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“First-Mover” and “Late-Developer” Advantages: Institutions and Market Design in the New York and Los Angeles Garment Districts, 1900-1960

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Abstract

New York and Los Angeles are the largest garment districts in the United States and resemble one another in many ways today, but they have had very different industrial histories. New York City was the earliest “fashion” district in the United States and its “first mover” advantages during the 1880s and 1890s gave it a near monopoly of the U.S. women’s wear market by the start of the 20th century. Los Angeles was an insignificant garment district serving a relatively small regional market until the late 1920s and early 1930s when its pioneering sportswear designs contributed to its emergence as a “late developing” district. These historical differences in the timing of the development have endowed the New York and Los Angeles apparel industries with a distinctive set of economic institutions – trade unions, employer associations, contracting relationships, and manufacturing cultures. Differences in unionization have been particularly significant and have shaped the way that markets are organized in each district. The New York City garment district had highly-competitive labor and product markets during the late 19th century that were “unraveling” in a chaotic form of hyper-competition. Unions entered this market in the early 20th century with the goal of stabilizing the labor market and reached a series of collective bargaining agreements with employers that regulated both labor and product markets through during much of the 20th century. The Los Angeles district remained largely free of unions and its markets were governed by intense competition except for a brief period during the late 1930s to the mid 1940s. This natural experiment in alternative market “designs” has had path-dependent effects that have persisted into the current decade even though union strength had substantially eroded in New York City by the latter part of the 20th century. The late-developing Los Angeles industry opted for a set of competitive market arrangements that appear to be superior when compared the more-institutional market governance first adopted by New York. The Los Angeles apparel industry continued to grow long after New York’s began to decline from import competition and it has displaced New York as the largest U.S. garment district, with more than three times as many apparel industry employees, a larger share of domestic output of women’s wear, and a lower rate of job loss in recent years. However, New York is performing better than Los Angeles by measures such as productivity and pay. It remains to be seen which market design provides the better odds of survival in the future.

"First-Mover" and "Late-Developer" Advantages: Institutions and Market Design in the New York and Los Angeles Garment Districts, 1900-1960[1]

New York and Los Angeles are the largest garment districts in the United States and resemble one another in many ways.[2] Garment manufacturing in both districts is dominated by small firms using labor-intensive assembly technologies (principally sewing machines); most manufacturing jobs are low-wage and filled largely by first-generation immigrants; both districts specialize in women's wear with many overlapping sub-specializations; and much of the local production is performed by contractors that are coordinated by "jobbers" and "manufacturers" who do limited garment assembly, but mainly serve as market intermediaries that receive orders from retailers and in turn commission contractors to assemble garments. New York and Los Angeles also have similar agglomeration economies -- large pools of flexible labor, proximity to buyers and suppliers, and ready-access to creative fashion knowledge – that contributed to the long-term growth of their apparel industries in the formative years of both districts, and both are now experiencing substantial job losses from import competition.

These districts, however, have very different industrial histories. New York City was the earliest fashion district in the United States and its "first mover" advantages during the 1880s and 1890s gave it a near monopoly of the U.S. women's wear market by the start of the 20th century. Los Angeles was an insignificant garment district serving a relatively small regional market until the late 1920s and early 1930s when its pioneering sportswear designs contributed to its emergence as a "late developing" district(see Gerschenkron, 1962).

Population shifts to the West and Southwest and long-term consumer trends favoring lighter-weight and more casual clothing gave Los Angeles a growth advantage over the New York garment district in national markets for sportswear, but as a late developer, Los Angeles

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[1] This paper is part of a comparative study of the economic performance of garment districts in the United States, the UK, France, and Italy. Support for this research came from the National Science Foundation under Grant No. 0328635, the Fiscal Policy Institute, the Garment Industry Development Corporation, the Alfred P. Sloan Foundation, the International Labour Organization, and the Harvard University Center for Textile and Apparel Research. The paper has benefited from comments by Daniela Bigarelli, Bruno Courault, Paolo Crestanello, Lynn Oxborrow, David Terkla, and from presentations at the 2011 Industry Studies Conference, American University, and the International Labour Organization.

[2] The New York garment district is defined as the five counties comprising New York City (Bronx, Kings, New York, Queens, and Richmond). The Los Angeles garment district is defined as the City of Los Angeles for periods prior to 1947 and Los Angeles County thereafter, except as otherwise noted.

had the added advantage of being able to learn from the experiences of earlier U.S. garment districts, especially those of New York City. Nevertheless, catching up with New York was a slow process. By the end of World War II, Los Angeles was successfully attracting buyers from all regions of the country including New York (Lassiter, 1953, p. 21). However, it only accounted for 4.6% of total U.S. value-added in women's wear compared to New York City's 54.4%. It was not until the late 1980s that Los Angeles surpassed New York as the largest U.S. district in terms of employment and until the late 1990s in terms of value-added in women's wear.

The historical differences in the timing of development in the New York and Los Angeles have endowed each district with a distinctive set of economic institutions – trade unions, employer associations, contracting relationships, and district manufacturing cultures. The difference in unionization has been particularly significant and has shaped the way that each district has responded to structural changes in apparel markets and supply chains. The New York City garment district had highly-competitive labor and product markets in the late 19th century which were becoming increasingly chaotic as immigration sharply increased the supply of labor to the apparel industry and the number of immigrant-owned contracting shops competing for apparel production. Intensified competition brought falling wages, volatile employment, and sweatshop working conditions to the district, which sparked union organization. Growing union strength forced employers to bargain collectively on a district-wide basis beginning in 1909, first over wages and employment and subsequently over the regulation of product markets. The district's apparel markets were heavily regulated by strong unions and collective bargaining during much of the 20th century, whereas the employers in the Los Angeles district successfully opposed unions and collective bargaining during most of the 20th century and its markets remained governed by intense competition.

This paper examines the formative periods of the New York City and Los Angeles County garment districts in order to understand how and why they experienced such different growth paths. The basic argument is that that both districts had predominately craft-based industrial structures in the late 19th and early 20th centuries, but that New York had substantial first-mover advantages from the externalities of fashion knowledge, proximity to a large and affluent market, and the availability of abundant immigrant labor with apparel skills. These agglomeration economies were reinforced by intense competition in product and labor markets that wages low relative to other districts in the late 19th and early 20th centuries, by scale economies that became available during the districts transition from craft production to mass production in the 1900s, and by economies of scope and specialization as new jobber-contractor supply chains emerged in the 1920s. Beginning in 1909, the New York garment district a new "institutional" externality was also emerging as unions and employers "created a system of market regulation through collective bargaining that brought both monopoly protections and efficiency advantages the district.

When Los Angeles embarked on a path to become the United States' most successful "late-developing" district in the late 1920s and 1930s, it too had a full complement of traditional agglomeration economies and was quickly able to emulate New York's most efficient methods of work organization and contracting. However, Los Angeles elected to avoid the New York industry's extensive engagement with unions and market regulation through collective bargaining.

These choices between union regulation and market competition represent a natural experiment in alternative market "designs".[3] The choices made by each district during their formative periods have had path-dependent effects that have persisted into the current decade, even though union strength had substantially eroded in New York City by the latter part of the 20th century.

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[3] While the market failure issues of U.S. garment districts bear little resemblance to those of two sided matching markets that are featured prominently in the "market design" literature (Roth, 1990; Roth and Xing, 1994), there is a common element in that New York City's atomistic apparel industry of the late 19th century was developing inefficiencies from hyper-competition in much the same way that the market for matching recent medical school graduates with intern and resident positions in U.S. hospitals "unraveled" between 1940 and 1952 (Roth, 1990). Addressing the market failures in the early New York City garment district by establishing a centralized regime for regulating the garment industry through collective bargaining has similarities to the adoption of a centralized National Resident Matching Program to replace the chaotic job matching of the decentralized market for recent medical school graduates (ibid.). One possible distinction between the design of an efficient market matching arrangement and the negotiated regulatory system of the New York City garment district is that the re-design of the apparel industry's markets included anti-competitive regulations as well as those that reduced the inefficiencies of chaotic markets. However, a recent article by Priest (2010) points out that the matching arrangements for medical school graduates also contribute to monopsony pricing.

Building District Advantage: Agglomeration Economies in New York and Los Angeles

Fashion apparel production in the United States has always clustered in and around urban areas where agglomeration externalities from large pools of labor, proximity to suppliers and customers, and shared industry knowledge are present. The important labor pools for apparel manufacturing initially consisted of workers with craft skills of cutting and tailoring and the know-how to capture the hang and drape of the fabric anticipated in clothing designs and entrepreneurs with the skills and experience needed to start new manufacturing and contracting firms. Later on, pools of unskilled labor that was willing to learn sewing skills, work hard for low wages, and accept seasonal employment became important. The important types of shared knowledge are about changing tastes in fashion, color palettes, fabric finishes and new product designs. The important suppliers are those that sell fabric, buttons and other trims, provide dyeing and finishing services and lend short-term operating capital. The important buyers are retailers, wholesalers, jobbers, and manufacturers that sell branded clothing.

The Roots of Agglomeration Economies

New York became the nation's largest city in the late 18^{th} century. With its large and growing regional market, influx of immigrant labor, excellent port facilities, and location at the hub of a transportation network served by the Hudson River, the Erie Canal, and a network of roads, New York became a well-established commercial and manufacturing center for many different industries by the early 19^{th} century.

Its commercial and tourism relationships with Europe made New York City the entry point for European fashion designs in the early 19^{th} century and it was recognized as the fashion center of America as early as the 1840s (Levine, 1969, pp. 2-5). By 1880, the City had a population of over 1.2 million and the affluence of its fashion-oriented consumers provided a prime retail market for women's wear as large department stores such as Bloomingdales and Macy's expanded their ready-to-wear fashion clothing departments and specialty shops selling fashionable clothing became more numerous.

Initially these apparel stores sold clothing made by New York City's small seamstress and tailor shops as well as imported fashions from Europe. As demand grew for ready-made clothing in the 1880s and 1890s, however, retailers turned to emerging factory production in

New York City as a source of supply and the combination of agglomeration economies and emerging scale economies soon made the New York garment district the principle source of supply for this expanding market.

Los Angeles had many of the same agglomeration economies as New York in the late 19th and early 20th centuries and it had tailors' and seamstress' shops that made tailored men's and women's wear in the 19th century, some coat and suit manufacturing in the early 1900s, and it was manufacturing work clothes and dresses prior to 1920. However, its apparel production was dwarfed by New York City. For example, the entire state of California had fewer than 200 garment firms and fewer than 4,000 employees as late as 1921 compared to New York State with almost 5,000 firms and over 90,000 workers (Teper, 1937, Appendix C), and it accounted for less than 1.5% of U.S. women's wear sales in 1925 compared to New York State's market share of almost 79%..

What Los Angeles' smaller and less-fashionable apparel market lacked was New York's first-hand knowledge about European fashion and design. It was not until the late 1920s that Los Angeles acquired a key district advantage in fashion knowledge and design when it developed its own sportswear fashion "look" that was distinctive from New York's more-European fashion tradition. Los Angeles took advantage of the growing demand for mass produced clothing in the 1920s to expand its sportswear market regionally and then nationally, and to launch itself as a late-developing garment district with access to the full range of agglomeration economies available in New York City.

<u>Pools of Labor</u>

Recent immigrants have always been the major source of garment industry labor and New York and Los Angeles have long had the highest percentage of new immigrants among major American cities. Even after immigration was restricted, first by travel limitations during World War I and then by national quotas in the mid-1920s, immigrants remained the primary labor pool for the industry in both districts.

Recent German immigrants, as well as American workers, were the original source of skilled tailors and seamstresses for the artisan shops that produced clothing in the New York district for much of the 19th century. Immigrants from Eastern Europe became the major labor supply in the 1890s and 1900s (Levine, 1969, Ch. III). An observer of the industry at that time specifically noted the rapid growth in Russian (and mostly Jewish) immigrants arriving in New York during that period -- 89,097 between 1882 and 1887, 48,000 a year from 1987 to 1900, and 107,347 in 1902 – as an important factor contributing to the growth of the apparel industry (Pope, 1970, Part II, Ch. I). Subsequent waves of immigrants in the first half of the 20th century came from Italy, various Caribbean nations, and Puerto Rico, along with African-Americans migrating from the South. Chinese immigrants came to New York (from California) as early as the middle of the 19th century, but were not an important source of immigrant labor for the apparel industry until the mid-1960s.

Many of these early immigrants had tailoring skills or other apparel industry experience that were critical during the craft-like stage of early apparel manufacturing while later immigrants without craft skills facilitated the introduction of mass production work methods as the industry moved towards a more industrial mode of manufacturing. Tailoring and cutting skills were particularly important in New York's cloak and coat industry, the sector that launched the earliest craft-based apparel factories. As the demand for ready-made cloaks and coats increased, manufacturers began to contract production to smaller and more specialized sewing firms that were operated largely by immigrant entrepreneurs and staffed by semi-skilled immigrant workers (Levine, 1969, Ch. III; Waldinger, 1986). Low overhead, relatively inexpensive labor, and the willingness of immigrants to work hard and accept intermittent jobs allowed these small contracting shops to undercut costs in the larger and more-established "inside-shops" that employed skilled sewers (Pope, 1970, pp. 62-65).

The largest immigrant group in the Los Angeles garment industry has always come from Mexico, but the ethnic mix has become more diversified over time. For example, Los Angeles began to draw immigrant labor from China as the demand for mining and railroad labor grew during the 19th century (Cleland, 1922). Mexican and Chinese immigrants continued to provide an important source of low wage labor to the Los Angeles garment industry through the 1960s, when they were joined by immigrants from other parts of Latin America and other Asian countries.

Proximity to Suppliers

Both the New York and Los Angeles garment districts have long benefited from the externalities of proximity to suppliers of fabric and other inputs. At the turn of the century, New York's emerging apparel manufacturing drew upon suppliers that had been serving skilled tailors, seamstresses, and small artisan tailoring shops. As the manufacturers and jobbers of fashionable apparel products moved from the congested lower East Side garment district to more modern and spacious accommodations in New York's mid-town area, a diversified fashion cluster was formed in a roughly thirty-five block area (bounded approximately by 5th and 9th Avenues and 34th and 42nd streets) that included both contractors and a variety of specialized suppliers – fabric and clothing wholesalers, button shops, pattern-makers, cutting shops, sample makers, embroiderers, dyeing and finishing firms, and equipment mechanics. The downtown Los Angeles garment district contains a similar mix of factories and suppliers, but on a less-dense scale, now sprawling over almost 100 blocks from 7th Street to the Santa Monica Freeway and from Main to San Pedro Streets. The distances are small enough in both districts to allow manufacturers to have face-to-face communications with their contractors and other suppliers.

Proximity to Buyers

New York is the oldest buying center in the country, and the first district to serve a national market, while Los Angeles remained a major sales center for the West Coast region until the 1940s. Large New York City manufacturers initially hired salesmen to visit buyers while smaller manufacturers sold through wholesalers who served small retailers.

When national markets and large retailers became more important after 1914, and as styles, fabrics, and grades of clothing began to proliferate, New York City manufacturers began to operate showrooms for buyers who travelled to New York in advance of each season to view the full range of products available in the district. The proliferation of styles, fabrics and grades of clothing also contributed to the growth of a special kind of wholesaler in New York, known as a "jobber", who served as a one-stop commercial intermediary by acquiring fabric, organizing production, and ensuring the rapid delivery of products to retail buyers. By 1919, the combination of year-round showrooms and the prevalence of jobbers who were highly adept in sales virtually eliminated the need for travelling salesmen as buyers either located offices in New York or came to New York for the buying season (Levine, 1969, pp. 413-415).

Los Angeles initially depended on travelling salesmen and buying offices when it principally served a regional market in the 1920s and 1930s and buying offices continued to be important for reaching national, as well as regional, markets in the immediate postwar period (Lassiter, 1953, pp. 18-22). Thereafter, Los Angeles followed a similar pattern to New York as it gradually evolved into a national buying center replete with seasonal "fashion weeks" and large showroom facilities such as the California Market Center and the New Mart where industry trade shows are also organized (Bonacich and Appelbaum, 2000, pp. 34-35). Los Angeles, however, has always remained well behind New York as a headquarters location for fashion buyers.

Proximity to Knowledge about Fashion and Design

New York has been at the forefront of fashion and product innovation since its beginning as a fashion center. Its seamstresses and tailors benefited from the flow of ideas about fashion trends in Europe reported by affluent tourists returning from Europe during the 19th century or copied from clothing imported from France and England (Green, 1997, p. 112-114). This success as a first-mover fashion center allowed it to support a wide portfolio of design traditions and multiple product specializations. The district manufactured military uniforms in the middle of the 19th century that prepared the way for its first fashion specialization in tailored men's and women's wear products in the 1880s. It added specializations in shirtwaists in the early 1900s and dresses became New York's largest specialization in the 1920s, with 125,000 different dress styles being produced in New York by 1939 (Hochman, 1941).

New York began to develop its own sources of design ideas in the early twentieth century. New York-based Vogue Magazine, for example, switched from featuring articles on cultural topics of broad interest to the affluent to a focus on fashion and design beginning in 1909, the Women's Wear Daily newspaper was founded in 1910, and district-wide fashion shows became an important public venue for showcasing fashion ideas beginning in 1943.

While most of New York's clothing designers during this period were self-taught and relied heavily on Europe for inspiration, New York also began to develop a training infrastructure for producing its own fashion designers. A small art and design school in New

York, which later became the Parsons School of Design, launched a specialized fashion design program in 1904 that initially served the market for theatrical costumes. By the start of the boom period of the New York City garment industry in the 1920s, the Parsons School had become a general school for fashion and design with links to the European fashion industry through its pioneering program in fashion and design located in Paris. The 1920s was also the beginning of a long period of intense product differentiation (National Retail Dry Goods Association, 1936), which further increased the demand for both design ideas and trained designers and led to the founding a second fashion and design school, New York's Fashion Institute of Technology, in 1936.

In contrast to the rich fashion and design infrastructure that was well-established in New York by the 1920s, Los Angeles relied on a group of self-taught designers during the 1950s, most of whom were inspired by the casual western lifestyle and proximity to Hollywood. These designers began to develop sportswear and swimwear designs with a California "look" and became the backbone of the growing Los Angeles garment district by launching their own manufacturing businesses during the 1930s. The California "look" was described by one observer as clothes with "a groomed casualness, distinctive for their individuality and beauty of simplicity" (Lassiter, 1953, p. 17). Their design innovations included the dirndl dress, peddle-pushers, and the backless bathing suit, and they also pioneered in the use of casual fabrics like faded denim and burlap (Lassiter, 1953, pp. 6-8). However, Los Angeles did not organize its first district-wide fashion show featuring local designers until mid-century and these fashion events have been overshadowed by their counterparts in New York (Community Redevelopment Agency of the City of Los Angeles, mimeo, April 2011).

Los Angeles has also lagged behind New York in the training and employment of fashion designers (Community Redevelopment Agency of the City of Los Angeles, mimeo, April 2011). There were no schools dedicated to fashion and design in Los Angeles until 1969 when the Fashion Institute of Design and Merchandising (FIDM) was founded in a neighborhood adjacent to the Los Angeles garment district. The FIDM was followed by a second apparel design program in 1978 when The Otis Institute of Art affiliated with New York's Parsons School.[4]

[4] The Otis Institute later separated from Parsons and was renamed the Otis College of Art and Design.

The widely-held view in the industry is that New York's long-term leadership in design, coupled with its skilled work force, have allowed its various women's wear specializations to have higher fashion content than those of Los Angeles. This is confirmed by the findings of an industry survey in 1946 that the largest fraction of women's suit and cloak firms in New York were producing better-priced garments while its closest rival district, Los Angeles, was mostly producing medium-priced products (Lassiter, 1953, pp. 23-24). More recent studies suggest that New York continues to have a fashion advantage, although Los Angeles is considered the leading design center for sportswear (Community Redevelopment Agency of the City of Los Angeles, mimeo, April 2011).

District Development: Industry Structure and Market Competition

As the oldest and for many years the largest of the U.S. garment districts, New York City represents a rich example of the evolution of the apparel industry's market structure, production methods, contracting arrangements, and competitive conduct. By 1880, the agglomeration economies needed to reinforce the New York City garment district's first-mover advantages were falling into place. The district began to adopt industrial methods of production during the late 1880s and the modern-day structure of the district was largely established by the 1920s, allowing it to serve both mass and customized product markets through a wide variety of factory sizes and contracting arrangements.

The district operated under a regime of intense competition during the late 19th and early 20th centuries. Such competition contributed to growth by holding down production costs, but it also created inefficiencies from high rates of labor turnover, frequent business failures, and considerable labor unrest. A wave of large strikes beginning in 1910 forced the industry to recognize and bargain with unions and collective bargaining gradually became a vehicle for regulating inefficient competition to the benefit of both employers and workers in the district.

The Emergence of the Women's Wear Specialization

Almost ninety percent of apparel manufactured in New York City at the middle of the 19th century consisted of custom-made men's wear (Pope, 1970, Appendix A). This market was supplied by independent tailors who could cut fabric, sew garments, and perform finishing and pressing operations, and by small artisan shops that handled a wide range of designs and fabrics and performed the full range of entrepreneurial and assembly tasks needed to produce a final product. There were 12,319 garment workers employed in New York state's artisan shops in 1880, most of whom were in New York City, and this number about doubled by 1890 (Levine, 1969, pp. 13-17) .

As demand for ready-made apparel continued to grow during this period, New York City became established as the pre-eminent "first mover" garment manufacturing district. Artisan shops were the major source of supply and women's wear was becoming an increasingly important product. Women's wear accounted for about one quarter of New York City's apparel production in 1880 and almost 40% a decade later (Pope, 1970, Appendix A). The tailored Cloak and Coat sector was initially the largest women's wear specialization in New York (Helfgott, 1959, p. 52) was the main employer of highly-skilled craft labor in the industry.

Major structural changes in apparel manufacturing occurred in New York City between the 1890s and the 1920s as demand for women's wear flourished. By the turn of the century, women's wear represented half of all apparel production in New York City, about 45,000 apparel workers were employed in women's wear factories (Pope, 1970, Appendix A, p. 64), and New York City produced 64.5% of all clothing manufactured in the United States (Levine, 1969, p. 385).

<u>The Transition to Industrial Production</u>

The growth of apparel manufacturing in New York further accelerated after 1900 as garment making evolved from highly-skilled craft production in vertically-integrated artisan factories to industrial production with large and often mechanized firms, specialized labor, and a heavy reliance on contracting networks (Levine, 1969, pp. 2-17). Increasing scale permitted greater occupational specialization with separate crafts of cutters, pressers, and sewers (both hand sewers and sewing machine operators), and a variety of smaller crafts like embroidery. These new factories became known as "inside shops" because they incorporated the full set of skills and financial assets needed to design products, purchase and cut fabric, assemble entire garments, and market the finished product.

A highly-competitive sector of small and often immigrant-owned contracting shops were also emerging during this period to perform the less-skilled sewing tasks at lower wages than were paid to the more-skilled workers in the inside shops. The growth of contractors allowed manufacturers to concentrate on the most skilled activities -- design, fabric acquisition, cutting of fabric, preparation of samples, and selling to wholesalers and retailers. At the beginning of the 20th century it was not uncommon for large manufacturers to have shifted to being “outside shops” doing some internal production while employing as many as thirty or more contractors. These contractors ranged from small shops using craft-like production methods to large factories using mass production methods with narrowly-defined job classifications (Levine, 1969, pp. 13-17, 144-45).

The tailored cloak and coat sector was among the first to use contractors for mass assembly, followed in later years by skirt manufacturing and then by a series of new manufactured products -- shirtwaists, dresses, and blouses. Mass production initially organized as “section work” in which components of parts of garments were assembled in stages and where the division of labor depended on the number of garments being produced. For the largest production runs, an extreme form of labor specialization was developed known as the progressive bundle system (PBS) in which sewing machine operators repeatedly performed the same narrow sewing operation in a time cycle measured in seconds. Workers received the materials to be sewn in large bundles so that they could sew continuously without interruption, the bundles moved from work station to work station until the final garment was assembled, and work flow along the PBS assembly line was carefully engineered so that each operation took approximately the same time (Doeringer and Watson, 1999).

The higher productivity and lower unit costs of industrial production, along with the growth in the range of products, styles, levels of quality and price offered by manufacturers in the New York City (Levine, 1969, pp.411-13) allowed the district to further increase its national market share to 69.3% by 1909 (Levine, 1969).

<u>The Establishment of Modern Contracting Arrangements</u>

During the 1920s, the New York City garment district developed what would become its modern organizational structure. Manufacturing Census data for 1921 shows that New York’s garment employment stood at 86,540, almost two-fold growth since 1900 (Pope, 1970, Appendix A), and its market share had risen further to 74.2%. Despite its large market share, the growth of small contracting shops meant that New York City remained a district of relatively small and competitive firms, with an average employment of 18, well below the national average of about 28 (Levine, 1969, Table III; Atack and Passell, 1994, Table 17.5).

Contracting was also becoming more systematic with the rapid expansion of supply chains organized by “jobbers”. Jobbers were originally wholesalers that bought apparel from manufacturers in large “job lots”, which were then re-sold in smaller in smaller quantities to retailers. Jobbers had sales experience and a range of retail contacts that manufacturers often lacked and they gradually assumed many of the functions of manufacturers -- buying fabric, contracting for apparel production, and selling finished garments to manufacturers or directly to retailers.

During the 1920s, a three-tier contracting chain gradually emerged that allowed manufacturers, jobbers, and contractors to become more specialized. Specialization allowed the district to develop a manufacturing model that combined the flexibility of small scale craft production with the efficiencies of specialization and the scale economies from the division of labor. Jobbers specialized in securing materials, organizing production by contractors, and marketing clothing to retailers. Contractors specialized in fast, flexible, and low cost sewing and final assembly. The presence of the jobber-contractor system allowed large manufacturers to abandon production and to concentrate instead on building their scope economies of design, brand development, and marketing, while using jobbers and contractors to capture scale economies of manufacturing and provide quick and flexible supplies of many different products. Small “inside-shop” manufacturers with the flexibility to switch quickly from one product to another served a high-end market niche by designing and producing smaller orders of high-quality products at relatively quick speeds.

Jobbers became the focal point for women’s wear manufacturing in New York City, particularly in the dress sector, as styles proliferated and mass market demand increased during the 1920s. However, some jobbers also had design capabilities and some manufacturers also managed their own contracting so that the distinction between jobbers and manufacturers became blurred and these terms are now used interchangeably by the industry.

Los Angeles resembled New York in the late 19th and early 20th centuries, but on a far smaller scale and with less-fashionable products. It also experienced similar structural changes to those in New York, although they were more gradual and spread out over a longer period of time. Like New York, Los Angeles initially adopted the "inside shop" model for both women's and men's wear. But unlike New York, it largely continued this model through the mid-1940s, using contractors mainly during periods of peak demand and for specialty work like embroidery (Lassiter, 1953, p. 41). This reflected the greater importance of products like work clothes (which could be mass produced) and sportswear (where at least the more-basic products had longer production runs that permitted greater specialization and division of labor). However, even the small women's wear manufacturers that were introducing fashionable clothing styles continued to use the inside-shop model through the 1930s (Lassiter, 1953, p. 41).

The late 1920s was also the period when Los Angeles first aspired to become a significant late-developing district that could escape the confines of its regional market and compete with New York City in the emerging market for sportswear. When Los Angeles began to realize this goal in the mid-1940s, manufacturers had already started to contract out some of their production and contractors were gradually becoming an important source of lower cost production in the district. Although some of the largest Los Angeles manufacturers have retained a manufacturing capacity for samples, higher-end products where quick production is needed, and products where there were scale economies to be realized, the general trend since World War II has been to contract more and more production. As in New York City, all but the largest manufacturers have now mostly abandoned in-house garment production to their contractors (Bonacich and Appelbaum, pp. 11-14, 27-29).

<u>Cut-Throat Competition and First Mover Advantage</u>

With its prevalence of small firms, specialized supply chains, mobile capital and labor, dense information networks, and piece-rate pay incentives, the apparel industry has many earmarks of a competitive industry. The combination of a relatively atomistic market structure, easy entry by firms, quasi vertically-integrated contracting chains, and substantial agglomeration economies found in New York City garment district has often led it to be singled out as a model for the efficient production of fashion apparel (Lassiter, 1953 Ch. VI; Bonacich and Appelbaum, 2000; Kranton and Minehart, 2001; Wintrobe and Breton, 1986).

Competition in New York City's garment district peaked during the late 19^{th} and early 20^{th} centuries when the apparel industry benefited from a form of hyper-competition, known in the vernacular of the industry as "cut-throat" competition, which was fueled by high levels of excess capacity. Excess capacity is a normal part of the apparel industry because of the seasonality of apparel demand and the volatility of fashion markets. However, additional excess capacity was also introduced during this period by the increasing returns to scale that accompanied the transition to mass production and from the easy entry of immigrant-owned contracting firms that rapidly expanded sewing capacity under the emerging contracting system in New York.

Excess capacity triggers an adjustment response where prices can be driven below average costs and firms must either lower their production costs or leave the industry. In a labor-intensive industry like apparel with relatively little technological change, reducing costs often leads to "sweatshop" employment practices – cutting wages, extending daily and weekly work schedules without extra compensation, using coercion and the threat of job loss to spur greater labor productivity, and allowing working conditions to deteriorate – as manufacturers and contractors compete for scarce work.

Poorly-paid labor, ten hour work days, and frequent after-hours work at home were common features of the apparel industry in the New York City garment industry of the late 19^{th} century (Levine, 1969, pp. 168-173). Working conditions were also unsafe and unhealthy. A typical New York apparel factory, for example, had crowded production areas that were "packed so densely that the girls could scarcely move from their chairs", poor ventilation, few toilet facilities, and little drinking water (Levine, 1969, p. 10.) Conditions improved somewhat during the 1890s as manufacturers with sweatshops on the lower East Side were moving to larger and more modern premises in mid-town Manhattan. However, cut-throat competition, long hours, and poor factory conditions continued as the new wave of immigrant contractors located in the lower East Side lofts vacated by manufacturers (op cit., pp. 168-173).

Between the rapid growth in the supply of immigrant labor and the presence of cut-throat competition, wages were also lower in the New York garment district than in other major districts during the late 19^{th} and early 20th centuries, particularly for less-skilled labor. Wages of factory-based sewing machine operators in 1906, for example, were 49% higher in Chicago than in New York, 34% higher in Boston, and 23% higher in Baltimore, with only Philadelphia (with a wage premium of only 2%) coming close to New York's wage level (Segal, 1960, p. 94).

New York manufacturers deliberately maintained a larger contracting capacity than was needed either to meet seasonal demand or to achieve minimum efficient scale of production (Teper, 1937, pp. 13). A study of the New York apparel industry at the turn of the century concluded that this excess capacity was intended to enhance manufacturers' bargaining power over contractors. Manufacturers regularly took advantage of excess capacity to negotiate lower prices with contractors who regularly came "hat in hand like a beggar" to their offices looking for work, and that contractors regularly pressed their workers to accept lower wages and sometime bear the costs of equipment and supplies (U.S. Industrial Commission 1901-02, vol. XV p. 332, cited in Levine, 1969, pp. 16-17).

As the jobber-contractor system spread during the late 1910s and early 1920s, jobbers replaced manufacturers as the drivers of excess capacity. They conducted auction-like bargaining sessions with groups of contractors in which the number and production capacity of bidders substantially exceeded the volume of orders being placed and competition for business in the early 1920s was seen to be as "chaotic" as in the 1900s (Levine, 1969, pp. 403-407, 409). A study in 1925 by the *Governor's Advisory Committee on the New York Cloak Industry* reported that 18.5% of New York cloak contractors accounted for 86.3% of contracted cloak output while "the remaining 81.5% of contractors …. were retained purely for bargaining purposes" (Cited in Teper, 1937, pp. 13-14). The Committee also noted that excess contractor capacity had spillover effects on the wages paid by manufacturers in their inside shops: "When work is scarce, as it usually is, except for a few weeks in the season, the workers are told that in order to meet the exigencies of price competition and to bring some work into the [inside] shop they must enter into secret arrangements contrary to the minimum labor standards which have been agreed upon." (*ibid*, p. 14; Levine, 1969, p. 16).

The combination of strong agglomeration economies, growing economies of scale, and falling production costs from cut-throat competition gave the New York City garment industry an edge over other districts in the late 19th and early 20th centuries that allowed it to secure a commanding share of the women's wear market. Nevertheless, New York City's apparel markets remained contestable by other garment districts because fashion designs are easily copied, skilled labor can be trained, jobs can be simplified, labor pools can migrate, regional wage differentials can change, and national buyers can quickly learn where similar products can be obtained at lower prices.

The risk of competition from outside the district was also rising because cut-throat competition had its own inefficiencies in the use of labor and capital. It spawned revolving pools of marginal firms charging prices below average costs of production, high rates of labor turnover and frequent business failures inhibited training, and the low wages and poor working conditions that accompanied cut-throat competition caused spontaneous strikes and labor violence. Strikes in particular were becoming a negative externality for the entire district because they brought widespread losses of time-sensitive production, encouraged buyers to shift orders to other districts with less labor unrest, and resulted in some manufacturers relocating to areas where strikes were less likely.

The inefficiencies of strikes became an even more serious concern in the 1880s as garment workers sought to address problems of low wages and sweatshops by forming trade unions. Skilled tailors and cutters employed in the cloak and coat sector, New York's largest and most skilled specialization at the time, were the driving force behind these early unionization efforts (Levine, 1969, pp, 92-98).

Strike activity tended to be concentrated at the start of each manufacturing season when the costs of lost production were greatest and it was most difficult for employers to replace the skilled workers who were on strike. These strikes were initially of short duration and there was high turnover among the early unions at the end of each season (Levine, 1969, p. 42-43). By the 1890s, however, New York garment unions were becoming larger, more numerous, and more militant. Militancy took the form of demonstrations and marches as well as mass picketing and there was increasing solidarity among the members of these new union locals that were forming around relatively homogeneous work "communities" defined by craft and type of product, religion, nationality, and neighborhood.

Opposition to unions became correspondingly more intense union militancy increased. Apparel employers discharged employees who joined unions, lockouts were used more frequently when union workers went on strike, and larger strikes and demonstrations often led to arrests and sometimes prison terms for strikers. Because concerted employer resistance to unions was difficult in an industry dominated by small firms and seasonal demand, employers also began to form industry associations to coordinate district-wide strategies for defeating unionization (Levine, 1969, pp. 56-57).

Smaller union movements were also emerging in most of the other major garment districts – Chicago, Philadelphia, Cleveland, and Baltimore – and there were various attempts during the 1890s to bolster local bargaining power by bringing local unions under a national union umbrella (Ulman, 1955), principally through affiliations with the eclectic Knights of Labor, the radical IWW, or the craft-based American Federation of Labor (AFL). National affiliations, however, proved impermanent for local garment unions in New York and elsewhere until 1900 when New York's largest craft workers union, the "United Brotherhood of Cloak Makers' Union No. 1 of New York and Vicinity", convened a national convention of "all workers in the trade, namely of those working in cloaks and suits, or at custom ladies tailoring, or in skirt shops" for purposes of establishing a nation-wide, craft-based union for skilled workers in the women's clothing industry (Levine, 1969, pp. 102-103).

Although only seven locals from four cities (including New York) were represented at this convention, the AFL quickly granted an official charter to the International Ladies' Garment Workers' Union (ILGWU), which was headquartered in New York City where roughly half its membership was located (Levine, 1969, p. 103). Counterpart national unions in the men's wear industry (the United Garment Workers Union and its successor the Amalgamated Clothing Workers of America) were also active in New York during this period, but the ILGWU provides the earliest and richest example of how unions and collective bargaining could "create" new agglomeration externalities in the New York City garment district by establishing a collective mechanism for re-designing New York's apparel markets.

<u>"Created" Externalities and the Regulation of Cut-throat Competition in the Union Era</u>

The ILGWU pledged to improve the economic conditions of the garment crafts by raising wages, reducing work weeks, making employment more secure, and ending sub-standard workplace conditions and other sweatshop practices. In trying to deliver on this promise, however, New York's local ILGWU unions had to address organized employer opposition to collective bargaining, a diverse membership scattered among many small and medium-sized firms that posed difficulties for organizing and bargaining, and the practices of cut-throat competition that threatened to limit economic gains for union members (Levine, 1969, pp. 110, 114-116).

Overcoming Employer Opposition

While New York's share of national women's wear markets continued to grow in the early 1900s, it faced growing external competition from other districts with lower factor costs and fewer strikes. Employers feared that bargaining with a locals affiliated with a national union based in New York would lead to even more strikes and costly increases in wages

The union strategy for overcoming for overcoming employer opposition was to rely on district-wide strikes to force employers to the bargaining table and the New York ILGWU unions were reasonably successful in achieving that goal. The first steps toward district-wide unionization were taken in 1909 and 1910 when ILGWU locals successfully launched large and long "general" strikes (the 1909 "Uprising of the 20,000" in support of shirtwaist and dress workers and the 1910 "Great Revolt" involving about 60,000 strikers in support of cloak and suit workers). These strikes, along with pressure from civic leaders and government officials, forced employers to recognize the ILGWU unions and to turn to their industry associations to represent them in negotiating collective bargaining agreements.

The ILGWU and the Regulation of Cut-throat Competition

Controlling cut-throat competition proved to be a longer-term challenge involving the development and gradual refinement of a bargaining agenda for stabilizing competition among employers in the district and for limiting market entry by non-union and other low-cost apparel suppliers from outside the district. External competition in particular was explicitly recognized as a major constraint on raising wages as early as 1910 during the ILGWU's discussions of bargaining strategy in preparation for the 1910 cloak and coat negotiations (Carpenter, 1972, pp. 48-49) and the arbitrators of labor disputes under that agreement later cautioned the union and the employers' association that they needed to extend bargaining coverage to firms outside of New York "for their own good" (Carpenter, 1972, p. 560).

The early labor contracts contained traditional labor benefits of wage increases, improved working conditions, and greater employment security for union members. However, the 1910 cloak and coat agreement (known as the "Protocol of Peace") also included provisions that affected market structure and district efficiency. [5] This contract provided for arbitration procedures to prevent the disruption of production by strikes over both worker grievances and future contract negotiations; it stabilized employment among manufacturers by limiting the amount of contracting they were allowed; and it established a systematic structure of minimum wages that recognized the different market conditions in various product sectors (Levine, 1969, pp. 194, 196-98; Carpenter, 1972, Ch. 2). This combination of economic benefits for workers, structural change affecting market competition, and the efficiencies of reducing strikes and stabilizing employment was subsequently replicated in agreements covering New York City's other major product specializations in 1913.

These contracts, however, failed to adequately control cut-throat competition in the district. Restrictions on contracting were hard to enforce and the small size and frequent turnover among firms made it difficult for unions to maintain sufficient organizational strength to limit non-union competition within the district. The threat of competition from other districts proved even harder to contain and a common employer complaint in later years was that "out-of-town reproductions" of their garments could be purchased far below New York prices (Carpenter, 1972, p. 61). Avoiding work stoppages also proved problematic as arbitration procedures became congested from the large numbers of shop-floor disputes and spontaneous strikes and employer lockouts became more frequent alternatives to arbitration. Finally, between changing labor market conditions and union wage bargaining, New York was losing its wage advantage over other districts. For example, the average annual earnings of apparel workers in New York City were 58% above those in Los Angeles by 1921 (Levine, 1969, Table VII).

The inability of unions to block non-union competition and control disruptive strikes, along with the recession of 1920-21and the revival of a nation-wide "open shop" movement among employers (Jacoby, 1985, Ch. 6), led New York garment employers to abandon their

[5] Because skilled workers often became supervisors in apparel factories and were also a source of entrepreneurial talent, a "management" perspective on competition and efficiency was present in the early craft-based locals in New York and the decision by the New York City locals to establish a national union affiliation with the "business-oriented" AFL also reflected an understanding of the importance of profits as a source of revenue for improving wages and working conditions. (See Taft, 1957 and Galenson, 1960).

collective bargaining agreements in the early 1920s. Ending collective bargaining, however, still left the New York apparel industry with the problems of spontaneous strikes, inefficient competition from marginal firms within the district, and growing competition from suppliers outside of New York. Recognizing that an enforceable district-wide solution to these problems was needed "to control unfair and destructive competition between jobbers and sub-manufacturers [contractors]" (Carpenter, 1972, p. 73), and that the New York industry lacked the means to develop and legally enforce its own mechanisms for market stabilization and restructuring, the major garment employers soon authorized their associations to re-open negotiations with the unions and to develop a more effective system of market regulation through collective bargaining (Carpenter, 1972, p. 564).[6]

By this time, the New York industry had largely completed the transition from artisan and craft production to an industrial contracting model consisting of a network of manufacturers, jobbers, and contractors and the ILGWU devised a comprehensive strategy for economic regulation that reflected these changes. The union insisted that the 1924 cloak and suit negotiations adopt coordinated bargaining with the three employer associations representing jobbers, manufacturers, and contractors, and jobbers were made the focal point for regulating the industry in recognition of the central position they occupied in the industry. The union proposals also envisioned a major restructuring of the industry to reduce excess capacity, stabilize employment, and "remove" wages and working conditions from competition (Levine, 1969, pp. 422-424).

The employers' associations in the cloak and suit sector initially rejected union's plan, but subsequently accepted a more limited proposal recommended by a mediation panel appointed by the Governor of New York (Levine, 1969, pp. 425-27; Carpenter, 1972, pp. 115-138, 326-366). The 1924 agreement included several of the key elements of the union's bargaining agenda: (1) the obligation of jobbers and manufacturers to deal exclusively with contractors and

[6] Contractual provisions for fixing prices, limiting entry, and requiring exclusive dealing are the kinds of monopolistic restraints on trade that would have been illegal if conducted by employers. However, such practices were exempt from anti-trust prosecution under Section 8 of the 1914 Clayton Act, provided they were reached through collective bargaining and were for the benefit of employees. *De jure*, the regulation of cut-throat competition to protect ILGWU employment and economic benefits met this test for over four decades of collective bargaining in New York City.

other suppliers that had active contracts with the union (2) the establishment of a minimum employment size for manufacturers and contractors, (3) the recognition that jobbers had contractual responsibilities for the terms and conditions of employment offered by their contractors covered by the contract, and (4) the requirement that jobbers (as well as manufacturers and contractors) participate in district-wide procedures for improving shop-floor working conditions and resolving industrial disputes. The ILGWU was reported to represent over 90% of women's wear employment in the district during this period (Levine, 1969, p. 424), giving it effective control over almost all women's wear employment, and many of the provisions of the cloak and suit agreement were subsequently extended to contracts covering other product sectors.

Further contract enhancements for regulating competition were negotiated through the late 1920s (Teper, 1937, pp. 19-20, 28; Carpenter, 1972, pp. 115-138, 326-366, 488-489). Limits were placed on the number of contractors each jobber could employ in order to control excess capacity; contracting relationships were made more permanent by designating the specific contractors assigned to each jobber; contract prices were required to cover fixed as well as variable costs in order to reduce turnover among contractors; jobbers were obliged to share work equitably among their contractors; and the peaceful settlement of labor disputes was strengthened by establishing full-time paid positions for the chairmen of arbitration procedures. To reduce competition from outside the district, equal prices were to be paid for comparable contracted work regardless of whether it was performed by New York contractors or elsewhere, penalties were levied against runaway shops leaving the district, and the union had a contractual obligation to organize competing employers outside the New York City district. Unions were also the major enforcement arm for these agreements through strikes and boycotts against firms that violated their contractual obligations, and union sanctions were backed as needed by judicial remedies. By the end of the 1920s, a transition from cut-throat competition to market governance through collective bargaining was well underway.

District-wide Efficiencies "Created" by Union Regulation

While monopolistic restraints on trade are normally considered to be inefficient, many of these practices had positive efficiency consequences for the district when compared with the inefficiencies of cut-throat competition. Compulsory arbitration, for example, helped to reduce the disruptions of spontaneous and unauthorized strikes, controlling excess capacity improved resource allocation, price-fixing reduced uncertainty, and minimum size-of-firm requirements helped to eliminate marginal firms and ensure that surviving firms could achieve minimum efficient scales of production. In addition, the ILGWU directly contributed to district efficiency by encouraging mechanization and efficient work practices by providing training and industrial engineering services to help unionized firms improve their production systems and work organization (Disher, 1947).

Efficiency effects also flowed from the pairing of jobbers with specific contractors, and from the preferences granted to these dedicated contractors in the awarding of contracts and in the equitable sharing of work at uniform contract prices. Continuing and exclusive relationships between jobbers and contractors provided new opportunities for investments in relationship-specific knowledge that improved both the productivity of contractors and the efficiency of contracting relationships. Jobbers could learn the strengths and weaknesses of their dedicated contractors and train them to be more efficient, contractors could learn about their jobbers' products and expected quality standards, and stronger channels of communication between jobbers and contractors could help jobbers to secure orders and improve profits. These stable contracting relationships applied primarily to the "core" group of experienced contractors in New York City who worked mostly for one jobber and had a regular flow of orders, in contrast to a remaining group of "peripheral" contractors who had highly-competitive, arms-length market relationships with multiple jobbers.[7]

Regulation of cut-throat competition through collective bargaining reportedly caused some employers to leave New York (Levine, 1969, Ch. XXXII; Carpenter, 1972, pp. 547-551) and prompted resistance to unions in other districts. However, the employers who remained in New York had come to realize by the end of the 1920s that the regulation of product competition through collective bargaining generated both monopoly rents and efficiency gains that could be profitably shared with their unions while also allowing the district's market share to continue to rise.

[7] Stable jobber-contractor relationships and the distinction between the core and periphery sectors of the district have persisted in a modified form long after collective bargaining ceased to be an effective regulator of competition in the New York garment district (Uzzi, 1997, Palpacuer, 1997, Doeringer and Crean, 2006).

The Great Depression of the 1930s, however, challenged this union-regulated system of monopoly protections and regulatory efficiencies as New York City employers sought to cut costs and prices in the face of sharply reduced demand for clothing and as union strength was eroded by membership losses. Nevertheless, regulation of the industry through collective bargaining continued in New York City, aided in part by the market stabilization and supportive union policies of the 1933 National Industrial Recovery Act (NRA), which translated many of the district's collective bargaining regulations into the NRA industry codes (Carpenter, 1972, Chs. 16-18). As a result, New York City's market share in women's wear remained close to its peak of about 75% through at least 1935 when the NRA was declared unconstitutional.

Estimates of Efficiency Benefits

The magnitude of the district efficiencies created in New York City from the beginning of collective bargaining in 1909 through the early 1930s are revealed in studies and hearings conducted by the NRA in conjunction with its examination of wage differentials among different garment regions. Testimony by the head of an employer association based in Chicago, for example, provides a qualitative perspective on these efficiencies from a unionized district that competed with New York City:

"New York is a natural market, it gets volume orders, its methods of production are superior, it has a much greater percentage of men workers and these are men who are anxious to work hard, its selling costs are about 5% less than Chicago, it has less inventory loss because it can buy from hand to mouth, its houses need not spend time or money to learn what is new in material and style, it is not required to expend sizable sums annually for express charges, and its product is generally made by machine whereas about 75% of the operations here are by hand" (Women's Wear Daily, Sept. 19, 1933, cited in Carpenter, 1972, p. 616).

Quantitative analyses of unit production costs in different regions conducted by the NRA further confirm that New York's efficiency advantages were substantial. For example, wages for major occupations such as cutters and sewing machine operators in other regions would need to be anywhere from 25% to 40% below those in New York in order to offset New York's unit cost advantages (Carpenter, 1972, p. 614). In the two decades of more or less continuing collective bargaining between 1910 and 1930, New York City also continued to see its market share grow.

With the demise of the NRA in 1935, the apparel industry in New York largely returned to earlier system of regulation through collective bargaining under the new union and bargaining protections of the National Labor Relations Act in1935, and later under the auspices of the dispute settlement and wage stabilization policies of the National War Labor Board during World War II. However, wartime mobilization also strengthened garment districts outside of New York City and by the end of World War II New York had a smaller, but nonetheless commanding market share of 54%.

Late Development and Market Competition in Los Angeles

Los Angeles was still part of Mexico and a largely agricultural and ranching community in the 1840s when New York was becoming a fashion center. After Los Angeles was annexed to the United States at the end of the Mexican-American War in 1848, it began to develop good port facilities and railroad networks and, by 1900, it had a garment industry specializing in cloaks and coats that served a small regional market. While it subsequently added specializations in work clothes and sportswear, its apparel market remained largely regional through the 1920s, 1930s, and early 1940s.

Employers in the Los Angeles area were aggressively anti-union in the late 19th century. Major employers formed the Merchants and Manufacturers Association (MMA) in 1896 to promote an :open-shop: industrial climate and the MMA advised apparel industry employers on how to implement anti-union strategies -- discharging and blacklisting union members, replacing strikers, and lobbying for pro-business labor policies (Milkman, 2006, p. 35; Laslett and Tyler, 1989, p.15). This anti-union climate was further reinforced by an active Ku Klux Klan movement (Lassiter, 1953, p. 171), and by the influential Los Angeles Times newspaper that had long opposed radical movements and was a strong advocate for low labor costs and freedom from unions as the basis for the development of the Los Angeles economy (Gottlieb and Wolf, 1977).

The apparel industry was no exception to employer opposition to unions. There were sporadic attempts by the ILGWU to organize workers in the fledgling apparel industry prior to the late 1920s, but these had only minor success and were often short-lived. For example, an ILGWU local was established in 1907, but survived for only 3 months (Laslett and Tyler, 1989, p. 15) and a women's cloak and suit local of skilled tailors working for small contractors was established in 1910, but this local had negotiated only 17 contracts with individual employers by 1919 (Laslett and Tyler,1989, pp. 15, 18-19). The ILGWU never represented more that 4% of employment in women's wear prior to 1930 (Laslett and Tyler, 1989, Appendix 4, p. 119); there were no unions in the dress sector until 1923 or in sportswear until 1937 (Laslett and Tyler, 1989, p. 20); and the only garment union to gain a significant foothold in Los Angeles before 1930 was a tailors' local that succeeded in negotiating contracts covering the vast majority of skilled male workers in the women's cloak and suit sector in 1924 (Laslett and Tyler, 1989, pp. 19-20).

As Los Angeles was poised to enter national markets for sportswear in the late 1920s and early 1930s, it had a full complement of agglomeration economies needed to support women's sportswear production – a pool of labor of immigrant labor, a regional base of suppliers and buyers, and a rapidly-developing base of knowledge about the design and manufacturing of sportswear. It also had advantages of lower labor costs and more abundant land than New York City, and it remained free of unions as the coalition of merchants, manufacturers, and the media, successfully mobilized public opinion and civic power to suppress union organizing in women's wear. Nevertheless, the Los Angeles district needed to consider whether any changes were needed in market structures and business practices in order to match the efficiencies of the industry in New York City.

Coincidentally, New York's employers and unions went through a self-assessment covering many of these same issues at the beginning of the 1920s when cut-throat competition returned to the district when employers abandoned collective bargaining after a decade of attempts to stabilize competition. The leading academic expert on the New York City garment district during this period reported an industry consensus that larger firms and greater market concentration were needed to gain scale economies and to help control cut-throat competition, and that scope economies needed to be expanded through greater product diversification. The industry then debated three options for achieving these goals: (1) the continuation of the jobber-contractor system, which was already moving towards larger firms; (2) the replacement of the jobber-contractor system with the earlier model of inside manufacturing with minimal outside contracting; or (3) the restoration of regulation through collective bargaining under a tripartite arrangement whereby manufacturers and jobbers would continue to grow in size and scope to gain further efficiencies in marketing, contractors would become larger and better able to manage garment production efficiently, and unions would regulate cut-throat competition and eliminate marginal contractors (Levine, 1969, pp. 417-417).

While the employers in the New York garment district chose the option of continuing the jobber-contractor system and returning to collective bargaining to regulate the industry in the 1920s, Los Angeles' employers chose to continue the district's industrial structure that was organized primarily around manufacturers with inside shops with relatively little contracting, and to keep in place its opposition to unions and collective bargaining. From the perspective of the Los Angeles apparel manufacturers, including some "runaway" manufacturers from New York City, the lessons from New York, and from the closer experience with unions in San Francisco (Lassiter and Tyler, 1989, pp. 170-7), were clear. The jobber-contractor system offered no particular advantages over the manufacturer-dominated system in Los Angeles. Manufacturers were good at design, marketing, the organization of economies of scale and scope, and at drawing upon contractors as needed, while unions and collective bargaining led to major inefficiencies from disruptive strikes, costly wage increases, and interference with management prerogatives. As a result, Los Angeles opted for unregulated markets and relatively low factor costs as the efficient way for competing in national markets.

Cut-throat competition among firms remained prevalent through the 1920s, although it was somewhat muted by the presence of larger manufacturers and the lesser reliance on small contractors than in New York. The wage cuts and collapsing employment at the start of the Depression triggered a wave of garment union organizing efforts and strikes in Los Angeles between 1930 and 1933. However, these were initially unsuccessful because the Los Angeles police arrested picketers and protected strikebreakers (Laslett and Tyler, 1989, ch. 5). Employer opposition to unions remained intense after the passage of the NRA and the NLRA in the 1930s (Laslett and Tyler, 1989, chs. 2-7), but union organizing and bargaining were somewhat more successful towards the end of the NRA and under the NLRA.

About 25% of the women's wear workers in Los Angeles were reported to be union members by 1936 (Laslett and Tyler, 1989, pp. 41-42). However, impasses during negotiations to extend union organization and improve contracts in 1936 resulted in a number of strikes that prompted strong employer retaliation. Strikers were arrested for disturbing the peace, employers subsidized police details to prevent pickets from blocking access to their factories, and a second employer association (the Southern California Manufacturers Association) was formed in 1937 to promote the open shop movement in the region (Laslett and Tyler, pp. 37-41). Together the MMA and the Southern California Manufacturers Association advised employers on how to establish company unions that would pass muster under the NLRA and they lobbied successfully for local legislation that limited picketing. Nevertheless, garment union membership overall had climbed to about one-third of the industry during the Depression (Laslett and Tyler, 1989, Appendix 4, p. 119) and ILGWU locals had almost 16,000 members in over 600 factories by 1939 (Laslett and Tyler, 1989, p. 42).

Apparel production grew in Los Angeles during wartime mobilization and unions made further organizing gains under wartime industrial relations policies. It was estimated that unions represented over 50% of Los Angeles' apparel workers during World War II (Laslett and Tyler, 1989, Appendix 4, p. 119) and the ILGWU also succeeded in securing some of the limitations on contracting found in New York City's collective agreements by using militant bargaining tactics. For example, a major contract was negotiated with several sportswear and dress employer associations in Los Angeles that contained a number of restraint of trade practices (Carpenter, pp. 841-47; Federal Trade Commission, In the Matter of the California Sportswear and Dress Association et al., 1955), but only after an unusual wartime strike in 1942.

Developments after World War II

New York City was still the largest and most unionized U.S, garment district at the end of World War II and much of its system of market regulation through collective bargaining remained intact (Carpenter, 1972, pp. 853-859). Its overall market share had fallen, but New York City still accounted for more than half of all value-added in women's wear and almost three-fourths of the blouse market (U.S. v. Greater Blouse, Skirt, and Neckwear Contractors' Association, et al., U.S. District Court, Southern District of New York, CR 153/181, 1959, cited in Carpenter, 1972, p. 852).

Nevertheless, a number of factors beyond the control of district regulation were working against production in New York City. The trend nationally was for production to decentralize towards districts in the South and West where land and labor costs were lower, fabric could be sourced more cheaply from textile suppliers that had relocated to the South, and unions were weaker. Fashion preferences were also shifting away from New York City's traditional specializations in dresses and tailored clothing in favor of more casual blouses, skirts, and trousers, and many of these products could be produced more efficiently in large factories using mass production methods than by the smaller-scale and flexible production networks prevalent in New York.

Entry by low-cost non-union suppliers was reducing New York's market share and Los Angeles, in particular, was beginning its climb to become the rival fashion district to New York. The decentralization of production and the growing number of large manufacturers also made it easier for suppliers to sell directly to retailers instead of going through jobbers and buyers in New York City. Market entry by other districts in the 1940s and 1950s was followed by entry by offshore suppliers beginning in the late 1960s, and this import penetration was subsequently reinforced by a series of trade liberalization policies that the apparel unions were unable to block -- the Caribbean Basin Initiative (1985), NAFTA (1994), and the more general reductions in apparel tariffs and quotas from 1994 to 2005 under the Uruguay Round of GATT negotiations.

The New York district began its long-term decline in the 1970s as output, employment, and union membership started to fall. The ILGWU union locals represented less than half the apparel employees in the district by the 1980s and only 30-40% in the 1990s (derived from Levitan, 1998, quoted in Milkman, p.88). Apparel employment in New York City is now under 20,000 (2009), about one tenth of it peak employment and roughly the same level as in 1890, and the district lacks a sufficient union bargaining presence to regulate competition and employer conduct to any significant degree. Nevertheless, many of the efficiencies of relationships persisted in the shrinking "core" sector of the New York City garment district.

Meanwhile, Los Angeles continued to prosper as a "late-developing" district. It had agglomeration economies similar to those of New York, an established reputation for sportswear design, a manufacturer-contractor system with somewhat larger firms than New York that suited its sportswear specialization, and the wartime strength of the Los Angeles garment unions proved to be temporary.

The union's remaining strength in Los Angeles was greatest among craft workers in the rapidly declining coat and suit sector while it was weakest in the post-war growth sectors of sportswear and dresses where the ILGWU represented only 10-15% of the workforce during wartime bargaining (Laslett and Tyler, 1989, pp. 45, 49, 52, 56, 62-63). An ILGWU organizing drive in sportswear was launched shortly after the end of World War II, but was met with strong employer resistance, substantial financial support from the MMA, and court injunctions against picketing (Laslett and Tyler, p. 58). The garment industry unionization rate in Los Angeles County quickly fell from its wartime high of about 50% to 24% by 1947 (derived from Lassiter, pp. 11, 66-67, 72-73; Laslett and Tyler, p. 56) and was only 9% by 1979 (Laslett and Tyler, Appendix 4, p. 119).[8]

Los Angeles returned to an unregulated market as its apparel unions weakened and collective bargaining gradually disappeared from its post-war apparel industry (Laslett and Tyler, 1989, pp. 61-62, 84-87). Recent accounts confirm that arms-length competition was once again the norm for contracting in Los Angeles by the 1980s (Ross, 2004; Bonacich and Appelbaum, 2000; Milkman, 2006).

In other respects, however, the New York City and Los Angeles are becoming more alike. Manufacturers in Los Angeles are concentrating more and more on design and marketing while relying heavily on contractors for garment assembly; there is considerable overlap in product specializations, and unions and collective bargaining have diminished substantially in New York. Both districts are experiencing declines in output and employment as a result of foreign competition and Los Angeles replaced New York as the largest U.S. garment district in the late 1980s and early 1990s.

Epilogue: Is there a Future for Market Regulation in the U.S. Apparel Industry?

The purpose of this paper is to show how economic institutions can redesign markets and augment traditional agglomeration economies, using historical evidence from the two largest garment districts in the United States. The key economic institutions in New York were the

[8] ILGWU membership fell from a high of over 12,000 in 1945 to under 10,000 in 1953, under 7,000 in 1962, under 5,400 in 1972, to 3,700 by the end of 1979, and to 3,000 in 1988 (Laslett and Tyler, pp. 92, 99). Using different data on ILGWU union membership as a fraction of total apparel employment in Los Angeles, Milkman also reports sharp declines in ILGWU membership -- from about 32% of all Los Angeles apparel workers in 1950 to only 4% in 1980, and down to 2.1% by 1992 (Milkman, p. 89). Even where unions remained in place, employers sometimes failed to comply with their collective bargaining agreements (Federal Trade Commission, In the Matter of the California Sportswear and Dress Association et al., 1955).

ILGWU and the industry associations with which it bargained. The performance advantages that were created are rooted in the re-design of highly-competitive, but nonetheless inefficient, supplier markets through a series of “regulations” contained in collective bargaining agreements negotiated and enforced during the era of powerful garment unions from 1909 through the 1970s and 1980s. Collective bargaining helped to unify fragmented apparel supply chains in the New York City garment district and to replace inefficient cut-throat competition with a blend of monopoly and efficiency practices that stabilized contracting relationships, improved industry performance, and created new district externalities, while also improving wages and working conditions.

Except for a brief period during the late 1930s and in World War II, apparel unions in Los Angeles never came close to being strong enough to regulate competition in the district. Highly-competitive market conditions have generally prevailed throughout the history of the Los Angeles district and contributed to Los Angeles eventually overtaking New York as the largest U.S. garment district.

The summary evidence of the performance advantages from regulation through collective bargaining during the decades of strong garment unions in New York City is found in the data on the district’s share of domestic output and value added (see Table 1). New York was the preeminent “first-mover” garment district in the United States. It secured a dominant share of national women’s wear markets by the 1880s and 1890s based on its abundant agglomeration economies, a labor market with increasing supplies of skilled immigrant labor, and a set of “cut-throat” competitive practices that kept wages lower and overall production costs lower than those in other garment districts. By 1899 New York accounted for 64.5% of the U.S. clothing market and its market share had increased further to 69.3% by the end of the district’s non-union period in 1909.

New York City’s market share rose further during the formative period of market re-design from 1909 to 1921 as the ILGWU local unions helped to replace chaotic cut-throat competition with more orderly and efficient competition through a series of collective bargaining agreements negotiated with apparel industry employer associations. Collective bargaining helped to protect the district’s market share by erecting entry barriers to New York’s markets,

Table 1

Market Shares: New York City, Los Angeles County, New York State, California

(Selected Years)

		New York City %	Los Angeles County %		New York State %	California %
	1899[a]	64.5				
	1909[a]	69.3				
	1921[a]	74.2			75.8	
	1925[b]				79.0	1.5
	1931[b]				75.1	2.5
	1933[a]				72.8	2.7
	1935[c]				73.2	2.8
	1947[d]	54.4	4.6		58.9	5.7
	1958[d]	41.3	6.3		44.9	7.5
	1967[d]	35.7	6.1		38.2	7.7
	1977[d]	26.8	11.9		29.3	14.3
	1987[d]	22.8	12.8		24.6	20.9
	1992[d]	21.9	18.9		23.1	24.5
	1997[e]	20.0	22.8		21.8	28.5

Sources: a = Levine, 1969: (Value of Shipments – SIC Basis); b = Census of Manufacturers: (Value of Shipments – SIC Basis); c = Teper, 1937: (Value of Shipments – SIC Basis); d = Census of Manufacturers: (Value Added – SIC 233 & 234); e = Census of Manufacturers: (Value Added – NAICS 315212 & 31523)

but it also redesigned market structures so as to reduce strikes, make competition more stable, and improve the efficiency of firms and contracting relationships.

Market re-design began with the “Protocol of Peace” agreement in 1910 and was substantially extended in subsequent collective bargaining agreements through the 1920s as major revisions in collective bargaining regulations were made in recognition of the growing influence of jobbers in the New York district. The district’s market share in women’s wear rose to 74.2% by 1921 and it held an even larger market share in its leading specializations --79% of women’s tailored suits, coats, and skirts and 77% of shirtwaists and dresses (derived from Levine, 1969, p. 515). The available state-level data point to further growth in New York City’s market share through at least the mid-1920s as market regulation under collective bargaining was expanded.[9] These increases in market share under union regulation came at least in part from the efficiency gains that allowed New York City to retain many of its existing markets while also drawing production from other large districts such as Philadelphia, Cleveland, and Boston (Levine, pp. 385) and much of this gain proved to be robust through at least the first half of the Depression.

New York City's dominant market position proved remarkably resistant to entry by entry by firms in districts with lower factor costs and unregulated markets. Although New York City subsequently lost market share during World War II to Los Angeles and other districts, it still accounted for over half of all domestic value-added in women's wear in 1947 (compared to 4.6% in Los Angeles), more than 40% in the 1950s, and over one third in the 1960s. Los Angeles was the second largest U.S. garment district after the war, but it made only gradual gains in market share until the 1970s when increasing domestic and international competition began to diminish the ability of unions to regulate the New York district. However, New York City was still supplying over 25% of domestic value-added in women's wear in 1977, more than twice that of Los Angeles, and New York continued to hold its lead into the mid-1990s.

While it may be tempting to attribute New York's dominant market shares to the trade restraints negotiated with the ILGWU or hard-to-replicate agglomeration economies associated with New York City's larger "culture economy" (Scott, 1996; Florida, 2004) the evidence points in other directions. New York City's markets were, in fact, successfully contested throughout the union era. Production of more standardized products with lower fashion-content was continually being decentralized from New York to districts with lower factor costs, greater scale economies, and newer plant and equipment, and suppliers in other nearby districts also competed successfully for contracts from New York-based jobbers and manufacturers in more-fashionable product lines (U.S. v. Greater Blouse, Skirt, and Neckwear Contractors' Association, et al., U.S. District Court, Southern District of New York, CR 153/181, 1959, cited in Carpenter, 1972, p. 852). The strongest evidence of the contestability of New York City's apparel markets is

[9] Changes in state-level market shares are a reasonable proxy for those in New York City because the New York garment district accounted for 98% of all women's wear production in New York State in 1921 and 91%-95% between 1947 and 1992.

provided by Los Angeles' ability to become a credible competitor to New York by building its own pool of fashion and design knowledge and eventually over-take New York. [10]

Moreover, the economic stabilization and price fixing arrangements in New York City's apparel industry bargaining agreements faced repeated legal challenges beginning in the late 1930s as the Federal Trade Commission and the Department of Justice sought to define the appropriate balance between legitimate trade restraints negotiated in support of workers' interests (which had immunity under the Clayton Act) and those where collective bargaining was largely a mechanism by which employers could impose otherwise illegal restraints on trade (see Carpenter, 1972, Chs. 21 & 22 for a detailed examination of these cases). Sometimes these legal challenges ended in judicial rulings barring specific anti-competitive practices contained in collective bargaining agreements and other times they ended in lengthy stalemates, but the continuing threat of these such investigations is reported to have had a chilling effect on the use of restrictive trade practices under collective bargaining agreements in the apparel industry (Carpenter, 1972, pp. 862-869).

On balance, New York's restrictive trade practices proved to be a more effective regulator of competition from <u>within</u> the district while its ability to regulate <u>external</u> competition depended more on keeping its unit costs competitive with districts that had lower factor costs and often greater scale economies. What set New York apart from competing districts was its ability to augment its substantial traditional agglomeration economies with collective efficiencies created through collaborative collective bargaining. The magnitude of this advantage is apparent from the various studies conducted by NRA during the early 1930s and from the commanding lead New York maintained for decades over other districts in terms of its shares of domestic production and value added.

Los Angeles, by comparison, has benefited from the long-term shift towards casual fashion and the scale economies that are possible in sportswear manufacturing. Manufacturing units remain larger in Los Angeles than New York (an average of 22 employees in 2008 compared to 15 in New York), there are more large-scale manufacturers and contractors, and a larger fraction of output consists of the mass production of moderately-priced products such as

[10] It has also been suggested that Los Angeles growth in the 1970s and 1980s was driven by the rapid growth of contracting with unregulated sweatshops that substantially lowered the district's production costs (Light, 2006).

blouses and shirts. Unregulated competition and arms-length market relationships between manufacturers and contractors may also be a more efficient way of organizing production of medium-priced sportswear, than the more-regulated contracting relationships in New York, and there is some evidence that Los Angeles' opposition to market regulation may have given it a further cost advantage from the adoption of illegal sweatshop practices (Bonacich and Appelbaum, 2000; Light, 2006; Weil, 2007).

Viewed over the last century, late-developing Los Angeles market-based production strategy would seem to be superior to New York's more-regulated production system. It is presently the largest U.S. district, with more than three times as many employees as New York, a larger share of the remaining domestic output of women's wear, and a lower rate of job loss. However, New York is performing better than Los Angeles by measures such as productivity and pay and its surviving firms appear to be returning to the districts original model of craft-like production, "core" contracting relationships, and small establishments producing small batches of products with higher fashion content than Los Angeles. The apparel industry in both New York and Los Angeles has shown a remarkable ability to survive in the face of over forty years of rising import competition and it remains to be seen which market design has the better odds of survival in the future.

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