

The Market Makers

How Retailers are Reshaping
the Global Economy

Edited by

Gary G. Hamilton, Misha Petrovic, and Benjamin Senauer

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Global Logistics, Global Labor

Edna Bonacich and Gary G. Hamilton

Introduction: The Meaning of Global Logistics

“Wal-Mart’s business model does not work without us”—so said Professor John Liu, the Director of the CY Tung International Centre for Maritime Studies at Hong Kong Polytechnic University. The “us” to whom he referred are those people who specialize in logistics and maritime services. Liu was giving a tour of the state-of-the-art training center at his university, training that prepares technicians to deliver efficient, predictable, and low-cost service to global customers like Wal-Mart. The “basic tools of global retailing,” he continued, “are containerized shipping and the Internet.” He might have added a few items to his list of tools, but his point was well made. Global retailing and global logistics are so intimately and thoroughly interconnected that it is difficult to tell where one starts and the other stops.

Not so long ago, logistics meant simply the tasks of organizing and coordinating the transportation of goods.¹ Now practitioners have extended the term to cover the entire cycle of designing, ordering, placing into production, and transporting goods to final markets. The activity of integrating all aspects of this cycle is called “supply-chain management,” and supply-chain management is at the heart of the market-making successes of Wal-Mart and all other large global retailers.

The market-making competence of these retailers can be seen in their ability to organize their suppliers and service providers, backwards from anticipated demand, so that even the smallest factory making components for a contract manufacturer will respond quickly to the decisions that retailers make. Relying on point-of-sale (POS) data collected electronically, retailers make decisions about the future production of goods, specific product mixes for specific locations, delivery schedules, inventory flows, and a large assortment of other

issues. In effect, using electronic data interchange, or EDI, retailers determine what, when, where, and how manufacturers produce goods. This new system turns on its head the old ways of doing things, where manufacturers would produce in quantity and retailers would make selections and put in purchase orders in response to what the manufacturers were making. Nowadays, what is selling plays a big role in determining what actually gets produced. Production is geared to sales, rather than the other way around.

Logistics writ large, in the form of supply-chain management, is the essential ingredient that has allowed retailers to organize their suppliers and, thus, to gain an advantage over manufacturers. But this turnabout is only one aspect of what the transformation in logistics has produced. In this chapter, we focus on the new geography of the global economy, on expanding the boundaries of consumer markets while simultaneously shrinking the boundaries within which suppliers operate. This changing geography has created a new world of work, a world in which competition amongst retailers and their ability to set different price points for both consumers and suppliers directly influence the locations and organization of supply chains all the way down to the wages that distant manufacturers pay their workers.

With new logistical tools in hand, supply-chain managers constantly measure the efficiency and timeliness of all aspects of production, distribution, and sales. The concern over costs and time ultimately feeds back to the cost of labor in every link in the supply chain. One of the chief reasons retailers and merchandisers developed and made contracts with foreign suppliers in the first place was to escape the high cost of US and European labor. As time went on, however, a second and even more important reason to contract with foreign suppliers was for retailers and merchandisers to maximize control and flexibility over their supply chains. With such controls and flexibility in hand, retailers and merchandisers were free to expand their consumer markets around the world, testing one new location after another to see what consumer markets they could make.

As retailers grow larger and more global, they require ever more control and flexibility over their suppliers. The suppliers, in turn, are expected to turn out progressively larger orders of goods at decreasing costs per unit item. The retailers' expanding supply chains paradoxically have the effect of localizing manufacturing. Fewer places in the world serve as the primary locations for firms producing more and more of a particular kind of product. Supply-chain management identifies niches in the global economy in which competing firms can develop expertise and economies of scale, and, as this process occurs, manufacturing firms grow in size and in market power. As discussed in Chapters 8 and 9, huge contract manufacturers have emerged since 2000 to control sizable percentages of the global market in textiles (Nien Hsing for denim), garments (Li & Fung), consumer electronics (Hong Hai and Flextronics), and

footwear (Pou Chen).² The same process happens in nearly every sector of production in which large retailers and merchandisers predominate, including the production of food, as Chapter 10 shows.

The next chapters in this part document this process. To achieve maximum efficiency in time and costs, retailers need large-scale manufacturers and service providers that flexibly and responsibly do most of the tasks required to get a product into the store. Global logistics allows those manufacturers to be located anywhere in the world, in any location that offers retailers and merchandisers the most advantages in time and cost.

In this chapter, we take the process one step further. The same process that concentrates manufacturing in specific locations also reshapes the markets for skilled and unskilled workers. It is, perhaps, inaccurate to call these new markets for labor global in scope, because labor is not as globally mobile as the goods that labor produces. Still, supply-chain management makes the conditions and cost of labor at each link of the chain an object of calculation in assessing the efficiency of the overall chain. The globalization of manufacturing and logistics, therefore, has the effect of separating the control of labor from the actual conditions and locations of work. Supply-chain managers view labor, like any other component of the supply chain, as a factor that needs to be assessed and controlled, and manufacturers, wherever they are located, need to view their workers from the point of view of supply-chain managers, no matter how distant.

Moreover, these supply-chain managers measure logistical services in the same way they do manufacturing costs. The transportation and warehousing sectors must also keep their costs at a minimum, including their labor costs. Not only production, but also distribution workers' wages and working conditions must be kept in line in order to keep global production profitable from the retailers' point of view.

Logistics and Intermediary Demand

Intermediary demand is the demand generated by what Gary Gereffi (1994b) calls "big buyers," who are mostly retailers and trade-name merchandisers. As a Wal-Mart executive once said, "We don't sell to our customers; we buy for them." The same can be said of all other retailers and merchandisers: they buy goods in anticipation of what their customers will later buy. Big-buyer purchases create intermediary demand.

This intermediary buying comes in two forms. For many items, especially for in-store brands, retailers take control of their ordered goods at the site of production and arrange for the shipment of these goods to their stores.³ For other items, manufacturers and brand-name merchandisers control

supply-chain logistics for the branded products that end up in the retailers' stores. A strong indicator of both types of buying is found in maritime statistics.

Focusing only on ocean transportation of containerized products (which accounts for over 80 percent of the value of total imports in the USA, the remainder entering by air or land transportation across the borders), and only on imports to the United States, we can see the importance of imports and maritime services in retailers' management of their supply chains.⁴ In 2008, according to Leach (2010: 22), 17,121,000 TEUs (or 20-foot equivalent units, the standardized measure of container volume; one standardized container holds two TEUs) were imported into the United States, which in a recession year had declined slightly from the high point in 2006 (18,611,000 TEUs) to about the same volume of imports as in 2005. The *Journal* produces an annual list of the top 100 shippers (referring to importers, rather than shipowners, which are known as carriers) that import goods to the United States using ocean transportation. Of the total TEUs for 2008 (*Journal of Commerce* 2009: 22A), 720,000 TEUs, one out of every twenty-four imported containers, was brought in by Wal-Mart. The next biggest importer was Target, with 445,800 TEUs, and the third was Home Depot, with 300,400 TEUs. Thirty-six of the top 100 importers were retailers, as were six of the top seven, which in addition to the above included Sears, Lowe's, and Costco.

Amongst the top 100 importers were also foreign firms that manufacture electronic goods (for example, LG, Samsung, Panasonic, Cannon, Sony, and Hon Hai), brand-name merchandisers that contract firms to manufacture their products (for example, Nike, Jarden, Whirlpool, and Mattel), as well as a number of automotive companies, parts manufacturers, and food distributors (for example, Dole and Chiquita). All of these firms import goods for which they supervise the distribution. Giant retailers, however, stand out as the major maritime importers to the USA, with Wal-Mart being head and shoulders above the rest.

Wal-Mart's dominance of the importers' list is not new, and its lead has been widening, even in a time of recession. The giant retailer's growth as an importer can readily be traced during the first decade of the twentieth century. In 2001 the company brought in 260,000 TEUs. By 2003 the imports leaped to 471,600 TEUs, again in 2004 to 576,000 TEUs, to 695,000 TEUs in 2005. Although overall imports fell in 2008 from its high in 2007, Wal-Mart's total was 720,000 TEUs for both years. This rise in retailers' imports is not simply a Wal-Mart phenomenon, but rather reflects the tremendous growth of manufactured imports to the United States in recent years. Target's imports grew from 121,000 in 2001 to 445,800 TEUs in 2008, and Home Depot's rose from 80,000 to 300,400 TEUs over the same period.

To gain some perspective on these numbers, consider the last firm on the list of the top 100 importers, Dal-tile, a manufacturer of tiles that is owned by

Mohawk Industries. Dal-tile imported 10,900 TEUs in 2008, which is 5,450 full containers. That totals about fifteen containers every day of the year, each of which holds around 30 tons of goods. A lot of importers hover in this range. Now consider Wal-Mart, which receives and handles the distribution of nearly 1,000 containers, totaling about 30,000 tons of goods, every day of the year. The ability to manage these imports and get the products to the right store at the right time is truly the triumph of modern logistics and of Wal-Mart's mastery of its supply chains.

The retailer statistics tell only part of the story. These figures reflect only the containerized products that are imported by the retailers themselves. The retailers also receive imported goods from brand-name merchandisers that contract with other firms to make their goods. Nike appears on the list of the 100 importers as a manufacturer. The athletic shoe producer and retailer, however, does not own its factories, is well known for offshore contract manufacturing, and has become the target of several major anti-sweatshop campaigns. Bringing in 70,200 TEUs in 2008, Nike ranked eighteenth on the list of importers. Other brand-name merchandisers include Mattel Inc., a toy manufacturer, which sells the largest proportion of its toys through Wal-Mart, even though Mattel does its own importing. It is ranked thirty-eighth amongst the top 100 in the *Journal of Commerce* list, bringing in 35,900 TEUs in 2008. Another example is Jarden, a little known factory-less company ranked fifteenth on the list of importers (80,500 TEUs) that contracts and sells well-known branded products (for example, Mr Coffee, Sunbeam, Oster, Crock Pot, and Coleman, amongst others) to a large variety of retailers. And there is Whirlpool, a well-known manufacturer of home appliances, which is ranked twentieth on the list and which imports a large number of component parts and branded products, including KitchenAid, made elsewhere also in factories that it does not own. Wal-Mart and the other large retailers can be seen as "indirectly" importing goods like those produced by such brand-name merchandisers.

As these figures suggest, a very large percentage of all imports worldwide arrive by sea. Although airfreight is rapidly growing as well, container shipping remains the cheapest and often the most convenient mode of transporting goods, and, as John Liu noted in the opening paragraph of this chapter, containerized shipping is a "basic tool of global retailing." Indeed, they both grew up together.

In 1956, a year after the shopping center construction boom started, the first maritime shipment of containers occurred on a voyage between Newark and Houston. After that opening, the success of containerized shipping was rapid, although it was not until 1966 that competing carrier companies could agree on standardized containers (Levinson 2006). Once standardization had occurred, however, and the risk of competing systems vanished, investments

began to pour into ships, ports, intermodal connections, railways, and trucking, so that, by the mid-1970s, the world's major ports were container ports capable of accommodating larger and larger container ships. And, in general, the size and importance of these ports followed the size and importance of international trade in those locations that followed supplier markets for global retailing.

In 1969, the list of the world's largest container ports listed only one Asian port, Yokohama, in seventh place, which had about four times less volume than first place New York (Levinson 2006: 209). By 1980, New York continued to top the list, but three of the top five were Asian ports: Hong Kong, Kaohsiung, and Singapore. Ten years later, in 1990, four out of the top five were Asian ports (Kobe, in addition to the three above), and New York had dropped to ninth place on the list. In 1998, the container port in Shanghai joined the top ten for the first time; the port in Hong Kong, listed amongst the top ten since the early 1970s, reverted to China with the retrocession in 1997. By 2000, New York had slipped to fourteenth place on the list, and five of the six largest ports were in Asia, including Hong Kong and Shanghai. By 2008, all the top five were Asian ports and New York had fallen to twentieth place on the list. Of these, three of the top five and seven of the top twenty ports were Chinese (in order: Shanghai, Hong Kong, Shenzhen, Ningbo, Guangzhou, Qingdao, and Tianjin).

The Rise of China

In 1980, the USA imported \$1.1 billion worth of goods from China, far below Taiwan's US-bound exports valued at \$6.7 billion. By 1990, despite a decade of rapid growth in US imports from Asia, China still exported only a little over \$15 billion of goods to the USA, by which time Taiwan's exports to the USA had grown to about \$22 billion. After 1990, however, China's exports to the USA (as well as to the rest of the world) leaped forward to over \$45 billion in 1995, \$100 billion in 2000, \$243 billion in 2005, and \$337.8 billion in 2008. In 2008, China's trading surplus with the entire world was \$295.5 billion; in the same year, China's trading surplus with the USA was \$266.3 billion—the largest trade deficit ever seen between two countries.⁵

The rise of China reflects a rapid consolidation of global manufacturing. In the decades preceding China's rise, Japan, Taiwan, Hong Kong, and South Korea became, increasingly, the primary locations where US retailers and brand-name manufacturers located suppliers for the consumer goods that they would, in turn, sell to their customers. As the previous chapter shows, US retailers and their buyers had taken an active role in creating suppliers that could competently provide the right goods at the right time at the right price.

East Asian manufacturers reacted rapidly to this opportunity to make money off the global economy by becoming better and better suppliers. In response to this intermediate buying, as Feenstra and Hamilton (2006) show, each of these East Asian economies began to diverge through supplying different products and through developing its own specialized production networks to make those products.

This divergence accelerated after 1985, when the Plaza Accord led to drastic upward re-evaluations in East Asian currencies, relative to the US dollar, which forced many Asian suppliers to shift the site of their low-end manufacturing to locations where labor costs were not so high. At first, in the late 1980s and early 1990s, Japanese and Korean manufacturers of labor-intensive products moved their production lines to South East Asia and Latin America. Japan's move to South East Asia was so extensive that Japan appeared to be building "a regional production alliance" (Hatch and Yamamura 1996). By 1985, facing higher property and labor costs, Hong Kong manufacturers had already begun to move their production facilities to the Pearl River Delta region in China. After hesitating for several years and experimenting with South East Asian sites, Taiwanese manufacturers followed suit. Starting in earnest in the early 1990s, waves of Taiwanese suppliers moved to China, often after having been encouraged, and some even required, to do so by US retailers and merchandisers.

In the 1990s, suppliers often split their production facilities. The labor-intensive production went to low-wage regions where the manufacturers could get the best deals: cheap land, low taxes on exports, no unionization for labor. The production of "up-market" products usually remained in the home country. The 1990s were also a time when production of high-technology products took off, and the production of high-technology components and products pushed Taiwan's and South Korea's economies to new heights. In large part, the success of Taiwanese and South Korean manufacturers resulted from their close collaboration with US retailers and came at the expense of Japanese manufacturers, who became their suppliers of technology-intensive component parts, such as flat-screen panels.

The Asian financial crisis in 1997 marked the beginning of the end of this growing Asian divergence in the products that East Asian countries produced for Western suppliers. As many economies in East and South East Asia collapsed, global retailers and East Asian suppliers began to consolidate, respectively, their sourcing and their manufacturing, in China. During this period, China had demonstrated not only financial stability, but also a willingness to join the World Trade Organization and to conform to WTO rules governing trade, which appeared to lessen the risk of investing in China. This conjuncture of events led to huge increases in foreign direct investment (FDI), which flowed into China from neighboring countries, led by Hong Kong and

followed first by Taiwan, then Japan and South Korea. Japanese and South Korean investments poured into northeastern China, which could easily be reached by ship via the Yellow Sea. Hong Kong and Taiwan investment initially went into the Pearl River Delta, but later also flowed into the area around Shanghai. In the opening decade of the new millennium, China became the site of the world's leading manufacturers and exporters of consumer products.

In the ongoing debate in the USA and Europe about whether China's economic policies are unfairly taking advantage of the rest of the world, very few analysts discuss the role of global retailers and foreign manufacturers in China. Nonetheless, more than any other single factor, global retailers drive China's exports. More than 50 percent of China's exports come out of firms not owned by Chinese nationals (Blonigen and Ma 2010). To this total, we can add the exports of many other firms that local Chinese do own and operate. It is obvious that very few Chinese firms make any markets in any products outside China, and so it is equally obvious that global retailers, brand-name merchandisers, and a range of trading companies acting as intermediaries between retailers and manufacturers control most of the market making for Chinese exports.

Offshore Production and Logistics by Retailers

This realization leads us to the following question: what is the relationship between global retailers and their suppliers in China? Neither retailers nor brand-name merchandisers typically own production facilities. Instead, both arrange with contractors for the production of their goods. Brand-name merchandisers obviously need to maintain some control over the design and perhaps even over the manufacture of their branded goods. Retailers, however, would appear to have a different relationship to their suppliers. A common assumption is that the relationship is merely arm's length, that retailers merely purchase whatever they want to sell from suppliers of those products, with very little if any intervention into the process of design and manufacturing.

This may once have been the case, before extensive contract manufacturing began. But, in recent decades, this distinction between retailers and brand-name merchandisers has virtually disappeared. For one thing, most global retailers have successfully developed private-label (or store-label) programs, where they arrange with manufacturers or contractors to produce their own label. The result is not very different from the kind of arrangements used by merchandisers like Nike to get their goods produced.

To try to understand the degree to which retailers are involved in production in Asia, Bonacich interviewed an important executive of one of the giant retailers that imports products from Asia and that is fairly high on the list of top maritime shippers. This person was extremely helpful, but wished to remain anonymous. The person explained the approach of the giant retailers to offshore sourcing in Asia. Bonacich asked whether retailers are involved in Asian production only when they are producing their stores' private label. The executive disagreed:

We are involved in all production in Asia, not just private label. We engage in the direct importing of both private label and branded goods. We work with the producers, oversee the production of our goods, and set up specifications for our products. It makes no difference whether the products are branded or private label. In neither case do we own any factories, so we are always dealing with someone else's factories.

This particular retailer has a private-label program that it began about a dozen years ago. The executive calculated that, if the retailer can get 20 percent better value in a private label than in a branded product, and better quality at the same time, it switches to private label. It then benchmarks the private label against the brand. Usually the retailer sells the brand right next to the private label. Essentially this tactic shows the brand-name merchandiser that its prices are too high. Pitting lower private-label prices against brand prices can play a role in driving down industry prices. It seems reasonable to assume that this has implications for labor standards in these industries as well.

When this retailer started outsourcing in Asia, it used a broker in the US that worked with a trading company in Asia. But now the retailer's policy is to try to get as close to the factory as possible and to limit the role of brokers and other middlemen. "We don't have our own offices in Asia, but some Asian companies are big enough that they serve as their own broker; so we can buy directly from them." In contrast, Wal-Mart has its own offices in Asia. In our informant's experience, it is the department stores that especially use buying agents. They form consortia for group purchasing. The big-box retailers are generally trying to get rid of all unnecessary middlemen.

How does this retailer use logistics effectively? First, the retailer uses POS data only for replenishment of items that are selling well. When it decides to try a new item, it uses its sales history elsewhere to determine the size of the order. The use of electronic data interchange (EDI) is still growing in Asia, according to our informant. One of the problems is a lack of a common standard. Thus, this retailer does not directly use EDI (or vendor-managed inventory (VMI)) for interacting with Asian suppliers. EDI is used extensively in the USA, noted the executive, and its use will soon be extensive in Asia too.

“Eventually the vendor and retailer community will develop a communications network to standardize ordering at an international level.”

This retailer uses “just-in-time” practices for anything manufactured locally. It has daily and sometimes twice-daily deliveries. The company president has ordered that there should be only one day’s worth of sales on the floor. This practice has allowed the company to reduce its number of stock-keeping units (SKUs) or specific items. Imports, by contrast, are planned inventories. They are rotated into the stores by SKU. They can be seasonal, like furniture, which is not replenished and involves a one-time buy, or they can be constant throughout the year, like men’s shirts, which are restocked on a regular basis.

Bonacich asked Jon DeCesare, CEO and President of World Class Logistics Consulting, what he thought about the use of advanced logistics practices by the big box retailers in Asia.⁶

The big-box retailers vary a great deal in their sophistication, so you can’t generalize. They make general forecasts, and then fill in the details using POS data. In terms of sophistication, Wal-Mart wrote the book, and rewrites it every day. Target is trying to keep up, as is Best Buy and Home Depot. For example, Target will budget shelf space for a certain product, and they lose money if it isn’t there on time. They reckon they save \$100 million for every day they can take out of the transit time. So the supply chain is incredibly important to them. But what they mainly seek seems to be visibility, not replenishment orders. They want to make sure that goods are moving as planned. They want a glass pipeline. They want to be able to see where their SKUs are.

He thinks Asian manufacturers often do not have direct EDI connections, where POS data are transmitted electronically to the producer so that it can take charge of the retailer’s replenishment needs, as is the case with many US suppliers. Rather, the retailers’ inventory control departments get the POS data, make adjustments to orders, and then send them out. The producer then has to be flexible in supplying the goods to the retailers. Essentially, the retailer “outsources” inventory management to the producers.

An example is Huffy Bicycles, made in China, said DeCesare. Wal-Mart may order 50,000, which are then delivered to a Huffy warehouse in the USA. Wal-Mart then asks for them on a just-in-time basis—in smaller lots, like 5,000. But they also have the power and flexibility to tell them that they do not need any more after they have received 30,000. Then Huffy is stuck with 20,000 bicycles, which it has to figure out how to unload. “This is a common scenario,” says De Cesare. Hamilton’s interviews with bicycle manufacturers in Taiwan and China confirm this picture. In fact, one manufacturer complained bitterly about having to pay storage fees in the USA until Wal-Mart assumed ownership of the bicycles, which occurred only at the point of sale.

The Impact of Retailers on Labor in Production

The marriage between retailing and logistics has had substantial effects on labor markets around the world. Giant retailers use their considerable size and economic power, directly and indirectly, to pressure manufacturers and service providers to improve their efficiency and to lower their costs, including, importantly, their labor costs. They also exercise their influence on labor standards in both supplier and consumer markets to push for government and corporate policies that make labor a flexible component of supply-chain management. Retailers' influence has the effect of moving the site of control over labor from the place of work (for example, the shop floor, the factory) to the supply-chain managers, who make the crucial decisions about which firms supply goods and services and at what cost.

It is important to recognize that this shift in the locus of control over labor does not necessarily lower labor standards. Nor is it, necessarily, the intention of retailers to do so. In the effort to make supply chains more efficient and flexible in terms of quality and cost of goods and speed of delivery, retailers help to “modernize” the economies of developing countries. They force firms in both developed and developing countries to rationalize their production and distribution methods. Also, through codes of conducts, which they typically post on their websites, retailers and brand-name merchandisers may even improve the conditions and increase the wages of workers in those firms relative to what they are in other firms in the same location (see our discussion on this point below). However, whether they improve the conditions and wages for workers or not is an ancillary outcome of the retailers' most important task, which is efficiently and effectively to manage their supply chains. And, insofar as they do so, then the supply chains, as well as the economies in which they are embedded, become demand responsive—that is, they become effectively organized backward from demand to supply.

The extensive use of contract manufacturing, or outsourcing, is known as “flexible production.” It is typically praised because it encourages production on an as-needed basis (limiting the costs of inventory accumulation), and avoids overproduction of unwanted goods that cannot be sold. Moreover, it allows for the production of small batches of specialized goods that can be targeted for specialized consumer groups and tastes. Flexible production is associated with product differentiation, with the multiplication of styles of products (and SKUs) of the same brand, such as the array of types and colors of iPods a customer can buy from Apple.

Flexibility, or contingent relationships, works well for retailers, but makes life difficult for the contract manufacturers and service providers. In turn, flexibility also makes life more difficult for the employees of these firms, employees who face increased contingency in the form of piece-rate,

temporary and part-time positions, independent contracting, and so forth. These irregular forms of employment have grown enormously in the United States in recent years. Contingent workers often suffer from a host of ills, including not only irregular work, but also low pay and the absence of benefits. Big, stable companies lend themselves to unionization. Contingent relations make unionization much more difficult. With contingent connections, big buyers can effectively shut out unionization by shifting work to contractors in regions or countries where they will not have to deal with “labor problems.”

The shift in the locus of control over labor to supply chain managers means that direct employers (the factory owners) cannot support worker organizations that would undermine their ability to meet the price and quality demands of big buyers, lest they lose their contracts. Contract manufacturers are, therefore, highly motivated to keep unions out of their factories by any methods whatsoever. Similarly, regions, export-processing zones, even entire countries face the same basic logic: if organized labor becomes a force that can improve wages, benefits, and working conditions, then contract manufacturers will become less competitive and will have to move to new locations to retain their contracts with retailers. In fact, as the next chapter shows, contract manufacturers often maintain factories in multiple locations, which allow them to shift production from one site to another, as conditions require.

Rural Migrant Labor in Southeastern China

The system of labor that has emerged in southeastern China is a good illustration of the indirect impact that retailers have on the conditions of workers engaged in manufacturing. Southeastern China, especially the large area in the hinterland of Hong Kong and Guangzhou in the Pearl River Delta, is the most important of China’s three main export-producing areas. Many manufacturers from Hong Kong and Taiwan have located their factories in this region, and many Chinese firms have grown up in this area to supply services and component parts for these foreign-owned factories.

This area of Guangdong province has also been the site of a number of studies investigating worker conditions in these factories. Because these foreign-owned factories are responding to greatly expanded orders for goods, the factories have grown very large and the number of workers employed is huge when compared to the size and employment figures of these factories before they were relocated to China. For example, as described in Chapter 6, the footwear manufacturer Pou Chen was only a medium-sized firm in Taiwan before it began to move its manufacturing operations to China in the 1980s. As reported in Chapter 9, Pou Chen, whose Mainland name is Yue Yuen, now

employs over 100,000 people in its Guangdong factories, around 80,000 of which are employed in one factory alone.

Because so many workers are required for these factories, in 2009, analysts, relying on Chinese government data, estimated that over 150 million rural migrant workers have moved from China's interior provinces to the coastal provinces where the export-oriented factories are located. The largest ratio of rural migrant workers to local residents is found in the Pearl River Delta, "where some 20 million rural migrant laborers live and work" in this relatively small area (K. W. Chan 2009: 11). These migrants, who make up most of the labor force for export industries, are denied the rights of urban residents and are forced to be temporary migrants moving back and forth between the countryside and the city.⁷ According to Kam Wing Chan (2009: 10):

The denial of local hukou (residency rights) to migrant workers, combined with their plentiful supply and lack of access to legal information and support, has created a large pool of super-exploitable, yet highly mobile or flexible industrial workforce for China's new economy, catering to global consumers . . . [The policy] has served very well China's economic growth strategy of being the world's "most efficient" (lowest cost) producer . . . China can continue to draw labor from rural to urban areas and export-processing zones without having to raise the wages much above the rural-subsistence level.

The "China price" is based on China's low labor costs, which result directly from China's policies to maintain this very large pool of temporary workers who are least able effectively to organize to secure their labor rights (A. Chan 2001).

Because most workers in China's export-processing factories are migrants, the factory owners typically provide large dormitories to house their employees with "anywhere from eight to twenty workers per room" and large cafeterias to feed them (Pun 2009: 158). These dormitories are close, and often even attached, to the factories themselves. The majority of those living in the dormitories are young, single women. These workers have little to no privacy, are closely supervised, and are required to follow the rules and regulations set forth by the owners. According to Smith and Pun (2006), the "dormitory labour regime" is unlike the dormitory system found in the paternalistic textiles factories in nineteenth-century Japan, which was set up to house single female workers fulfilling multi-year contracts. By contrast, in China, the dormitory system provides short-term facilities for temporary workers. These workers work seasonally and intensively, often preferring to work overtime to earn as much money in as short a time as possible. They provide the factory with a highly flexible labor force that offers, as a rule, little resistance to the demands of management. With this system of labor control, argues Pun (2009; see also Smith and Pun 2006), factory owners can lengthen the work day, suppress wage demands, access labor on a just-in-time basis, exert direct

controls over the labor process, and rely on government policies and rural families' need for money to replenish the supply of temporary migrants.

Codes of Conduct and Monitoring

This system of labor control is closely connected to the purchasing system that retailers and brand-name merchandisers have developed over time. Retailers and merchandisers are reluctant to hold inventories of goods, and thus they push inventory management down into the factory, where just-in-time production becomes a necessary condition for getting contracts. Factories, as well as the Chinese government itself, have responded to this evolving system of export production by developing a just-in-time workforce that is capable of responding to big buyer demands.

Retailers do not want to be labeled as creators of "sweatshop-like" conditions in factories making products that they have ordered. Fearing the consequences of a bad reputation, most retailers and merchandisers have devised codes of conduct and systems of oversight that are supposed to ensure compliance from their contract manufacturers. These codes of conduct are typically posted on the website of these firms, so that all interested parties can see them. In addition, many of these companies have banded together to form, in the United States, the Fair Labor Association (FLA), which promotes the independent monitoring of the global supply chain to prevent labor abuses. Another group, which began in the United Kingdom but has a global orientation, is called the Ethical Trading Initiative (Birchall 2007).

Researchers, investigating the extent to which contract manufacturers in China have implemented these codes of conduct, have come up with counter-intuitive results. Sum and Pun (2005) find three paradoxes that are outcomes of the adoption of codes of conduct. First, the competition in contract manufacturing to engage in "just-in-time, low-cost and fashion-conscious production," on the one hand, and the big buyers' requirement to implement extensive codes of conduct for labor, on the other hand, have led manufacturers to use "compliance with labor codes" as a marketing strategy to obtain more and larger contracts (Sum and Pun 2005: 197). The name of the contract manufacturing game is to obtain the contracts in the first place, and, for this task, adopting a code of conduct is useful, if not necessary.

Second, codes of conduct are doubly useful as a tool to "encourage workers to cooperate with management to avoid the loss of contracts and hence future employment opportunities" (Sum and Pun 2005: 197). Summaries of the codes of conduct are posted on the walls of the factories, where they are visible to inspectors. In relation to outsiders, such as big-buyer and third-party inspectors, managers encourage workers to enter into a "tactical alliance" that

protects the factory from social auditing by outsiders. Workers are trained to answer questions in ways that comply with the code of conducts, even though the actual conditions of work are quite different.

Third, outwardly adopting a code of conduct requires contract manufacturers to develop “elaborate managerial and audit/documentation systems to defend the [contract manufacturer] against charges of infringing the Code . . . [Hence] more effort goes into paperwork than into actual advancement of labour rights protection” (Sum and Pun 2005: 197).

The weakness of the codes-and-monitoring system goes beyond China, as is shown in an October 2006 revelation that Tesco (the giant British retailer that belongs to the Ethical Trading Initiative) was producing clothing in factories in Bangladesh that employed children. According to a *Financial Times* reporter (Birchall 2007), “the case illustrated the limits of systems established to monitor conditions in sectors such as clothing, footwear and toys. Wayward factories have become adept at covering up abuses, and even when monitors flag problems, little progress seems to be made in reducing them.” A study (described in the same article) that investigated the effectiveness of the Ethical Trading Initiative found that monitoring has helped to eliminate child labor and improve factory safety, but has had little effect on the rights to form unions and to achieve any job security.

Neil Kearney, of the International Textiles, Garment and Leathers Workers Federation (ITGLWF)—a federation of trade unions in these industries from around the world—puts these efforts in perspective:

These [multinational] companies adopt codes of conduct, some of them in very nice language, but then they negotiate deals which make it impossible for their contractors to honor the codes. The companies say to the contractor, “Please allow for freedom of association, pay a decent wage,” but then they say, “We will pay you 87 cents to produce each shirt. This includes the wage, fabric, everything.” (cited in Varley 1998: 95–8)

As a leader of an anti-sweatshop group put it: “If retailers are not willing to change the way they deal with their purchasing practices and be transparent about that, then codes will never be effective” (Birchall 2007).

US retailers can play a critical role in the reproduction of sweatshops, whether they intend to or not. The sheer size of their ordering power, coupled with huge competitive pressures amongst contractors and intermediaries to win the work, create a breeding pool for sweatshop proliferation. Most important, however, is the determination of retailers to cut costs to the bare bone, which leaves little room for contractors to maintain labor standards.

As an example, let us briefly consider Wal-Mart’s relations with its suppliers in China, the country where most of its offshore production is located. The home office of Wal-Mart Global Procurement is in Shenzhen, China. By locating

there, the company could exercise great oversight over its suppliers and over the factories they use (Useem 2004). Wal-Mart, however, is not just a passive recipient of Chinese-produced goods, but an active producer of those goods. The company is a major actor in China, not only as an expanding retailer, but, perhaps more importantly, as a shaper of production. Ex-store manager Lehman, interviewed for the television program *Is Wal-Mart Good for America?*,⁸ reported that the company's pressure to cut production and shipping costs is just as intense in China as in the United States. The "natural" cheapness of Chinese production is not enough for Wal-Mart. The company puts pressure on already poor conditions to lower them still further.

Wal-Mart's procurement staff members are constantly making deals with hundreds of Chinese manufacturers on a daily basis in order to produce goods tailored to Wal-Mart's own stringent specifications; these include pricing, quality assurance, efficiency, and delivery. Wal-Mart is also known to demand that its suppliers change their bookkeeping systems and improve their logistics to meet rigid delivery schedules while maintaining the lowest price margins. In exchange for Wal-Mart contracts, Chinese companies are often required to open up their books to Wal-Mart, and cut prices where necessary, if Wal-Mart decides the supplier's profit margins are too large. Wal-Mart demands rock-bottom prices and forces its clients to cut costs in order to remain in contention for export orders.⁹

In a *Wall Street Journal* article of November 13, 2003, author Peter Wonacott tells the following story. Ching Hai is a contract manufacturer that produces juicers, fans, and toasters for some of the largest retailers, with Wal-Mart as its largest client. Over the previous decade, the average wholesale price for Ching Hai's products had almost halved, from \$7 to \$4, in order for it to continue doing business with the stringent cost demands of Wal-Mart. Wal-Mart's Chinese producers have had to find ways to lower their costs, which often leads to further demands on their labor force. Ching Hai was forced to cut its labor force in half, while maintaining the same level of orders. The company had a starting wage of \$32 a month, which was lower than the local minimum wage, and a high rate of workplace accidents, and many employees had to work eighteen-hour days. In spite of all the cost-cutting efforts, the company was barely profitable. Pun and Yu (2008) also found a similar relationship between Wal-Mart's procurement practices and the codes of conduct that Wal-Mart wants its suppliers to follow.

In December 2006, a Hong Kong-based group, China Labor Watch, accused Wal-Mart of using suppliers that failed to pay legal wages or to provide proper working conditions.¹⁰ The group surveyed 169 employees at 15 Wal-Mart suppliers in China and found that some of them paid workers as little as half the minimum wage, threatened to fire workers if they did not comply with mandatory overtime, and provided no required health insurance. One

company had a single bathroom for 2,000 workers. Some of the firms fined employees as much as an hour's pay for arriving one minute late to work. And some were behind in paying wages.

Labor in Distribution

The process of importing requires various types of labor, including: the work of seafarers on the container vessels; the work of longshore and other dock workers; the work of railroad employees, who move the cargo inland; the work of truckers, who transport ocean containers to railheads and warehouses in the vicinity of the ports, where they are transloaded for trucking to inland destinations, and the work of warehouse and distribution center employees. These workers are the backbone of the logistics system. They are the people who enable the containerized freight to arrive safely, accurately, and in a timely manner at your local retail outlets.

Statistics show that US logistics costs have declined significantly since the early 1980s. They dropped from around 14.5 percent of GDP in 1982, to 8.5 percent in 2003 (Wilson 2004). The logistics industry prides itself that the reason for this shift lies in all the efficiency gains of supply-chain management. Inventory costs have been cut, and so have the costs connected with most of the modes of freight transportation. Yet we can ask, how much have these gains been made at the cost of workers? In their study of these questions, Bonacich and Wilson (2008) found that, in general, conditions have worsened for logistics workers.

US seafarers used to have strong unions, but their jobs have been almost entirely outsourced. Steamship companies, which transport containers across the ocean, often use what are called "flags of convenience." This involves registering ships in countries like Panama and Liberia, where there is little or no regulation of conditions on board the vessels. In addition, the steamship lines employ crewing companies to recruit seafarers, often from the poorest countries of the world. While container ships can be cleaner than some other types of ships, seafarers work for longer hours, as well as much longer tours of duty, than did US unionized workers. Of course, their pay is a fraction of the earlier system.

Longshore workers still have good jobs, at least on the Pacific Coast, where the International Longshore and Warehouse Union (ILWU) continues to have considerable clout. The steamship lines and terminal operators that employ the dock workers, organized as the Pacific Maritime Association (PMA), have made serious efforts to undermine the union. In 2002, during a contract dispute, they locked ILWU workers out, and brought the Pacific Coast ports to a halt for eleven days. The lockout failed to break the power of the union,

though it did gain some technological concessions for the employers (Olney 2003). However, the union is always under threat, as some very powerful forces are arrayed against it.

As suggested above, trucking can be divided into a number of types. Here we focus on one particular area of trucking—namely, port drayage. These truckers haul containers from the ports to their first drop-off point. In Southern California this drop-off point is typically either a railhead, where the containers are loaded onto a train to be shipped to the Midwest or East, or a local warehouse or distribution center, where the container is unloaded and the goods are prepared for further shipping to their ultimate destinations.

The truckers engaged in port drayage, or port truckers, used to be members of the International Brotherhood of Teamsters (IBT), but their jobs have been deunionized. This occurred when trucking was deregulated in the late 1970s and 1980s by the federal government, and many drivers were converted from employees to independent “owner operators.” In fact, port truckers still work for trucking companies, but as so-called independent contractors, which means that they have to own their own rigs and pay for upkeep and insurance. The switch to non-union truckers was accompanied by a shift from largely native-born to immigrant drivers. Having broken the union in this field, the employers switched to a lower-cost labor force.

The railroads have a long history of unionization, and unions are still prevalent in the industry. But railroad workers have been heavily impacted by efforts to cut the cost of freight train operations. The principal form that labor cost cutting has taken is the elimination of thousands of jobs. The consequence has been that railroad workers have to adapt to difficult work schedules and to increased danger of accidents.

In terms of warehousing, a major agglomeration of warehouses and distribution centers has been developed just east of Los Angeles County, in the Inland Empire counties of San Bernardino and Riverside. All the giant retailers, as well as many smaller ones, maintain import warehouses there. Wal-Mart, Target, Home Depot, Costco, Sears, Walgreen’s, Staples, Kohl’s, Toys “R” Us, Big Lots, and Ross Stores are amongst the retailers that run distribution centers in the area. One of the reasons for locating in this area was the availability of relatively low-cost land and abundant space for new construction. But another reason is the relatively low-wage, mainly non-union labor force that lives in the area. In addition, a huge temporary labor industry has now grown up around these distribution centers to provide them with contingent workers on an as-needed basis.

In examining the various groups of workers involved in the logistics system, Bonacich and Wilson (2008) came to the conclusion that there were four key features of the changes that had occurred for workers in the previous twenty-five or thirty years. First, labor has been made more contingent, even

precarious. This precariousness is especially true for seafarers (crewing contract workers), port truckers (independent contractors), and warehouse workers (temporary employees). Second, workers have suffered from racialization; that is, they are more likely to be racial and ethnic minorities who are willing to work for less under more difficult conditions than whites. Third, unions have declined in most of the jobs, with the exception of dock and railroad workers. Finally, wages and working conditions have generally deteriorated, with, for example, much lower earnings for port truckers and seafarers, fewer and more dangerous jobs for railroad workers, unsteady work for seafarers and port truckers, and so on.

Role of Retailers in Lowering the Cost of Logistics Labor

It is difficult to trace the exact line of retailer pressure to reduce logistics costs, and the impact on workers. At one level, this pressure is compacted into a single transaction: the rates paid to the steamship lines for ocean shipping. Every year these rates are negotiated, and pressure is put on the steamship lines to push the rates down.

The steamship line rates are so important because they often encompass railroad and trucking costs. The steamships frequently offer door-to-door rates, where a single fee covers the entire cost of transportation from a Chinese port to the importer's warehouse in the United States. The lower the rate negotiated with the ocean carriers, the lower is likely to be the rates that are paid to the railroad and trucking companies, which in turn translates into pressure on wages and working conditions all along the line.

The big retailers are known for their ability to get special rates from the transportation community. They can leverage their huge volume to their advantage. Wal-Mart, for example, pays a significantly lower rate than the average-sized importer. The giant retailer "makes the market" on setting the price for the lowest ocean freight rate, and other importers bargain with the steamship companies relative to Wal-Mart's price.

The clearest evidence of retailer interference in logistics labor costs came with the 2002 West Coast ports lockout. In order to "reform" labor conditions at the ports, and reduce the power of the ILWU, a new group was formed called the West Coast Waterfront Coalition (WCWC). (The group persists as The Waterfront Coalition, or TWC.) This group, amongst which large retailers, including Wal-Mart, were prominent members, played an important role in helping to pressure the PMA (and the Bush administration) to take a firm stand against the ILWU in labor negotiations. Giant retailers, who have so much at stake in the cost of logistics, wanted to ensure that their interests were strongly pursued.

Conclusion

The continuing advances in global logistics have allowed global retailers to control their supply chains as if these supply chains encompassed a single, vertically integrated firm. The scope of these supply chains now spans the globe. All economies with any connections to global trade feel the effects of supply-chain management. To a lesser or greater extent, all these economies are reshaped organizationally through these supply chains.

It is, therefore, a fair question to ask at the conclusion of this chapter, to what extent can we describe global trade in a world so organized as “free trade”? In conventional terminology, free trade connotes trade that is unencumbered by government regulations, such as tariffs and tightly controlled financial systems that fix rates amongst currencies. If that is our definition of free trade, then, indeed, a trading world organized through retailers’ supply chains is, by definition, free trade. But, if we add to this definition considerations of monopolistic and oligopolistic restraints on exchange opportunities, then we see that the huge market-making power of retailers channels the flow of goods and encumbers all those who, in some way, touch those goods. We should see this condition as the opposite, rather than the epitome, of free trade.

The global economy is increasingly an organized economy, organized backward from POS information of consumers around the world. Nations may argue over the conditions of trade between countries and try through multi-lateral and bilateral agreements to correct problems that may arise in the course of balancing national accounts. But most of these arguments evade the central point of how economies get organized and stay organized. We do not live in a world that David Ricardo would recognize when he developed the notion that nations each have their own comparative advantages and that, if trade were unencumbered by tariffs, trade would naturally move toward an equilibrium. Rather we live in a world of competitive advantage, where nations and firms create their own advantages and exploit them, if they are able, at the expense of other nations and other firms.

The market-making perspective developed in this book helps us see that market making is not a benign process. The creation of one set of opportunities for exchange has the potential to influence and even to shape other opportunities for exchange. As retailers have grown larger and have harnessed global logistics to their advantage, they increasingly structure the opportunities for exchange, not only for consumers, but also for manufacturers, service providers, and workers around the world. At present, retailers wear this cloak of responsibility very lightly.