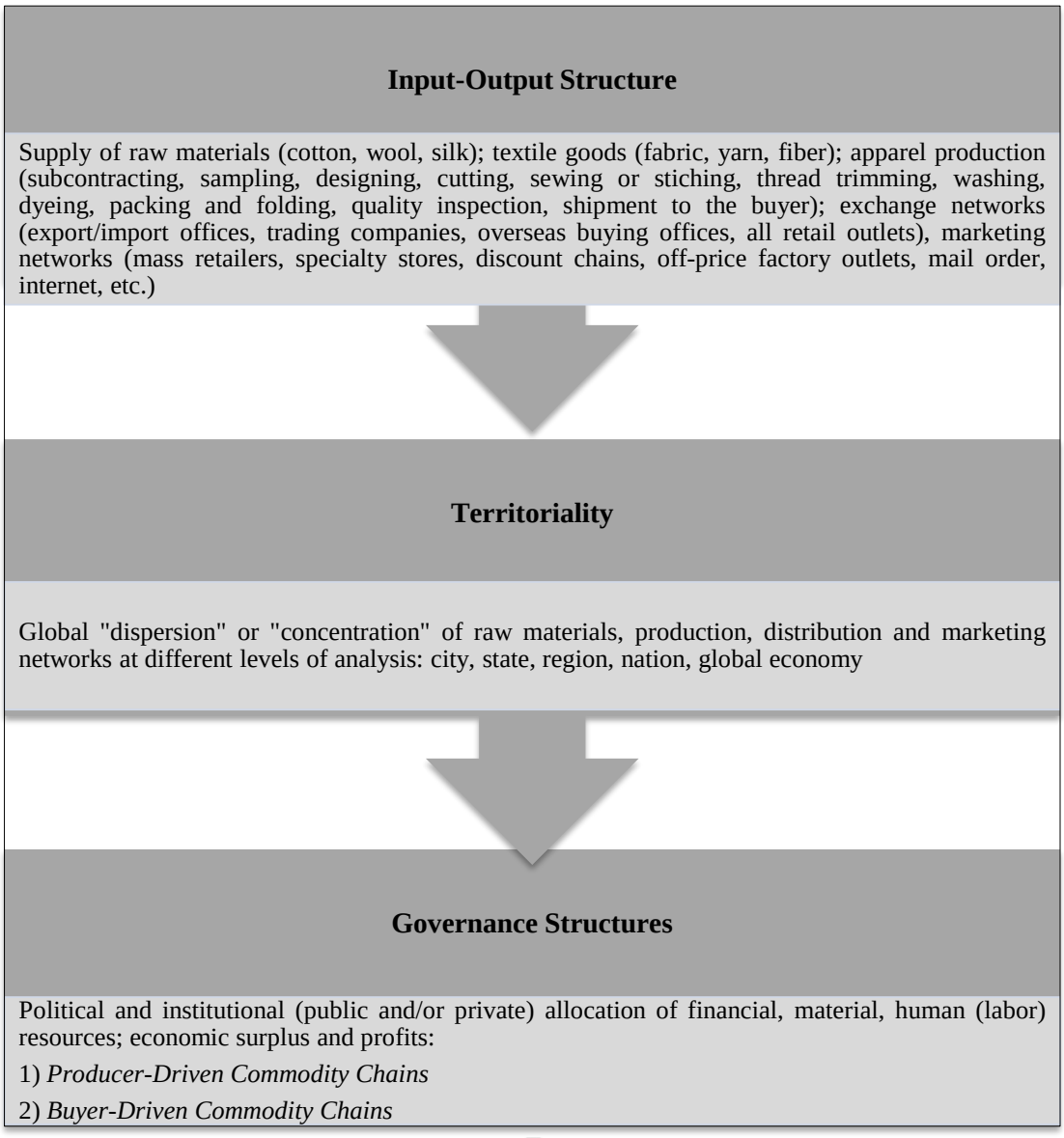


Figure 1. Global Value Chain (GVC) Analysis: The Case of Apparel Industry

Source: Figure is author's creation. Key concepts and value-chain activities are from Appelbaum and Gereffi, 1994, p.43; Gereffi, 1994, pp. 41-42; Gereffi *et al*., 2011, pp. 8-11

As Figure 1 shows, power relations in the apparel industry reflect two types of governance structures: "producer-driven commodity chains" and "buyer-driven commodity chains" (Gereffi, 1994, pp.41-42; Appelbaum and Gereffi, 1994, pp.43-44). The textile and clothing industry is a buyer-driven commodity chain; real rents in this sector derive from retailing, marketing and design activities. In producer-driven commodity chains, by contrast, large, capital- and technology intensive, "vertically-integrated" enterprises control production. This model is representative of industries that have adopted the Fordist model, such as automobile, computers, oil, aircraft, etc.

Buyer-driven commodity chains are characterized by the rise of global outsourcing by manufacturers as well as retailers. As retailers have gained control over the production process, the distinction between retailers and manufacturers became less important. Labor-intensive, consumer-

oriented industries, such as textile, garment, footwear, toys, and consumer electronics increasingly adopted this model. They organized production in a number of export processing zones and initially in low-cost, developing countries. Mass retailers in the US such as Macy's, JC Penny, Sears, Wal-Mart, Target, Kohl's, Dillard's, etc., have increasingly taken on manufacturing roles such as "product design", "fabric selection", "private-label" lines, quality and price control, and most importantly global outsourcing (Gereffi, 1994, p. 46).

Besides mass retailers, "branded marketers" and "specialty apparel retailers" are actively creating and managing the globalization of apparel production. These major retailers are outsourcing US apparel imports from other countries (Ramaswamy and Gereffi, 2000, p.194). In the case of specialty apparel retailers like the GAP, the Limited Brands, American eagle, H&M, Mango, Abercrombie & Fitch, the "retailer owns or licenses the final product brand" but does not own manufacturing or production facilities themselves (Gereffi *et al*., 2011, p.8).

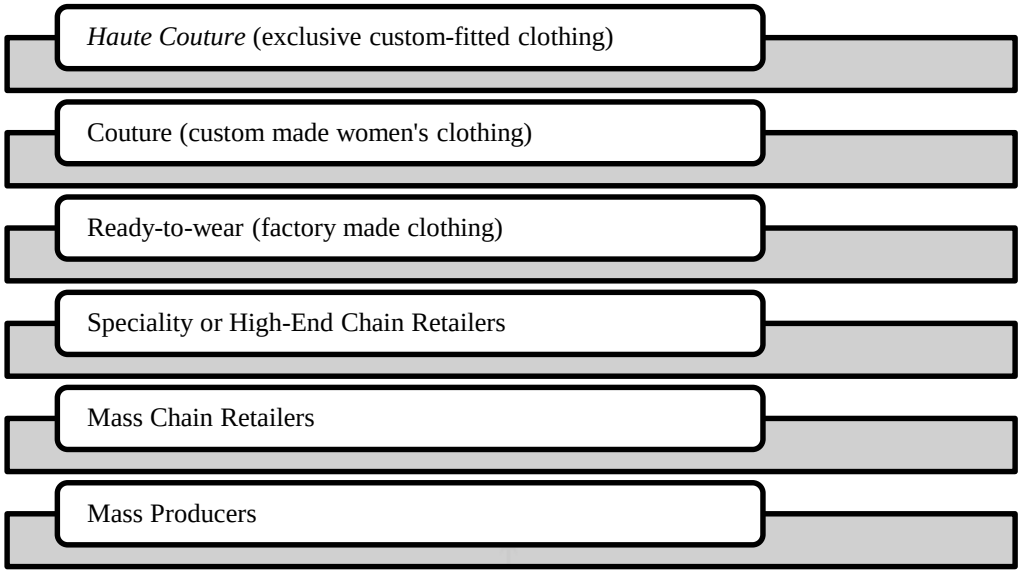


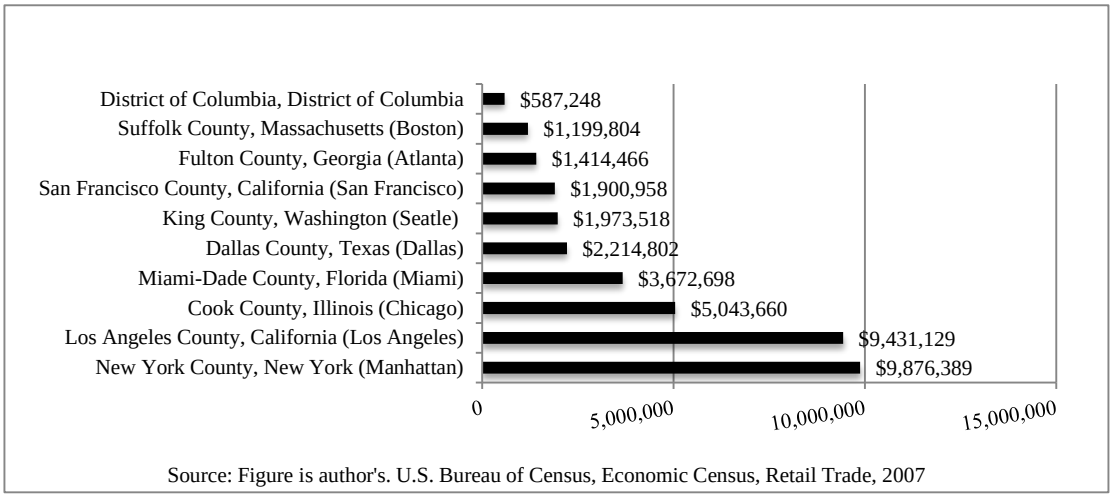
Figure 2. Hierarchy of the Apparel Value Chain

Source: Figure is author's own creation. Concepts are from Hovey, Fashion Week 101, 2012.

Branded marketers are well-known companies like Liz Claiborne, Nike, Reeboke, Polo, Levi Strauss, Hugo Boss, Diesel and Gucci. Such firms are marketers in the sense that they design and market their brands but do not own factories or manufacture the goods they sell. Also described as "manufacturers without factories" by Gereffi (1999), they use a global network of contractors (suppliers) that carry out all or portions of their production activities, such as labor, inputs, raw material, services and equipment. Since garment industry is subject to rapid changes in consumer demand and production costs, the subcontracting system allows apparel retailers to externalize risks through increased "flexibility", lower labor costs and virtually no workers' benefits (Bonanich *et al*., 1994; Appelbaum and Gereffi, 1994, p. 44; Esbenshade, 2004, p.36; Gereffi, *et al*., 2011, p.8). Currently, the American Apparel is the only firm in the fashion-basic sector, which does not outsource labor but retains its manufacturing operations in downtown Los Angeles and owns retail stores within the US.

NEW YORK: DEMAND CONDITIONS IN A BUYER-DRIVEN GLOBAL CHAIN

Demand conditions highlight the nature of domestic and/or global demand for the apparel industry's products and services. Under this topic, we examine economics of demand ("buyer power") and market trends in apparel sales. The key buyers of apparel are individual consumers as well as large, multinational mass retailers, discount stores, and specialty apparel stores. While many manufacturers sell their products directly to retailers, some brand manufacturers (Torry Burch, Ralph Lauren, Zara, Benetton, etc.) also own retail stores, where they sell their goods directly to individual customers.



Source: Figure is author's. U.S. Bureau of Census, Economic Census, Retail Trade, 2007

Figure 3. Retail Sales ($1,000): Clothing & Clothing Acces. Stores, 2007

Due to overlapping business interests and power over labor, it is important to see retailers as "related" (or "supporting") industries rather than mere buyers of finished garment. Therefore, they exercise different kinds of power from individual customers. During the last two decades, the "consolidated power of retailers" has grown due to mergers that produced a substantial increase in buying power, particularly among discount stores. For example, the 10 largest retailers represent about two-thirds of garment sales in the US. With this buying power, they can control both the price of labor and clothing. Retailers ask manufacturers to reduce wholesale prices, therefore exercising considerable power over workers on the assembly line (cost related advantages). Retailers also compete with the apparel industry by producing their own private label lines. Retailers like INC/International Concepts and Charter Club, not only design the garment but also "contract out" and supervise production and "set the prices for garments created exclusively for their stores" (Economic Justice, 2007, p.68).

Individual consumers, however, constantly shape demand conditions. In the apparel industry, the buyer's power in is driven by mass consumption, the existence of mostly "undifferentiated products", threat of substitutes and a high degree of rivalry among producers and retailers. A high level of choice enhances buyer power due to low switching costs. Second hand clothing, custom-made clothing (couture), and web sites serve as "niche alternatives" to the retail of ready-made-clothes (hence threat of substitutes). While buyers are conscious about particular brands, brand loyalty is not always a key determinant of a consumer's choice. Price, style and quality are more crucial. Market segmentation, location, social status, income, and education influence

consumer-buying patterns. At the high end of the retail industry for example, consumers may feel more loyal to a particular brand than the manufacturer or the retailer. In poorer regions where "functional clothing" is the key pattern, brand loyalty may be unimportant. High-end retailers influence consumer behavior in affluent areas where clothing is part of life-style, values and social class (*Market Line*, 2012a, pp.13-17; *Market Line*, 2012b, p.12).

In markets with a strong sense of fashion like New York, public perception and demand change rapidly. While unpredictable demand conditions generally strengthen buyer power, retailers exercise power through the variety of products they offer to customers. In return, buyers customize their purchases in a variety of ways (on line versus in store). According to Figure 3, New York Country ranked the highest in terms of retail sales in clothing and clothing accessories stores in 2007 ($9,876,389) ($9.87 billion). Los Angeles, Chicago, and Miami accounted for $9.43 billion, $5.04 billion and $3.67 billion of annual sales respectively, following New York in top five retail sales. It is clear that demand gravitates towards fashion, design and manufacturing centers that have established markets and close ties to global trade.

Within this group, New York is the epicenter of US retail sales for the following reasons—an unparalleled wholesale market that accounts for 27% of the US wholesale market in 2010. For example, New York City receives more than 578,000 domestic and international visits each year and hosts major trade shows and thousands of showrooms. Second, the growth of emerging markets like Brazil, Russia, India and China has created marketing opportunities for US companies. US fashion retailers are increasingly targeting different needs and styles of consumers in those markets (through a strategy known as "market segmentation"). Other factors include the rise of new branding strategies (e.g., teen fashion; finest denim), proximity to garment manufacturers, rise of "vertical brand strategies" among retailers to satisfy consumer demand and instant delivery of goods from runway to stores, top destination for fashion designers and global shoppers, and the existence of powerful media and social networks (e.g., Fashion Week; *Vogue*, *Women's Wear Daily*) (NYCEDC, 2010, pp.7-11).

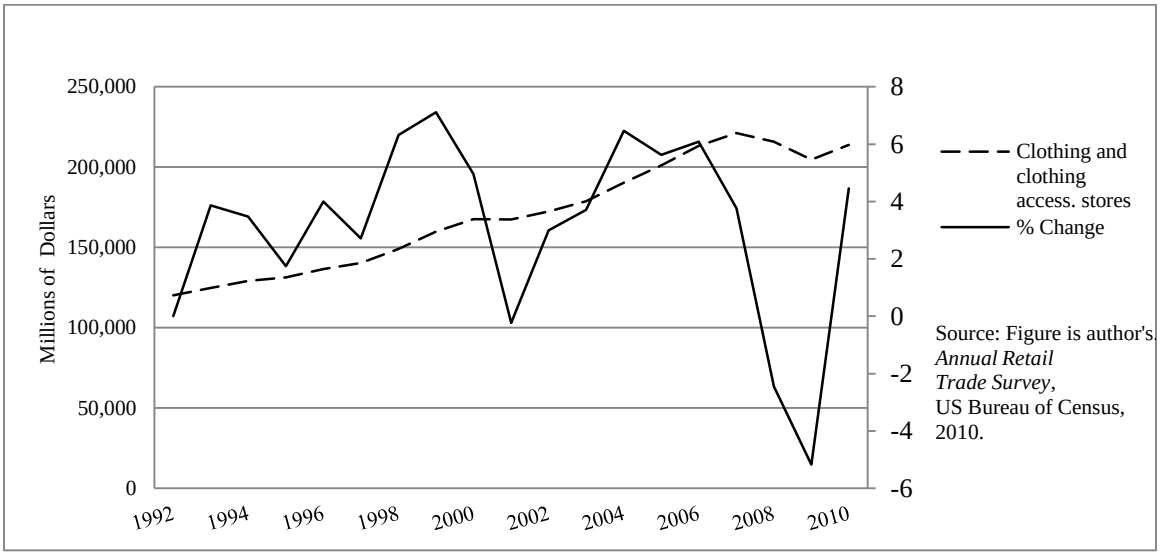


Figure 4. Annual Sales of US Retail Firms, Clothing/Cloth. Accces. Stores

While the US retail market is highly competitive, consisting of large number of retailers with similar products, the global organization of retail trade is spatially concentrated. It is not surprising to see that North America (44) has the largest concentration of retail and brand-based companies (with headquarters) specialized in clothing, footwear, accessories and luxury goods. The rest of the companies are located in Europe (24), Asia-Pacific (14), and Middle East/Africa (1). Within North America, one store is located in Canada and 43 are in the US, with Berkshire Hathaway, Inc. from Nebraska (Omaha) with the highest revenue ($143,688.0 million) globally and domestically in 2012. Within the US, New York has the largest concentration of "multi-holding" retail (non-apparel) and apparel companies (10) followed by Ohio and Pennsylvania (5), California and Texas (4), and North Carolina (3) (*Market Line*, 2012c).

While apparel goods remain an essential part of retail revenue, Figure 4 shows that retail sales are highly dependent on market conditions and shifting consumption patterns. This makes garment production demand elastic and dependent on a short-life cycle. In 1999, US retail sales in clothing and clothing accessories[i] had the largest relative change, indicating 7.10% increase from 1998 to 1999. While sales declined by 5.16% from 2008 to 2009 and stabilized afterwards, the pace of economic recovery seems slower. More recently, the apparel and footwear became a smaller share of personal consumption expenditures compared to other sectors of the US economy. Although demand varies among different apparel categories, US consumption of apparel declined by 3.1% from 2007 (20.1 billion garments) to 2008 (19.5 billion garments). Due to recession, 2008 was the second "consecutive" year of market contraction in this sector (AAFA, 2008, p.3).

There is a trend of sustained growth in fashion retail market with New York leading this trend globally. Although some of this demand is home driven, the rest is international. With the rise of global buyers (e.g, China, Brazil, Russia, India, Turkey), there is more opportunity for US companies to introduce foreign brands to these markets. For example, China predominantly uses cotton in its textile and apparel industry and is the world's biggest consumer, producer, and importer of cotton, especially US cotton. US cotton exports to China rose by 150% in 2010. This was mainly a response to increase in China's textile and apparel industry production (USITC, 2011, p.85). Forecasted to grow annually (6-9%) from 2011 to 2021, emerging markets have a large basis of demand for foreign brands and retail sector. It is suggested that foreign brands make up 20%-40% of top 10 brands in these countries (NYCEDC, 2010, p.12).

FACTORS OF PRODUCTION

Factors of production include basic endowments such as capital availability, labor resources, physical resources and infrastructure. The Bureau of Labor Statistics (BLS) describes them as the "fashion industry's supply chain" that refers to "import and producer prices, employment in the apparel manufacturing and fashion-related wholesale and retail trade industries, labor productivity in the manufacturing sector and in selected textile and apparel industries" (BLS, 2012, p.1).

As Palpacuer (2002) noted, the social and economic organization of the New York garment industry has changed dramatically within the last 30 years. The "industrial-district model" that Waldinger (1986) argued in the mid-1980s has given way to a "more complex form of organization", especially in women's wear and ready-wear clothing. In the traditional model, small firms specialized in "craft production principles" laid the development of New York and Los Angeles apparel industries. Such firms were better suited to changing demand and supply conditions during the late 20th century. With the Immigration Act of 1965, the two cities profited from a steady influx of immigrants, attracting a highly labor-intensive and low-

cost workforce to the garment district. Yet a more complex model has emerged since the 1970s, more tightly integrated into the global economy and New York retail sector. Palpacuer (2002) identifies three major drivers of industrial transformation in the garment district: 1) the rise of large brand manufacturers appealing to different consumers with different price ranges and product variety (Donna Karan's "bridge lines", sportswear line or DKNY, for example, as opposed to "designer line" or Donna Karan Collection), 2) the "rise of transnational subcontracting networks" that connect local manufacturers, retailers, suppliers and contractors in a number of countries, 3) the rise of new immigrant enterprises (especially in Chinatown) who have built up new "manufacturing capabilities and contracting linkages with New York manufacturers" (p. 55). Immigrant enterprises operate as sub-contractors for local garment manufacturers and retailers—the same role fulfilled by Asian contractors sourcing labor and other services on behalf of US companies. Sometimes, they perform both roles connecting Asian production and distribution networks to the garment district.

The garment district is representative of Porter's "cost savings" generic strategy whichever market segment one examines (Figure 2). It is a highly volatile industry based on low-wage, low-skill competitive strategy and short-product cycles, mainly in women's fashion. When confronted with retailers' demands for fast product delivery and high turnover stock, manufacturers have increasingly become "price takers". In order to compete, American garment companies are forced to push the envelope on both the fabric that is being used and the design of the garment. Furthermore, technology must always be improved to cut labor costs and meet up-to-the-minute inventory needs. As is the case with all sectors of the economy, computer systems will continue to replace living labor at the point of production. This is not just a means to speedy fulfillment of orders but to ensure quality control. In the standardized goods sector, labor became more and more disciplined in an automated production line ("batch system") that allows management to have total control over the workforce (Taplin, 1997, pp. 101-102).

Despite the flight of manufacturing jobs to low cost regions over the last decade, a local industry will persist in New York's garment district. In cities like San Francisco, Los Angeles and New York, garment manufacturers have invented "quick response" strategies in order to deal with the changing nature of women's wear. New York definitely maintains a "niche" market in high-end fashion and more formal garment, such as blouses, slacks, overcoats, tailored women jackets. New York accounts for 25% of all US-made clothing associated with names like Oscar de la Renta, Donna Karan, and Calvin Klein. The proximity to sewing jobs is also an advantage in terms of controlling the quality of production. Rather than producing on a mass scale, many of the well-known fashion houses manufacture small ensembles of hundreds and "prefer to stay in New York where their designers can walk across the street to their contract shops to personally oversee the quality of production" (Economic Justice, 2007, p.66).

WORKFORCE CHARECTERISTICS AND EMPLOYMENT TRENDS

The garment industry has taken off through a combination of low wages and the ready availability of high-technology production tools that can be procured at relatively low costs in other countries. Despite low wages, the garment industry provides a means of material improvement for millions of women in the underdeveloped countries who had previously subsisted through the informal sector (Nordas, 2004, pp.1-3). While workplace regulations designed to protect workers in sweatshops vary among cities, exploitation (e.g., minimum wage violations; job injuries; excessive hours; child labor) is the rule for entry-level jobs in both developed and developing countries.

Sewing shops are divided between New York's midtown in a protected garment district and in Chinatown, with some located in Brooklyn's Sunset Park, Queens and the Bronx. Since a large number of shops are unregistered, we cannot determine the exact number of services provided to New York fashion industry's supply chain. According to a report published by *Economic Justice* in 2007, 1,600 garment manufacturers and 2,600 contractors are registered with the New York Department of Labor. There are nearly 2,500 unregistered shops, consisting of small-scale establishments with less than 20 workers per shop. The small and unpredictable nature of a sewing labor force allows manufacturers to lay off workers when business is slow. A majority of apparel workers consist of Latina and Chinese immigrant women, with a small number coming from the Dominican Republic and other countries. While most of the shops in midtown and Chinatown (80%) are unionized by UNITE (*Union of Needletrades, Industrial and Textile Employees*), minimum wage and overtime violations are common in unionized shops. A UNITE member working in Chinatown shops can make between $5 and $15 an hour if they work for unionized manufacturers like Donna Karan, Liz Claiborne, and Calvin Klein. However, outsourcing has forced union shops to accept low wages due to competition from nonunion contractors who accept orders from non-union manufacturers (Economic Justice, 2007, pp.66-67).

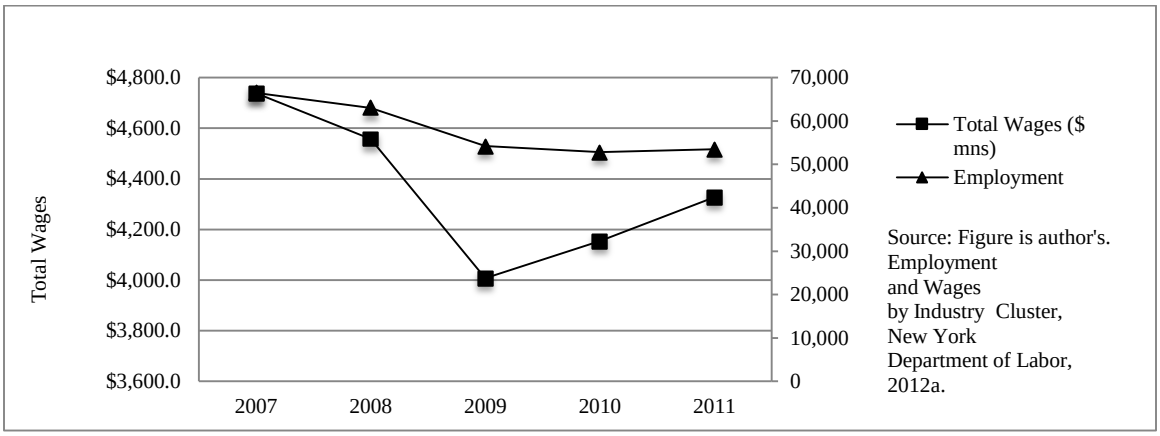


Figure 5. New York City: Fashion, Apparel and Textiles

On the shop floor, the division of labor is heavily gendered, with women in sewing operations and men in higher-paid positions like hangers, cutters and pressers. In New York's Midtown (in a zoned garment district), the manufacturing remains concentrated in small factories and serving "niche" markets. While quick production and frequent style changes have given local shops an advantage, retailers impose strict conditions on their orders and the amount they pay to manufacturers. This has led to cost cutting pressures through the supply chain—subcontractors who are not receiving enough money from manufacturers are in violation of workplace safety and health conditions. Workplace violations, such as low wages, involuntary servitude, excessive hours and injuries, are largely prevalent in non-union shops, especially among workers paid "piece rates" rather than an hourly wage. According to the U.S. Department of Labor's report that came out in 2001, 48% of garment factories in New York City violated "overtime requirements" and 13% did not comply with "minimum wage requirements" (Brennan Center for Justice, 2007, pp.77-78).

Although New York employs the greatest number of workers in apparel manufacturing (as opposed to textile), there is a downward

trend in production jobs. Unlike manufacturing the retail sector is located in fashion centers yet operates with lower wages for unskilled, non-union jobs. Yet, between 1990 and 2011, US apparel manufacturing employment declined from 900,000 to 150,000 jobs—a loss of 80%, which was proportional across all sectors of apparel manufacturing (BLS, 2012, p.3). According to USITC (2011), from 2006 to 2010, the US textile and apparel sector lost 198,600 jobs, falling by 33% to 395,500 workers. With the final "phase-out" of developed country quotas on January 1, 2005, the US textile and apparel industry further downsized labor force. Given the rising costs of inventory management, the current recession has somewhat offset this trend. Now retailers have to rely on thin inventories forcing them to work with local apparel producers for "quick-turnaround items" (USITC, 2011, p.250). The global crisis may reinforce the trend of sourcing domestically, although it is unlikely to reverse the loss of production jobs (especially in unionized manufacturing).

In the apparel industry, there is a diverse group of businesses, ranging from ready-to-wear and custom apparel for individual clients, apparel contractors, cutting or sewing operators to tailors. Knitting is classified under both textile mills subsector and apparel manufacturing because it feeds into apparel production as intermediary of finished garment. Taking into account the whole sector, the US apparel industry employed 426,027 workers and owned 15,478 business establishments in 2001. In 2010, there were 7,855 private establishments, employing 157,587 workers (BLS, 2012, p.4). From this perspective, it can be concluded that clothing and textiles businesses are declining and imports of finished garments are substituting local manufacturing for an ever-increasing demand in the US market.

New York garment industry mirrors nation-wide loss of manufacturing. Between 1980 and 2000, apparel jobs dropped from a high of over 149,000 to a low of 65,000-74,000 (Economic Justice, 2007,p. 66). In 2010, only Los Angeles and New York counties accounted for more than 500 business establishments—2,509 and 803 respectively (BLS, 2012, p.4). From 2002 to 2007, apparel employment in New York dropped from 22,535 to 11, 653 (48% decrease) while business establishments decreased from 1,239 to 779 (US Bureau of Census, 2007).

If one analyses the garment industry as a "fashion-apparel industry cluster", however, the data differs from apparel manufacturing alone (Figure 5). This is probably because the garment district is tied to related sectors or sub-clusters that are spread out the New York State. The fashion, apparel and textiles cluster includes network of sub-clusters such as apparel manufacturing, apparel wholesale, jewelry & miscellaneous manufacturing, leather goods and footwear manufacturing. In 2011, among 16 industry clusters in the New York state, the fashion and apparel cluster does not appear to be among top 5 in terms of employment and annual average wage. Yet if one looks at the top 5 clusters in terms of "location quotient" (that is, concentration of a specific cluster in a region or city in comparison to the national average), fashion-textiles-apparel accounts for the top cluster in three market segments: New York State, Mohawks Valley Labor Market Region and New York City labor market region (New York State Department of Labor, 2012b).

Despite its large concentration of fashion related businesses, however, New York City still reflects a downward trend in both employment and total wages. As evident in Figure 5, fashion, apparel and textiles employment in New York City dropped by 19.54% from 66,500 in 2007 to 53,500 in 2011. Loss of employment was faster than stagnation in total wages. Annual wages dropped by 9%, from nearly $4.73 billion to $4.32 billion during the same period (New York Department of State, 2012b).

HUMAN AND SOCIAL CAPITAL

Most importantly, New York is home to a

young generation of designers increasingly popular through their brand names and *haute couture* sold in high-end retail stores (Bergdorf Goodman, Saks Fifth Avenue, Barney's New York, Bloomingdales). The designers are the vanguard of the industry and key to identifying the fashion appetites of the consumer. As such, they are uniquely placed in the more advanced sectors of American manufacturing, in places such as Los Angeles and New York City. These designers, both from the US and outside, get wide publicity when their first collections are displayed during New York fashion week.

Young designers with broad range of styles and nationalities—Alexander McQueen, Marc Jacobs, Zac Posen, Tom Ford, Jason Wu, Derek Lam, Philip Lim, Brian Atwood, Helmut Lang, Elie Saab, Torry Burch, Reem Acra (to name a few)—have nurtured from local New York businesses and fashion schools to be worldwide brands. While some of these designers attract wealthy clientele for custom made apparel and *haute couture*, others also produce ready-made clothing (for example, more affordable versions of their "designer lines", such as *Marc by Marc Jacobs, Red Valentino*) sold at mass retailers in New York and throughout the world.

More established designers such as Liz Claiborne, Donna Karan, and Calvin Klein are pioneers of "first mover advantages" that revolutionized New York fashion industry. They set a trend for less expensive, professional-looking clothing ("bridge-lines") that became popular during the 1970s. For example, Liz Claiborne, a New York based firm, was the first company listed in the *Fortune 500* established by a woman. She was also the first designer having her products displayed on department store floors rather than in separate categories (for example, pants versus shirts). This made shopping easier for customers and invented the business of "fashion merchandising" as we know it today (Wilson, 2007). Officially becoming Fifth & Pacific, Inc. in 2012, the company also owns other famous brands like Juicy Couture, Kate Spade, Lucky Brand (Bhattacharjee, 2011).

Skilled workers such as tailors, fashion designers, dressmakers and custom sewers are attracted to brand manufacturers on the basis of higher than average wages and superior career prospects. Unlike small firms in geographically isolated areas, these companies offer formal and informal training to workforce and maintain close ties with "industry specific training institutions" such as the Fashion Institute of Technology/SUNY and the Parsons School of Design (Palpecuer, 2002, p.56). In 2010, the annual mean wage of fashion designers was $73,930-- $25,000 higher than the average wage for other categories of garment jobs. During the same period, New York and California accounted for nearly 75% of all fashion designers. Leading the nation, California employed 4,480 fashion designers. Wages vary from state to state. In 2010, the fashion designers' mean wage varied from lowest $44,100 (Virginia) to highest $80,650 (Maine and New York) (BLS, 2012, pp.11-13).

GLOBAL SUPPLIER NETWORKS

Historically, some of New York's advantages are undercut by pressures from the overseas relocation of production and the rise of foreign suppliers of garment. Since the expiry of the quota system in 2005, some Asian countries (China, India, Vietnam, Bangladesh and Cambodia) have gained steady growth from exporting apparel. From 2005 to 2008, China's share of world apparel trade increased from 26% and 33%. In 2011, China accounted for 76% of total employment in the global apparel sector (Gereffi *et al*, 2011, p.9). As East-Asian countries discovered methods of managing and coordinating their sourcing networks regionally, they were ready to exploit competitive advantage through better product differentiation and innovation. This enabled them to maneuver from a pure "assembly of imported goods" to a "more domestically integrated" and "higher value added form of exporting", such as brand-based

merchandising (Gereffi and Memodovic, 2003, pp.1-2).

Asian NICs have been coordinating supply chain networks with foreign retailers and brand marketers since the mid-1980s. They decide where to produce, at what price, and how fast to deliver products to fashion centers. These countries soon developed on the basis of export diversification and branded merchandise for both domestic and global consumption. For example, today's textile firms in Taiwan produce textiles for domestic manufacturers rather than simply assembling textile goods for export. They have adopted an advanced industrial model that Gereffi *et al*., (2011) describe as "Original Export Manufacturing" (OEM) or "Full Package". Taiwanese textile makers are producing high-technology fabrics used in the production of ski jackets, raincoats, outdoors furniture, etc. This is a high-niche market operating with higher profit margins and higher unit price of fabric, which has increased 41% since 1999. The Asian crisis forced textile manufacturers to come up with successful innovative strategies for survival. These strategies are the main drivers of price increase in fabrics in the post-crisis era (Yang, 2012). Despite high labor costs, the main advantages of Korean and Taiwanese suppliers are "high labor productivity and small-flexible sewing lines", which are more suitable for fashion apparel than any other industry (USITC, 2004, p. xiii).

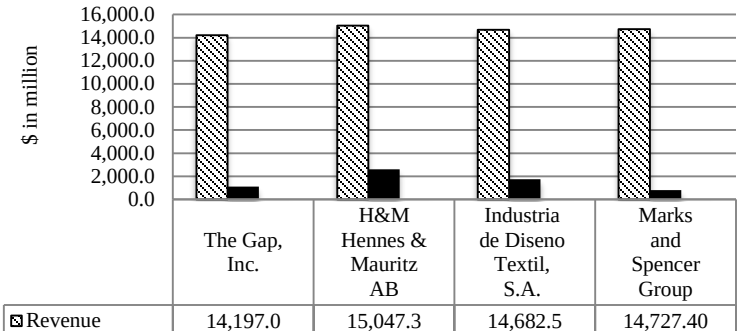
The global environment of apparel trade reflects outsourcing strategies of US mass retailers, brand marketers and brand-based manufacturers. These players actively coordinate foreign suppliers of apparel and textile to the US market. According to USITC (2011), the US experienced 14% increase ($10.9 billion) in trade deficit in textile and apparel from 2009 to 2010, which came to $86.8 billion in 2010. The driving engine of this deficit is the US consumer demand for apparel merchandise. US imports from major Asian suppliers (Vietnam, India, Indonesia, Bangladesh) are rising with Asia accounting for 86% of the US trade deficit in textiles and apparel in 2010. In the same year, 76% of all US footwear imports and 40% of all apparel and textile imports came from China--the largest producer and supplier of apparel goods to the US market. From 2009 to 2010, US exports of textile and apparel to regional trading partners, e.g., NAFTA (Mexico, Canada) and DR-CAFTA, increased by 18% ($2.7 billion). These regions collectively accounted for nearly 60% of total U.S. exports in 2010 (USITC, 2011, p.245).

Unlike branded marketers and retailers, however, many US garment manufacturers outsource to Latin America rather than to Asia. Reciprocal trade agreements (such as NAFTA, DR-CAFTA) enable textile inputs (fabric, thread, buttons, trim) to be supplied to firms in Mexico and then re-imported into the US at low cost. This process, which is essentially same as outsourcing, is described "production sharing" in the US and "outward processing trade" in the EU, where production networks are organized in low-wage, low-cost neighboring regions (Gereffi, 2001). For this reason, much of the demand for US textiles abroad reflects the logic of "production sharing", rather than growing demand for apparel merchandise in the NAFTA countries (Mexico). US textile goods exported under NAFTA are ultimately "linked to increased U.S. imports of apparel from the same partners" (USITC, 2011, p.249). Mexico's garment sector—mainly dominated by sewing of garments made from imported fabrics (in *maquiladoras*)—lacks "full-package production" capabilities of their Asian counterparts and performs lower-level functions in the global value chain (Dicken, 2003, p. 351). Furthermore, even lead firms lack the capabilities for launching industrial upgrading through demand for additional services. Research by Gereffi *et al* (2011) note that "global lead firms influence functional upgrading in countries where large integrated suppliers are based and where the domestic pressures for economic upgrading are strong, but they do not promote upgrading in countries where the factories engage only

in assembly (CMT) activities" (p.5).

GLOBAL COMPETITION

In global women's wear, a Spanish firm, Zara is one of the major competitors to US garment manufacturers and retailers. Zara is the leader of Industria de Diseno Textil (Inditex) Group, which also owns Bershka, Pull and Bear, Massimo Dutti, Stradivarius, Oysho, Uterque. Inditex is a vertically integrated, multi-holding company involved in textile design, production and distribution (*Market Line*, 2012b, p. 24). In Porter's "generic strategies", "cost" and "differentiation" are two basic types of competitive advantage. Low cost strategy is based on overall cost efficiency with a low-wage and highly productive labor force (Porter, 1990, p.37). Differentiation, on the other hand, refers to the advantage of offering unique products, high-quality service, superior technology and high product performance. In both strategies, however, competitive advantage translates into higher productivity and market share than that of rivals. The "low-cost firm produces a given output using fewer inputs than competitors require. The differentiated firm achieves higher revenue per unit than competitors" (Porter, 1990, pp.37-38). Whatever the firm's strategy, however, a firm gains higher profits than its rivals when its customers gain more value.



	The Gap, Inc.	H&M Hennes & Mauritz AB	Industria de Diseno Textil, S.A.	Marks and Spencer Group
Revenue	14,197.0	15,047.3	14,682.5	14,727.40
Net Income	1,102.0	2,591.2	1,741.2	812.8
Profit Margin %	7.8%	17.2%	11.9%	5.50%

Source: Figure is author's *Market Line, Global Women's Wear*, February 2012b.

Figure 6. Leading Companies: Global Women's Wear, 2010

For example, differentiation offers the basis for Zara's advantage over other retailers in global women's wear. Zara quickly responds to consumer taste and fashion trends (by adopting "live collections" as opposed to seasonal clothing) and employs specialized workers in small-scale workshops located in Spain rather than overseas. Zara imitates high-end brands at affordable prices, using advanced inventory, logistics, e-business, and distribution channels (Daniels *et al*., 2011, pp. 390-394). Almost all of Zara's clothes, for example, are produced in La Coruna, the design-manufacturing complex in the North-West of Spain (Dicken, 2003, p.345). While still using headquarters staff and sourcing finished garments from suppliers in Far East, Europe and North Africa, Zara produces 40% of goods in its own factories located in its headquarters in La Coruna. It compensates higher labor costs by "minimizing advertising, cutting inventory expenses and quickly adjusting to fashion trends" (Daniels *et al*, 2011, p.392). As shown in Figure 6, the key rivals to US apparel manufacturers and retailers are based

in the U.K (Marks and Spencer), Spain (Inditex group) and Sweden (H&M). These companies are retailers of fashion apparel specializing in clothing, cosmetics, accessories and shoes for women, men, teenagers and children. Marks and Spencer is a multi-product retailer of food and non-apparel merchandise (like housewares and home accessories). In 2010, Inditex reported $14,682 million revenue and net income of $1,741 million in global women's wear with a profit margin of 11.9%. It was preceded by H&M group and followed by the Gap and Marks and Spencer Group (*Market Line*, 2012b).

CONCLUSIONS AND FURTHER PROPOSITIONS

This article provided a snapshot of industrial and structural organization of the New York garment industry in the most recent period. Public and private sources offered the analysis for secondary data collected from industry-specific data vendors (Market Line) and publicly available databases (US Bureau of Census; Bureau of Labor Statistics; New York State Department of Labor). This paper argued that although New York is a microcosm of "de-industrialization" within the US textile and apparel industries, there is a dialectical upside. The garment industry has played a major role in the New York economy, providing millions of jobs and revenue to a large number of firms. Yet apparel is a globalized industry with garment goods produced outside of the Garment District, including China, East Asia, North Africa and Central America.

Within this context, New York's garment district is at a major turning point. In order to maintain its historical advantage as a supplier and distributor of apparel to the global market, the garment district has to capitalize on local institutional assets made possible by an influx of capital and labor. This advantage stems from many factors: Integration into global production and retail networks, the persistence of human capital (local designers with global acclaim), social capital clustering (the existence of local institutional assets; social networking; groups of inter-related industries; industry-specific events and training institutions), and "first-mover advantages" gained by the "initial" creator of a particular strategy or business model (e.g, fashion merchandising).

As a result, local industry will persist in New York's garment district. There are issues that need to be further examined, such as the role of government in enhancing the vitality of garment district (for example, "special zoning" regulations that protect small factories from residential development and white-color offices with higher rents in Midtown). New York is already integrated into global production and retail networks because of the global reach of US and non-US apparel firms. However, future research needs to investigate how the garment district can leverage its historical strengths in apparel production and design for industrial upgrading, job creation and workforce development.

[1]*According to US Bureau of Census, NAICS Codes, clothing and clothing accessories stores include: "clothing stores, men's clothing stores, women's clothing stores, family clothing stores, other clothing stores, shoe stores, jewelry, luggage, and leather goods stores, jewelry stores".*

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APPENDICES

<Data for Figure 3>

	Sales ($1,000)
New York County, New York (Manhattan)	$9,876,389
Los Angeles County, California (Los Angeles)	$9,431,129
Cook County, Illinois (Chicago)	$5,043,660
Miami-Dade County, Florida (Miami)	$3,672,698
Dallas County, Texas (Dallas)	$2,214,802
King County, Washington (Seatle)	$1,973,518
San Francisco County, California (San Francisco)	$1,900,958
Fulton County, Georgia (Atlanta)	$1,414,466
Suffolk County, Massachusetts (Boston)	$1,199,804
District of Columbia, District of Columbia	$587,248

Source: EC0744A1: Retail Trade: Geographic Area Series: Summary Statistics for the United States, States, Metro Areas, Counties, and Places: 2007

2007 Economic Census

Source: Retail Trade http://www.census.gov/econ/census07/

http://www.census.gov/econ/census07/

<Data for Figure 4>

	Annual Sales **Clothing and clothing access. stores**		% Change
1992	120,103		NA
1993	124,749	J	3.868346336
1994	129,083	T	3.474176146
1995	131,333		1.74306454
1996	136,581	A	3.995949228
1997	140,293	T	2.717801158
1998	149,151	M	6.313928706
1999	159,751		7.106891674
2000	167,674		4.959593367
2001	167,287		-0.230805014
2002	172,304		2.999037582
2003	178,694		3.708561612
2004	190,253		6.468599953
2005	200,969		5.632499882
2006	213,189		6.080539785
2007	221,205		3.760043905
2008	215,776		-2.454284487
2009	204,626		-5.167395818
2010	213,735		4.451535973

US Bureau of Census: http://www.census.gov/retail/

<Data for Figure 5>

New York City		
	Employment	**Total Wages ($ mns)**
2007	66,500	$4,737.9
2008	63,000	$4,557.1
2009	54,200	$4,007.6
2010	52,800	$4,154.1
2011	53,500	$4,327.4
Difference	-0.195488722	-$0.09
% Change	19.54% decrease	9% decreased

Source: http://labor.ny.gov/stats/nysindclusters.asp

<Data for Figure 6>

2010, Leading Companies: Global Women's Wear($ in millions)

	The Gap, Inc.	H&M Hennes & Mauritz AB	Industria de Diseno Textil, S.A.	Marks & Spencer Group
Revenue	14,197.0	15,047.3	14,682.5	14,727.40
Net Income	1,102.0	2,591.2	1,741.2	812.8
Profit Margin %	7.8%	17.2%	11.9%	5.50%

Source: Market Line, Global Women's Wear, February 2012b.