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Sourcing Dynamics, Workers' Rights, and Inequality in Garment Global Supply Chains in India

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Executive Summary

Global Supply Chains and Inequality

- **Global Supply Chains and Development:** For many poor countries, the pathway toward development begins with insertion into garment global supply chains. Today 60 percent of trade is through global supply chains. Yet, far too many countries remain in low wage, unequal development ruts decades after promoting garment exports.

- **Global Supply Chain Power Imbalance:** One reason for this persistence of inequality and underdevelopment is the growing power imbalances between buyers and suppliers, which, in turn, has had an adverse impact on workers. Buyers squeeze suppliers in terms of price and speed to market, and suppliers, in turn, squeeze workers in terms of wages, hours of work, and work intensity.

- **Growing Inequality:** As one illustration of how this power imbalance impacts inequality, the current net wealth of the CEOs and owners of five top global buyers (Zara, C&A, Walmart, H&M, and Uniqlo) are each worth more than the value of all Indian garment exports, valued at USD 18 billion in 2016. Jeff Bezos (CEO of Amazon) now makes more in one second than the average Indian garment worker earns in a year.

The Sourcing Squeeze on Suppliers

- **Price Squeeze:** The real dollar price paid by buyers for apparel exported from India to the United States between 1994 and 2017 declined by 62.81 percent. From 2010 to 2017, the real dollar price of blouses made of synthetic fabric exported to the E.U. declined by 31.93 percent. And from 2006 to 2018, the real dollar price paid by buyers for cotton t-shirts declined by 41.14 percent.

- **Speed to Market and Payment Squeezes:** Between 2012 and 2017, average lead times – the time given to suppliers to source fabric and other inputs and make and ship an order – shortened from 87.39 days to 77.67 days. This is a speed-to-market squeeze of approximately 11 percent. During this same period, the time buyers took to pay suppliers after orders shipped increased from 47 days to 54 days.

- **Declining Profit Margins:** From 2012 to 2017, suppliers reported that their average profit margins declined by 28.41 percent, from 13.20 percent to 9.45 percent. Thirty-nine percent of suppliers indicate that they accepted at least one order below the cost of production during the past year. Eighty percent of suppliers say that buyers change order specification often or sometimes *after* a production cycle starts.

The Squeeze on Workers

- **Below Subsistence Wages:** The survey data indicate that, on average, male workers total take home pay (including overtime hours payments and bonuses and after deductions) was USD 162.23 per month. Female workers' average take home pay was USD 113.69 per month. Ninety-six percent of women said their straight wages did not cover their living expenses.

- **Forced and Unpaid Overtime:** Sixty-three percent of workers said overtime work was sometimes or always obligatory. Thirty-two percent of workers indicated that they were not paid the legal overtime rate of 200 percent. Rather, they were paid the straight wage rate while doing overtime work.

- **Work Intensity:** The survey data and worker interviews indicate a profound concern among workers with increased worker intensity. Production targets have gone from daily targets to hourly targets and they have increased to what some workers refer to as an inhumane pace of production. Rather than the factory term of 'production target,' some workers refer to their 'production torture.'

- **Verbal Abuse and Sexual Harassment:** Sixty-four percent of workers said they had been yelled at by their supervisors, often for not meeting their production targets. They indicated they were often called 'donkeys' and 'owls' when they did not meet targets. Interviews and meetings with local experts indicates that workers were often sexually harassed and faced physical abuse at work.

- **Precarious Employment:** The majority of workers in the garment sector face some degree of precarious employment. Many are home-based workers, in-factory piece rate workers, or contingent (no-contract) workers. Many of the so-called 'stable' contract workers report that they are on six-month contracts via employment agencies that keep closing and re-opening under different names.

Summary of Principal Recommendations (for all recommendations, see final section of report)

- **Buyers:**
  - Adjustment in purchasing practices to include "Total Costing for Sustainable Supply Chains (TCSSC)." TCSSC includes the costs of compliance with core labor standards, safe working conditions, reasonable hours of work, and adequate living wages, as well as external environmental sustainability.
  - Written and fair supplier contracts for TCSSC with delivery times and payment schedules that are reasonable for suppliers. Appropriate planning and forecasting, and responsible exit strategies.

- Full public transparency that includes data on wage gaps with living wage standards, unionization rates and collective bargaining agreements in supplier factories.
- Zero tolerance for all core labor standards violations, building safety standards, and violence and harassment in the world of work standard.

- **Governments in Buyer Countries:**
  - Mandatory due diligence legislation that covers all multinational buyers (not just the largest) and covers all core labor standards as well as building safety and violence and harassment in the world of work standards.
  - Trade policies to ensure long-term investment practices and not hyper-mobility production regimes.
  - Development practices that encourage production diversity and not overcapacity in a limited range of goods.
  - Regulation of finance capital to encourage firms that pursue sustainable policies.

- **Other Actors**: Given the findings of this particular research project, we focus on our recommendations for buyers and governments in buyer countries. As we note in the final section, there are also important roles to pay for international organizations, the Indian government, supplier factories, trade unions, and workers.

Introduction

Insertion into the global economy through global garment supply chains is often cited as a necessary step on the path toward economic development and worker well-being. Yet, in recent decades, this path has often proven elusive for developing countries. Many apparel exporting countries have remained in low value-added, low-wage, and low-development tracks *despite* growth in garment exports. In India, the value of apparel exports increased by 480% between 1992 and 2016, from USD 3.1 billion to USD 18 billion. At the same time, and, by one estimate, wages in the Indian apparel export sector only covered 23 percent of workers' living expenses (WRC 2013: 108). And patterns of forced overtime, work intensity, and various forms of precarious work all appear to be rising.

The question that this report seeks to address is why the growth of the apparel export sector does not seem to have led to more significant growth of improved conditions of work, better paying jobs, and reduced inequality. Historically, one of the more common arguments is that – despite the best efforts of multinational firms – this is because local employers exploit the domestic workforce and local governments do not enforce labor laws.[1] There is no doubt that there is much more that local employers and governments can do to improve the terms and conditions of employment and respect for workers' rights. And there is absolutely no excuse for any local employer to violate fundamental principles and rights at work. This report finds considerable evidence to suggest that the purchasing practices of multinational enterprises also substantially contribute to chronic low wages, long and intense working hours, and worker rights violations. These practices of international buyers also contribute to an increase in non-standard forms of work.

These arguments and dynamics are examined via a case study of the garment export sector in India, with particular attention on the National Capital Region (NCR) around the Delhi and Bengaluru regions. Data for this report was gathered through field research, stakeholder interviews and original surveys of supplier factories and workers conducted in 2017 and 2018. Trade data were also examined for Indian exports to the US, the EU, and the world to establish pricing and sourcing trends over time. The report concludes that the purchasing practices of buyers (brands and retailers) have resulted in a squeeze on supplier profits, reductions in lead times, persistently low real wages, increased work intensity, and myriad forms of precarious work.

This report begins by reviewing the literature on power asymmetries in apparel global supply chains and develops the argument and the analytical framework. Next, the report outlines the methods used to gather data. The report then provides an overview of apparel export production in India. The fourth section details and analyzes the findings. The final section offers conclusions and recommendations for addressing some of the dynamics raised in this report.

[1] This argument was made forcefully by the employers' group during the International Labour Conference discussion on Decent Work in Global Supply Chains in Geneva in June 2016.

Section I: Inequality and the Global Apparel Industry

Inequality, An Exploration of Trends and Causes

Contemporary social scientists and commentators have grappled with the issues related to development and inequality for decades (Bhagwati 2004; Feenstra and Hanson 1996; Korzeniewicz and Smith 2000; Palma 1978; Rostow 1971). For Thomas Piketty, the cause of inequality is linked to the returns on capital relative to the growth rate of the economy (Piketty 2017). Absent financial crises that dramatically reduce the wealth of the top earners or considerable state intervention, the rich are expected to get richer relative to other sectors of society (Ibid). Indeed, Oxfam International observes that 82 percent of all wealth created in 2017 went to the top one percent of the world's population and nothing went to the bottom 50 percent (Oxfam International 2018). Women are the hardest hit by income inequality and, as reported in an IMF Staff Discussion Note, closing the inequality gap in part requires closing the income gap between men and women (Gonzales et al. 2015).

India is no exception to the trend of rising inequality. Since the mid-1990s, the share of national income going to the top 10 percent and top one percent of the population has risen markedly, whereas the share going to the middle 40 percent and the bottom 50 percent of the population has steadily declined. Indeed, by 2014, the share of income going to the top one percent exceeded that going to the bottom 50 percent and the share going to the top 10 percent (which reached 56 percent of all income) was greater than that of all other segments of the population. [See Figure 1.]

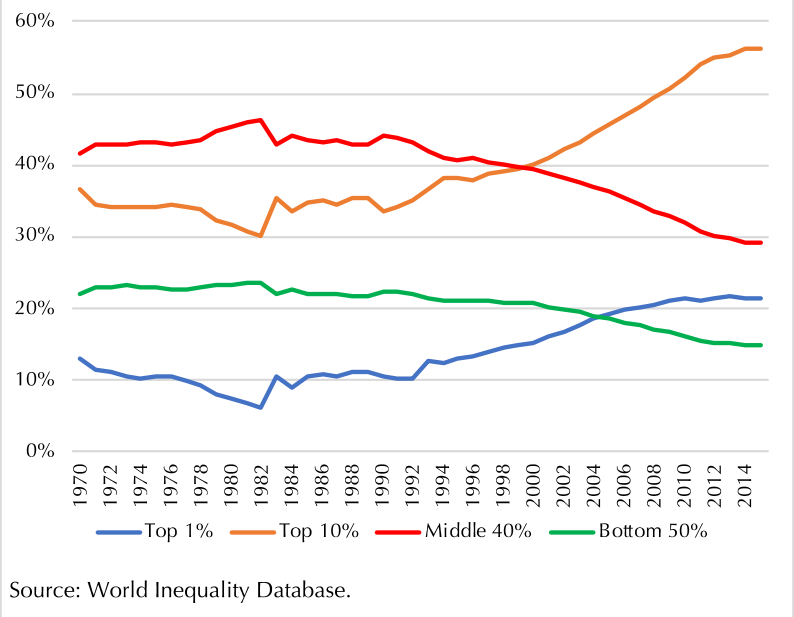

Figure 1: India: Pre-Tax Income, Share by Income Group

As noted by Piketty, the very rich do not derive most of their wealth from income, but rather from other sources, most notably returns on investments. Hence, a better indicator of

inequality in society is personal wealth. Here the trends in India are even more pronounced. While in 1981 the top one percent owned 12.5 percent of the wealth in society, by 2012, their share had risen to 30.69 percent, 4.79 times the wealth held by the bottom 40 percent. And the share of the top 10 percent rose from 45 percent to 62.77 percent, over double that of the middle 50 percent. [See Figure 2.]

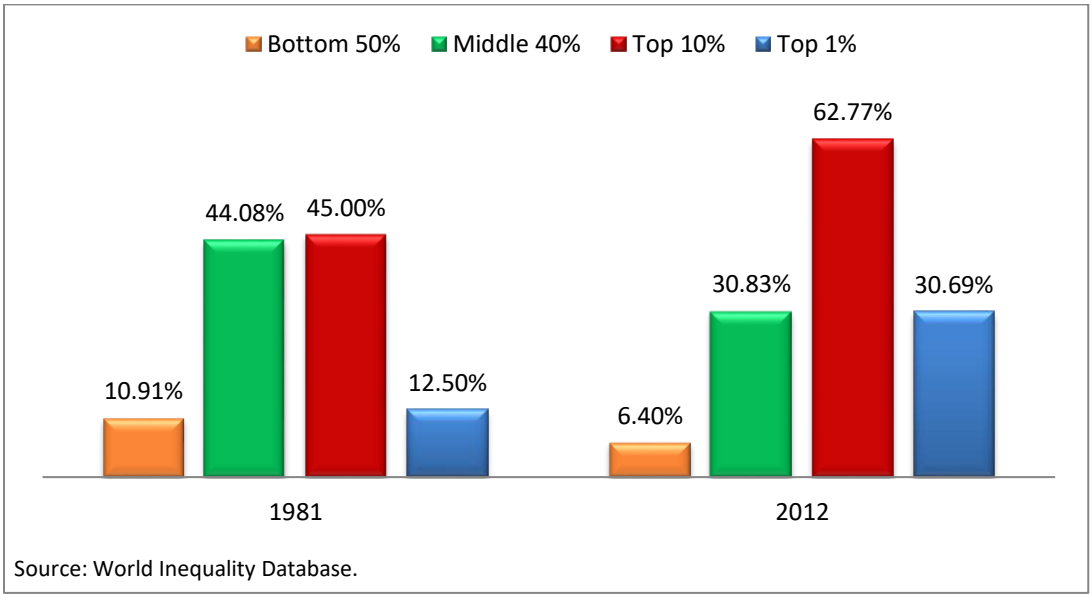

Figure 2: India's Net Personal Wealth Share by Income Segment

Contributing to persistent levels of inequality are, no doubt, weak capital investments, low education and skill levels, productivity gaps, deficiencies in national infrastructure, and regressive tax regimes. In this report, we will argue that one additional factor that contributes to inequality within and across countries is the growing power imbalances in global supply chains, notably in the garment sector.

We have known for some time that the prevailing wages of garment workers are low and do not cover workers' basic needs. Research indicates that wages in all the major garment exporting countries do not cover even half of workers' living needs (WRC 2013). In the case of India, wages cover only 23 percent of workers' living expenses. But this is not because garments as an industry do not generate significant value added and are not profitable. In 2016, when the value of India's garment exports totaled USD 18.6 billion, at least six CEO/owners associated with the apparel industry had a net worth that exceeded USD 18 billion. Indeed, in the case of Zara, the CEO's net worth was approximately four times the total value of India's exports for that one-year period. [See Figure 3.]

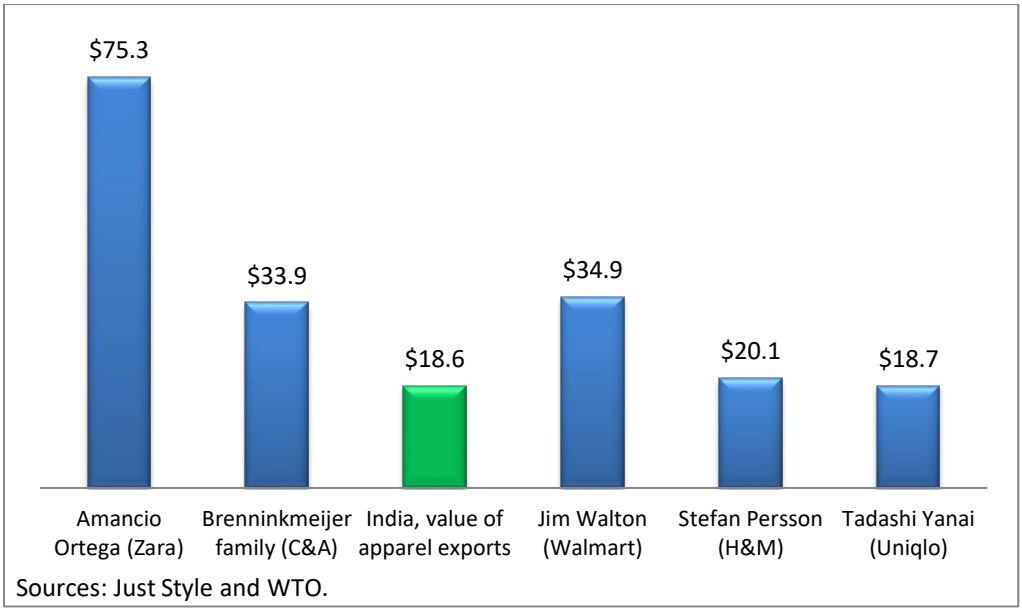

Figure 3: CEO/Owner's Net Worth and India's Apparel Exports (USD Billions)

Yet even these figures pale in comparison to retailer stock market valuation. Here is where we find the greatest degree of wealth concentration. In September 2018, Amazon (for all products) hit the USD one trillion mark in its market value, which gave it roughly the same value as the next seven largest consumer companies combined.[2] Jeff Bezos, Amazon's CEO, was estimated to have earned USD 3,182 every second in 2017.[3] As we will see ahead, that is more than the average Indian garment worker earns in a year. What is the cause of these tremendous disparities? As we will argue next, they can be found, in part, in the power asymmetries in garment global supply chains.

Power Asymmetries in Garment Global Supply Chains

One of the original premises of the global supply chain (GSC)[4] literature is that there are power imbalances across different nodes of chains (Gereffi, Korzeniewicz, and Korzeniewicz 1994; Henderson et al. 2002). This concentration has been linked to mergers and acquisitions

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[2] Laura Stevens and Amrith Ramkumar, "Amazon Hits $1 Trillion Valuation." *The Wall Street Journal*, September 4, 2018. See: https://www.wsj.com/articles/amazon-hits-1-trillion-valuation-1536075734?mod=searchresults&page=1&pos=2

[3] Julia Glum, "The Median Amazon Employee's Salary Is $28,000. Jeff Bezos Makes More Than That in 10 Seconds." *Money,* May 2, 2018. Seehttp://money.com/money/5262923/amazon-employee-median-salary-jeff-bezos/ (Accessed May 19, 2019.)

[4] The literature also uses the terms 'global value chains,' 'global commodity chains,' and 'global production networks,' and there is considerable debate over the meanings of these terms (Bair 2009). I use the term 'global supply chains' as a more neutral term and one that has been adopted by the International Labour Organization. The ILO defines GSCs as, "the cross-border organization of the activities required to produce goods or services and bring them to consumers through inputs and various phases of development, production and delivery" (ILO 2016: 1).

(Bonacich and Appelbaum 2000) and new technologies that allowed large firms to better control their inventory relative to smaller competitors (Abernathy et al. 1999). International institutions and mainstream media are coming to similar conclusions. The International Labour Organization observes, "the sheer volume of its purchases grants [buyers] substantial bargaining power in an asymmetrical market relationship where a buyer can negotiate prices and specify, what, how, where, and by whom the goods it sells are purchased" (ILO 2016: 11).

The Wall Street Journal (WSJ) reports, "Declining enforcement of antitrust rules has led to bigger mergers, less competition and higher profits."[5] Roni Michaely observes in The WSJ: "If you want to compete with Google or Amazon […] you'll have to invest not just billions, but tens of billions of dollars."[6] As indicated in Figure 4, in 2018, Amazon's market valuation had grown larger than the market valuation of the next nine competitors combined, including Walmart. *The New York Times*, in reference to Amazon and other 'superstar firms,' finds:

> *Two of the most important economic facts of the last few decades are that more industries are being dominated by a handful of extraordinarily successful companies and that wages, inflation and growth have remained stubbornly low. Many of the world's most powerful economic policymakers are now taking seriously the possibility that the first of those facts is a cause of the second*.[7]

Building on these critiques, *The Economist* news magazine declared in its November 15, 2018 issue, "Market power lies behind many economic ills." It observed, "Monopolistic prices may have allowed powerful firms to eat away at the purchasing power of wages. The labour share has fallen fastest in industries with growing concentration."[8] As noted by an International Labour Office report, "Being in employment does not always guarantee a decent living. […] The poor quality of many jobs also manifests itself in the fact that, in 2018, more than one quarter of workers in low- and middle-income countries were living in extreme or moderate poverty" (ILO 2019: 1-2). The report goes on to note that in India, despite considerable economic growth, "less than a fifth of the population is covered by some form of social protection" (Ibid: 47).

There is a debate in the literature regarding the degree of this power imbalance and the direction of change. As Locke, Amengual, and Mangla (2009: 328) observe, "Power relations among the key actors in the supply chains are far from unidirectional or unambiguous." Gereffi, Humphrey, and Sturgeon (2005) argue power relations are linked to information complexity, codification of transactions, and supplier capabilities. In the global apparel industry, they find, "the expansion and growing capabilities of its global supply-base have permitted it to move rapidly from captive to more complex relational value chains over the span of just a few decades" (Gereffi, et al., 2005, p. 91). That is, they see a decline in power asymmetry in apparel global value chains. This decline, they suggest, is the result of supplier factories moving from

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5 Jason Zweig, "The Disturbing New Facts about American Capitalism." *The Wall Street Journal*, March 3, 2017.
6 Cited in Zweig, "The Disturbing New Facts about American Capitalism." *The Wall Street Journal*, March 3, 2017.
7 Neil Irwin, "Are Superstar Firms and Amazon Effects Reshaping the Economy?" *The New York Times*, August 25, 2018.
8 "The Next Capitalist Revolution." *The Economist*. November 15, 2018.

assembling garments through an export processing zone model to full package production, which involves greater capabilities on the part of supplier firms and more complex forms of coordination between suppliers and lead firms. Yet, the phase out of the trade rules that limited supplier concentration (the Multi-Fibre Arrangement or MFA) and the entry of China and Vietnam into the World Trade Organization (WTO) significantly increased cost competition among suppliers. In this context, buyers were able to move production from location to location more easily, with a marked expansion in Asia. This served to increase buyer power over suppliers.

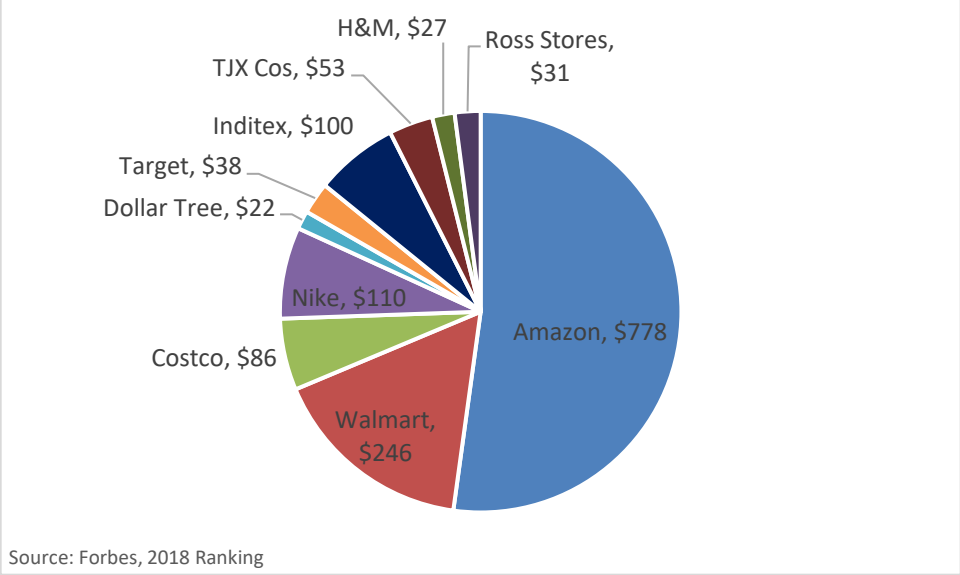


Figure 4: Market Valuation, Largest Retailers That Sell Apparel

Technological developments have also facilitated greater control by buyers over their supply chain logistics, including distribution. This has given market advantage to the largest of mass merchandizers and firms specializing in electronic commerce (Kotha and Basu 2011). In addition, growing pressure from investors on buyers to reduce costs and increase margins has created increased pressure on lead firms to squeeze their suppliers on costs. Since capital markets are so competitive, CEOs and managers in brands and retailers are under constant pressure to grow share values or risk being replaced. This pressure is present whether it is public or private capital. The rise of 401(k) accounts and individual retirement accounts (IRAs) inserted considerable capital into the market, mostly via mutual funds. As David Weil explains, the money flowing into firms from these mutual funds is 'impatient' and moves frequently in search of better returns for a given level of risk (Weil 2014: 46). Private equity firms also play a role in squeezing firms and workers (Appelbaum and Batt 2014).

To summarize, trade rules, technology, and financialization have contributed to growing power asymmetries in apparel global supply chains. These current power imbalances in global supply

chains are engendering two mechanisms which have had deleterious effects on workers: a price squeeze and a lead time/sourcing squeeze. The price squeeze refers to how much buyers pay suppliers for the products they produce. If, as suggested, the growth of the supplier base increased with the phase out of the MFA and the entry of China into the WTO, and if, as also indicated, buyer consolidation grew over the past twenty years as a result of technological innovations and growing capital markets, then we can expect to see declining prices starting at some point in the mid to late 1990s and a continued decline afterwards. If, as also suggested, power imbalance is increasing in apparel global supply chains, then we can expect lead multinational firms to use their leverage not only to reduce prices – the 'price squeeze' – but also to reduce lead times, adjust order size, and modify product specifications on short notice according to their needs as part of a 'sourcing squeeze.'

The squeeze down on prices by lead firms has pushed supplier factories to keep down real wages, often by not raising wages during periods of inflation, by lobbying governments not to raise the minimum wage and, in some cases, by lobbying governments to have a lower minimum wage for apparel export workers relative to workers in other manufacturing sectors (Anner 2011). When it is not possible to keep real wages down, supplier firms can turn to the long-held practice in the sector of increasing work intensity by increasing worker production targets. For example, a worker might be told she needs to perform 90 operations per hour (e.g., sewing on collars to a garment) as opposed to the previous requirement of 80.

It is important to note that this is not a traditional piece-rate system where wages are directly and solely tied to production. Such a system is most often not permitted due to minimum wage laws. However, employers can demand workers perform a number of operations per hour in order to keep their jobs. Under such a system, when buyers lower prices and suppliers are not permitted to lower wages due to minimum wage laws, suppliers can demand workers work faster. In this way, a price squeeze often pushes suppliers to increase workers' production targets so that the supplier remains economically viable, resulting in increased work intensity.

The sourcing squeeze includes a squeeze on lead times, the time given to supplier factories to design, source inputs, make, and ship an item. Speed to market – manifested through shorter production lead times – has become part of a broader trend epitomized by 'fast-fashion' (Anguelov 2016; Taplin 2014). Shorter lead times allow *all* buyers (fashion sensitive and non-fashion sensitive) to better control inventory. Control over inventory reduces the need to sell items at a markdown and thus can result in significant savings for firms. Another element of the sourcing squeeze is order size and number of styles. As argued by Locke, "some persistent labor problems originate in various upstream business practices" (Locke 2013: 153). These practices include small order volume combined with a greater variation of styles. Nike acknowledged as much, noting, "Every time a factory has to change a style, it reduces productivity and overall efficiency, adding to the total number of hours of work requested" (Cited in Locke 2013: 128).

Extreme order volume fluctuations can be expected to have three important impacts on working conditions. Since factory owners are unsure how large their orders will be month to month, they opt to hire a lower number of workers rather than risk having idle workers during

downturns. As a result, when order volume increases, suppliers have workers perform overtime hours, which can be extensive and forced (Anner, Bair, and Blasi 2013). Even when all workers are working, for example, more than 70 hours a week, this still may not be enough hours of work to complete order spikes with short lead times. In these cases, factories may turn to temporary workers (at times paid off the books) or sub-contracting by which production is outsourced to another factory. The subcontracted factories are typically smaller and employ more precarious working conditions. Often, they are not inspected by building-safety or labor authorities and may not be authorized by the buyer to produce its products.

The price and sourcing squeezes create an incentive for employers to pursue union avoidance strategies, which may include violations of the law. This is because employers assumed that unions will create pressure to raise costs by bargaining to increase wages and benefits. Employers also assume that unions will strike and disrupt production, which could have negative consequences for suppliers with short lead time pressure. State representatives may fear that, were they to vigorously enforce their labor laws in the context of highly cost-competitive global supply chains, investors will go elsewhere (Anner 2011).

This framework for understanding the price and sourcing squeezes and their impact on working conditions and workers' rights is presented in Figure 4. The figure begins at the top where developed states and international institutions' trade and investment policies facilitate the geographic dispersion of suppliers through shifting trade rules, and financial capital incentivizes the consolidation of a few mass merchandizers and electronic commerce companies at the expense of others. The result is depicted in the second tier of Figure 4: buyer consolidation on the one hand and the expansion and dispersion of suppliers on the other. The combination of these two trends – depicted in the third tier of Figure 4 – is growing power asymmetries in apparel GSCs. Buyers then use their leverage over suppliers through two mechanisms: the price squeeze and the sourcing squeeze. This, in turn, results in deleterious impacts on labor via a squeeze on wages and working conditions, seen at the bottom of Figure 4.

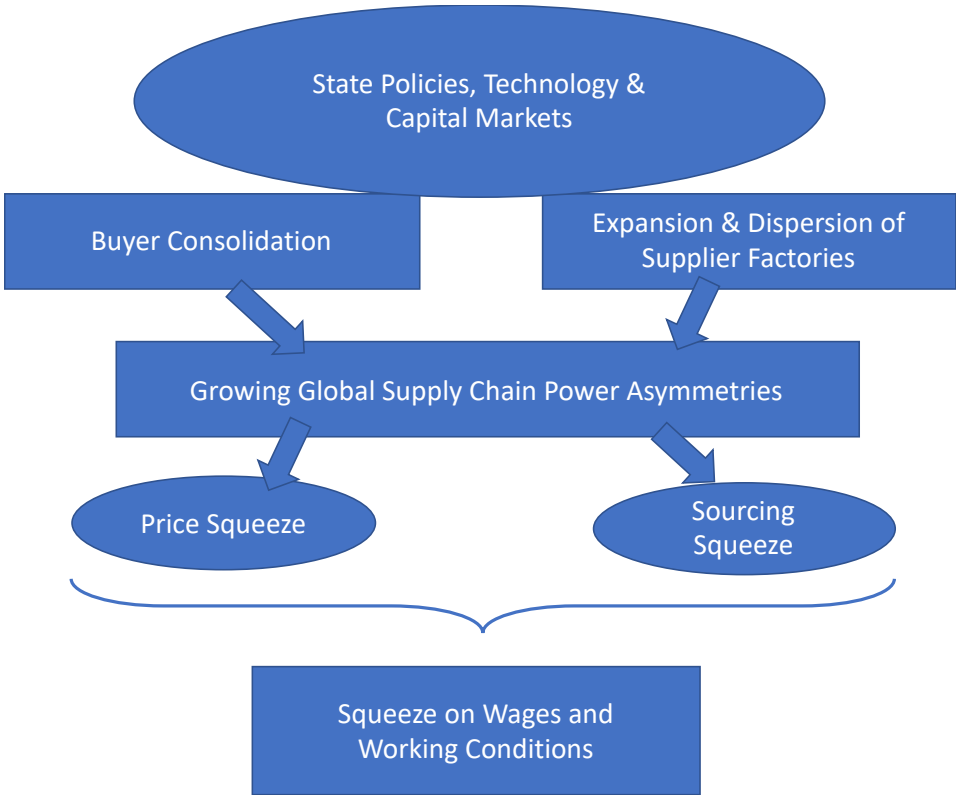


Figure 5: GSC Power Asymmetries, Price and Sourcing Squeeze, and Working Conditions

India's Apparel Export Sector

Textile and apparel production in India have a very long history. Specialists have found and analyzed fabric fragments that date back to at least 2300 B.C.[9] Inhabitants of what is now India grew and harvested cotton, wove fabrics and dyed the cloth. When Portuguese explorers arrived in the 15th century, they took India's colorful cotton fabrics and brought them back to Europe. European textile printers struggled without success to duplicate the dying practices the Indian textile makers had mastered thousands of years before. In 1742, the secrets of Indian artisans were learned by a French cleric living in the region, Jesuit Father Coeurdoux. After being converted to Catholicism by Coeurdoux, the Indian master dyers confided their secret process to him with the understanding that he would not share it. Stephen Yafa (2005: 30) describes what happened next: "Coeurdoux immediately gave a detailed description in a step-by-step letter published in France. In a blink, three thousand years of clandestine artisan practice became public knowledge."

After the Europeans had captured and duplicated the Indian craft of textile dying, British colonizers banned the manufacturing by Indians of Indian cotton into fabric. As a result, British textile production boomed and the Indian economy faltered. Many decades later, as India

[9] This paragraph is based on (Yafa 2005).

struggled to develop, international development agencies and specialists would indicate that India should develop its textile and apparel production industries because developed market economies had achieved their development and industrialization by first growing their textile and apparel sectors.

Textile and apparel production eventually did grow outside of developed market economies, but their growth would come first in East Asia, notably Japan, Korea, Hong Kong and Taiwan (Gereffi and Wyman 1990). At the time in which these Asian countries were growing their apparel exports in the 1960s, in India apparel exports accounted for only 0.16 percent of exports (Mezzadri 2016). By the 1990s, garments accounted for more than 12 percent of India's exports (Ibid.) Today, India exports more than USD 18 billion per year in apparel and is the fifth largest apparel exporter in the world.[10] One of India's more notable characteristics relative to its competitors is the small size of its export factories. In 2001, India had 10,865 export facilities earning USD 5.5 billion, whereas Sri Lanka had 300 exporters who earned USD three billion (Mezzadri 2016: 33). Hence, India's garment industry is largely built on networks of subcontracting through small firms (Chari 2004).

Apparel production is spread throughout India. Tirupur, in the south, is the largest exporter in the country, followed by Delhi's National Capital Region (NCR). Bengaluru has the third largest concentration of apparel export production. These regions vary significantly in terms of workforce characteristics. Most notably, the south is characterized by a high concentration of women workers whereas the Delhi region is known for its regional male migrant workers (Devaraja 2011; Mezzadri 2016; RoyChowdhury 2005). Indeed, gender, caste and migration status have long characterized the multiple forms of labour control and subordination in India (Chari 2004).

In terms of informal work, as noted by Mezzadri (2016: 35), apparel production networks, "can bank on multiple processes of labour informalization, which feed the Indian sweatshops with armies of cheap labour." Mezzadri argues that the informal sector accounts for the 'lion's share' of value added and employment generation (Ibid, 36). In 1990, Kumar and Khanna described the situation of informality in the Indian garment sector as follows:

> *More than 88 percent of the firms have subcontracted fabrication work, while keeping cutting and finishing as in-house operations. The subcontractors are essentially labor contractors who employ a small workforce specialized in tailoring operations. All employment is temporary and at the lowest market wages – often at piece rate. The system of fabricators imparts a much-needed flexibility to this industry. The fabricator employs tailors only when required and ensures that wages remain a variable cost. Capacity expansion is simply a matter of hiring extra hands and working multiple shifts. In off-seasons only a skeleton staff is retained, while others are laid off and go back to their villages* (Kumar and Ram 1990: 184-185).

[10] World Trade Organization, clothing statistics.

Hence, informality can be understood not only as the result of a legacy of underdevelopment, but also as the result of the exigencies of modern apparel production. The need for speed and flexibility translate into the need for sub-contracting, temporary employment, and piece-rate work.

These historic and locally embedded trends in the Indian garment industry interact with international dynamics and exigencies. For much of the post-WWII period, the global garment industry was regulated by the Multi-Fibre Arrangement (MFA), which allotted export quotas to developing countries. By the mid-1980s, India reached the limits of its export allocations in many apparel products (Kumar and Ram 1990). When the World Trade Organization (WTO) began a phase out of the MFA in the 1990s, the industry in India began to grow. Yet, it grew at a time when buyers were consolidating their power and financial firms were increasing their leverage over buyers and demanded larger returns. As China and then Vietnam entered the WTO in 2001 and 2007, respectively, a crisis of overcapacity emerged in the industry. In response, retailers began promoting shorter fashion cycles in order to sell more products (Anguelov 2016). The results, we argue, were a squeeze on price and a squeeze on lead times and other sourcing practices. We explore this argument in the sections that follow.

Section II: Research Project, India's Garment Export Sector

Research Methods

This report explores the sourcing squeeze argument by analyzing trade data and through two surveys in India; the first survey covered 340 supplier factories and the second survey covered 560 workers. The report also relies on interviews with a range of stakeholders in India, factory visits, and visits to workers' homes and communities.

The price component of purchasing practices is examined by exploring trade data on the price per square meter or price per kilogram over time of apparel exports. To do this, we draw on three data sources. The Office of Textiles and Apparel (OTEXA) of the International Trade Administration of the U.S. Department of Commerce provides time-series data for apparel imports to the U.S.[11] The European Commission provides data on apparel imports from India to Europe in price paid in EUR per kilogram of imported apparel, which allow us to trace the price paid per kilogram of imported apparel from India to the E.U. for all Indian-made apparel and for specific apparel groups.[12]

Finally, the Government of India's Ministry of Commerce and Industry also provides data on India's apparel exports in INR (rupees), USD, and units.[13] This allows a tracking of all apparel exports from India to the world (not just to the U.S. and Europe). It will also allow us to control

[11] See: http://otexa.trade.gov/)
[12] See: (http://ec.europa.eu/eurostat/data/database)
[13] See: http://commerce-app.gov.in/eidb/ecom.asp

for the price when products leave India versus the price for these products when they pass through customs in the U.S. or E.U. countries. The difference indicates freight and duty expenses. Trade data also allow us to examine fluctuations in order volume by month.

The cornerstone of this research project is made up of in-person surveys of employers and workers. For the supplier survey, access to factories was facilitated by the Apparel Export Promotion Council (AEPC). Most of the surveys were conducted in the National Capital Region (NCR). The second largest group of surveys were conducted in Tirupur. Surveys were also conducted in Bengaluru and Mumbai. [See Table 1.]

The survey allows us to examine the pricing dynamic in much greater detail than the trade data allow. It also permits us to explore dynamics not captured by the trade data, such as lead times and changes to order specifications. To carry out this survey, we worked with teams of professional surveyors and Indian graduate students.

Table 1: Supplier Factory Location, Survey

	Frequency	Percent
Bengaluru	26	7.6
Faridabad (NCR)	7	2.1
Gurgaon (NCR)	37	10.9
Jaipur (NCR)	77	22.6
Ludhiana (NCR)	18	5.3
Mumbai	24	7.1
Noida (NCR)	69	20.3
Okhla (NCR)	2	0.6
Tirupur	80	23.5
Total	340	100.0

The 340 factories included in our survey had an average size of 408 workers. This figure confirms the small size of factories relative to other major apparel exporting countries, such as Bangladesh, where many garment factories have thousands of workers (Mezzadri 2016). Indeed, Mezzadri found an average factory size of approximately 108 workers in her data (Ibid.). However, she included small workshops that produce for the local market in her study, which tend to be much smaller. Our focus was on apparel exporters. It is still notable in our data that more than 50% of factories included in our survey had 250 workers or fewer. Only 7.1% of factories surveyed had more than 1,000 workers. What our data also indicate is significant regional variation in terms of the gender composition of the workforce and factory size. Notably, in the Delhi region (NCR), the average factory had 361 workers, of whom 21

percent were female. In contrast, in Bengaluru, the average factory had 882 workers, of whom 78 percent were female. Analyzing reasons for these regional variations are beyond the scope of this study. However, they are well analyzed in the work of Mezzadri (Mezzadri 2016).

We also undertook a survey of 560 factory workers. To conduct the survey, local surveyors went into garment worker neighborhoods and interviewed workers in or near their homes. These neighborhoods were located in the Noida and Gurgaon regions of the NCR and the Mysore Road and Peenya regions of Bengaluru. Since accessing the workers was easier than getting access to factory managers and owners, we were able to ensure a fairly equal distribution of surveys across these four locations. [See Table 2.]

Table 2: Regional and Gender Distribution of Workers Surveyed

	Female Workers	Male Workers	Total	% Surveyed by location
Noida, Delhi	19	113	132	23.60%
Gurgaon, Delhi	16	120	137	24.50%
Mysore Rd, Bengaluru	128	10	138	24.60%
Peenya, Bengaluru	142	7	149	26.60%
Other	.	.	4	0.70%
Total	305	250	560	100.00%

As with the factory survey, the worker survey indicates regional variations. In the Delhi region, 87 percent the workers surveyed were male. In Bengaluru, 94 percent of the workers we surveyed were women. In the Delhi region, 51 percent were 30 years old or younger, and 87 percent were 40 years old or under. In Bengaluru, 42.5 percent were 30 years old or younger and 86 percent were 40 years old or younger. In the Delhi region, on average, workers had eight years of education. In Bengaluru, workers had, on average, 7.4 years of education. In sum, there was no significant different between the two regions in terms of education and age but there were dramatic differences in terms of gender. Indeed, the two regions are polar opposites; male workers dominate the industry in the north and female workers dominate the industry in the south.

As we will see ahead, the survey allowed us to examine wage patterns, hours of work, work intensity, and work contracts and forms of employment as we control for such factors as these gender differences. As we also will see ahead, the survey allowed us to ask open-ended questions of the workers about their work experiences.

The fourth step in our research methodology involved interviews with a range of stakeholders. These interviews complemented our understanding of sourcing dynamics, employment relations, and workers' rights in the apparel industry in India. They helped us to analyze our data findings by providing more nuanced and historical understandings of the industry that

cannot be captured solely through trade data or surveys. We draw on these insights from our interviews as we present our survey findings.

Research Findings

Findings, Part 1: Trade Data

International trade data allow us to examine pricing dynamics over time in India. Taking the value of Indian apparel exports to the US and European markets and dividing this amount by the volume of exports gives us price per volume per year. To control for inflation, we then use a USD deflator and USD/Euro exchange rates to get the real USD price per unit over time.[14] What the data indicate in the case of Indian apparel exports to the United States from 1994 to 2017 is a 19.65 percent decline in nominal value and a 62.81 percent decline in real dollar value. This is an extremely dramatic decline and it suggests strong evidence for our argument that there is a price squeeze in terms of what American buyers pay for the garments they import from India. As anticipated, the decline becomes more pronounced following the phase out of the multi-fibre agreement and the entry of China and Vietnam into the WTO. The rise in prices from 2010 to 2011 is the result of a spike in cotton prices. Following the spike, price once again declines. [See Figure 5.]

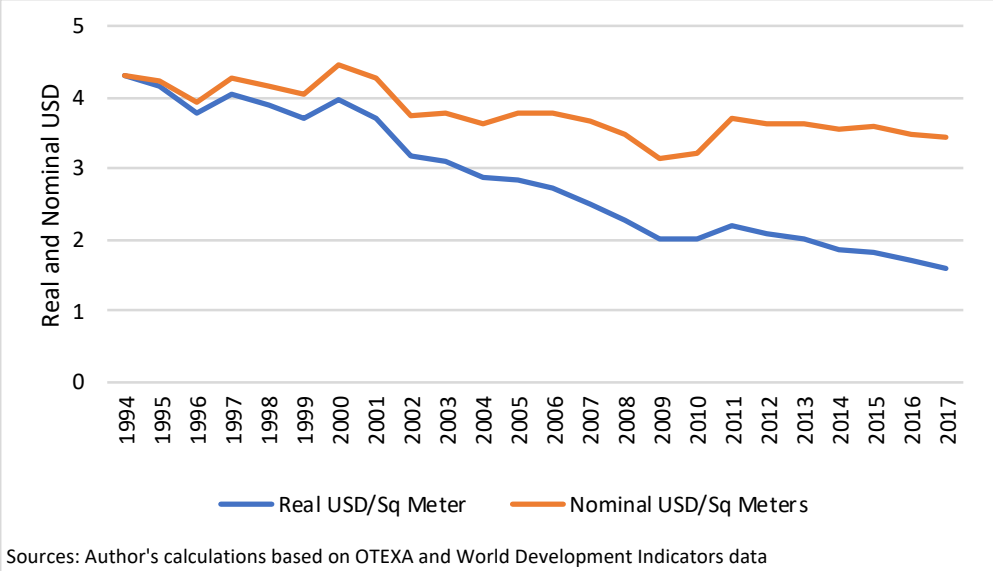


Figure 6: United States Imports of Indian Apparel, USD/Square Meter

[14] Finding the appropriate deflator for an item produced in a global supply chain is a daunting task. Without knowing whether the cotton was grown in the US or Uzbekistan, and whether the fabric was woven in Turkey or Hong Kong, it is almost impossible to properly control for the real value of the final product. However, when looking at a 24-year time period, not controlling for inflation would present a distorted picture of price dynamics. To address this problem, we decided to use the GDP deflators for the US and for the European Union. These deflators tend to be more conservative than other options.

For the European Union, if we look at the price paid for India's second largest export to the EU, women's and girls' blouses of synthetic fibers (HS 620640), we see a rise in real USD per kilogram from 2003 to 2010. But then we see a dramatic decline from 2010 to 2014 before a leveling off of prices. In real dollar terms, Indian producers were paid 10.51 percent less in 2017 to make the same garment they made in 2003. From 2010 to 2017, we see a 31.93 percent decline in real prices. [See Figure 6.]

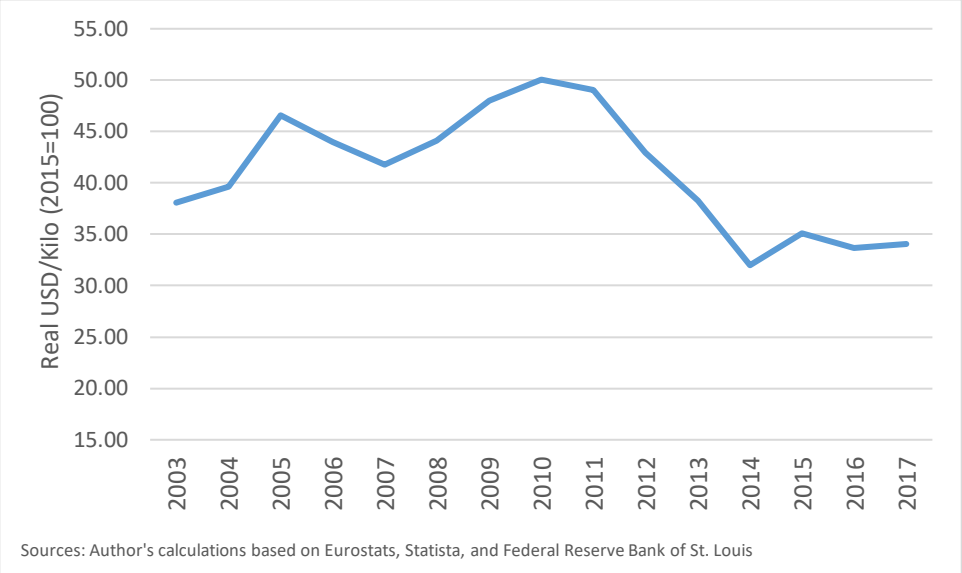


Figure 7: Blouse exports to E.U. (synthetic fiber, HS 620640)

Data from the Indian Department of Commerce[15] indicate the that top garment exports from India are cotton t-shirts, valued just over 1.6 billion USD. What is notable is that four of the seven top exports, including dresses and blouses, are made with synthetic fibers. [See Figure 7.]

[15] See: https://commerce-app.gov.in/eidb/default.asp

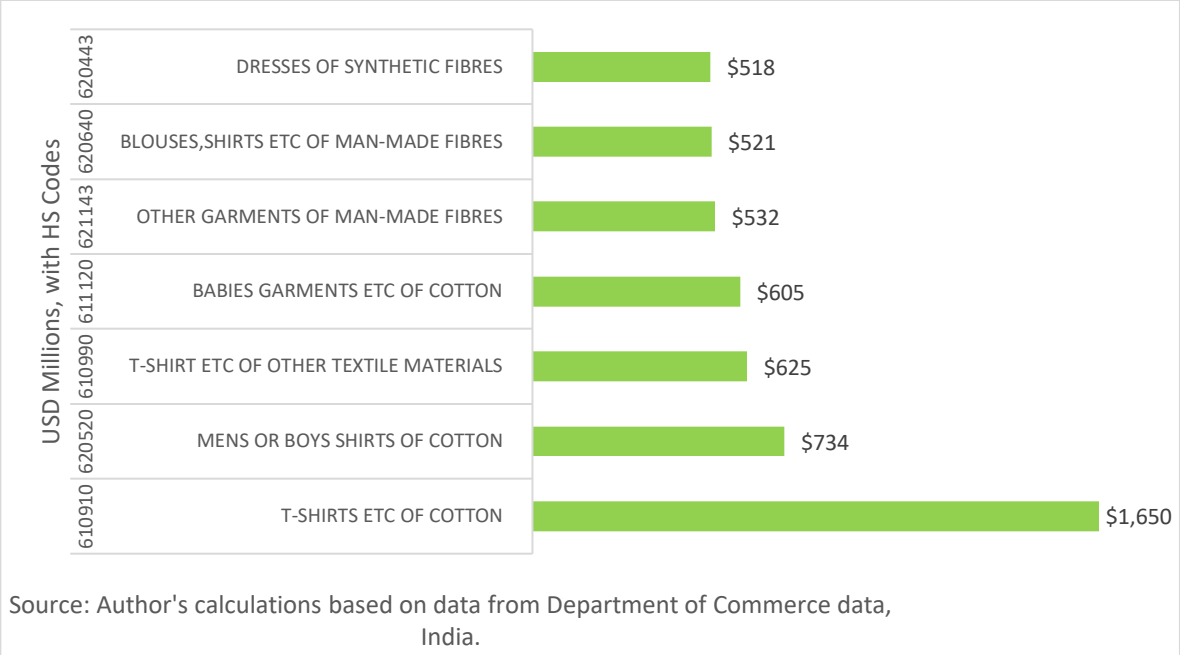


Figure 8: India, Top Garment Exports to World, April 2018-Feb. 2019

Indian government trade data also provide the price paid for products when they leave the country. There are two advantages to these data. First, they cover all world markets, so they present an accurate picture of price pressures on Indian suppliers. Second, these data are calculated without including shipping costs and duties. As a result, variations in oil prices and import duties for receiving countries are not reflected in the data. In these data, we include cotton t-shirt exports and two top exports made with synthetic fabrics: dresses and blouses. From 1996-1997 to 2017-2018, we find a total real USD decline in the price received for exported t-shirts of 45.14 percent. There are fluctuations in the price of garments made with synthetic fibers. Overall, we find a 29.95 percent decline in the price for dresses and a 16.88 percent decline in the price of blouses. [See Figure 8.]

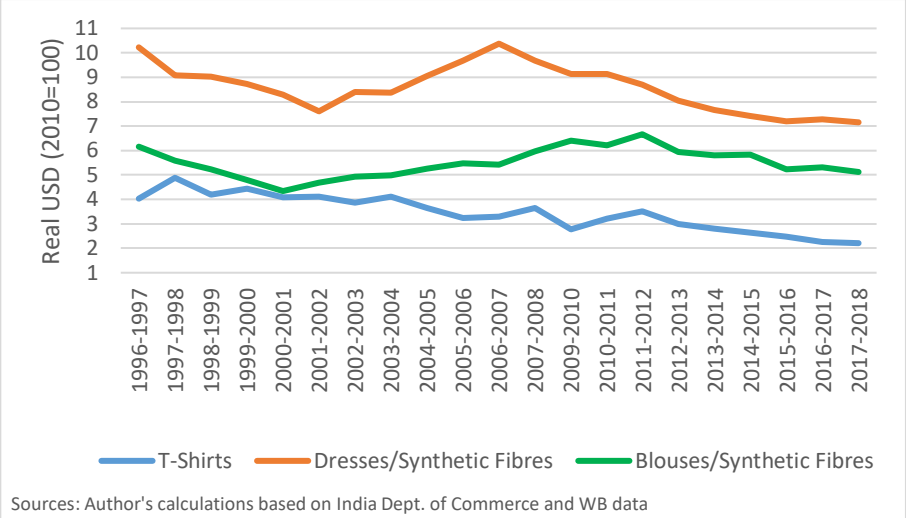


Figure 9: India, World Apparel Exports, Real USD per unit

To summarize, the trade data for the US market, the E.U. market, and the world market in general provide strong evidence of a decline in price, in particular since 2011. Often these price declines are very dramatic, as in the case of apparel exported to the United States.

Findings, Part 2: Employer survey findings

One limit of the trade data is that they include the price of all inputs that go into apparel production, including the price of fabric, which may be imported. To control for this factor, in our survey we asked producers what they were paid only for the cut-make-trim component of production – that is, what they were paid excluding the price of fabric and other inputs. We then controlled for inflation using a USD deflator. What we find is, for all products, suppliers were paid, on average, 7.41 percent less in 2012 relative to what they were paid in 2017. However, there were important variations according to product, markets, and factory size. The price paid for knit products increased by 11.41 percent, whereas the price for woven products decreased by 18.04 percent.

When we compare US buyers and European buyers of bottoms, we find that US buyers cut prices whereas European buyers increased prices. Yet, what is notable is that US buyers started at a much higher price point for this product in 2012 (USD 3.19/unit), while European buyers were paying USD 1.59/unit for the same product in 2012. By 2017, US buyers were paying USD 2.28/unit for bottoms, a 34.10 percent real dollar decline. European buyers increased their price for bottoms to USD 2.10/unit, which was a 21.77 percent real dollar increase from 2012, but it was still USD 0.18/unit below what American buyers paid for bottoms. [See Table 3.]

Table 3: Cut, Make, Trim (CMT) Prices, 2012-2017

	Number of factories	2012	2017 nominal USD	2017 Real USD	% Change, 2012-2017, (Real USD)
Knit	113	$1.44	$1.74	$1.60	11.41%
Woven	129	$3.15	$2.80	$2.58	-18.04%
US Buyers; Bottoms	67	$3.19	$2.28	$2.10	-34.10%
European Buyers; Bottoms	93	$1.59	$2.10	$1.94	21.77%
Over 250 Workers	164	$2.18	$2.68	$2.47	13.35%
250 or fewer Workers	172	$2.58	$2.13	$1.96	-23.88%
All	**337**	**$2.38**	**$2.39**	**$2.20**	**-7.41%**

While factories with more than 250 workers saw a 13.35 percent increase in prices, factories in the sample with 250 or fewer workers saw the price they were paid for their products decline by 23.88 percent between 2012 and 2017. This suggests that the price squeeze is particularly severe for small producers. In contrast, larger suppliers might be better positioned to negotiate more reasonable prices. What these data also suggest is that, going forward, there may be a decline in smaller suppliers – who will be squeezed out of business – and a corresponding rise in larger producers. Overall, the data indicate a general decline in prices paid by buyers to supplier factories in India, with the notable exceptions listed above.

A breakdown of freight on board (FOB) price components provides an indication of which elements are the most costly and which elements are increasing their share of costs. What the suppliers indicate is that the fabric is, by far, the largest cost component and that the cost of fabric is increasing. Trim and overhead costs are also increasing. Data provided by suppliers indicate that wages costs are accounting for a slightly increasing share of costs, from 16.26 percent of costs to 17.80 percent of costs over the 2012-2017 time period. However, it is important to note that labor costs in this case include direct and indirect (e.g., management) wages. Employers most often do not separate out production worker wages from management wages when providing a cost breakdown.[16] What is most noticeable is the change in profit margins. On average, profits declined from 13.20 percent of FOB prices in 2012 to 9.45 percent of FOB prices in 2017. Buying house commissions and other expenses held relatively constant during the same period. [See Table 4.]

Table 4: Share of FOB Price by Cost Component

	2012	2017
Fabric	44.58%	45.30%
Trim	9.50%	10.30%
Labor	16.26%	17.80%
Overhead	10.51%	11.31%
Profits	13.20%	9.45%

[16] The author thanks Dev Nathan for this observation.

Buying House Commission	3.34%	3.26%
Other	2.61%	2.59%
Total	100.00%	100.00%

Cut, Make and Trim (CMT) excludes the cost of fabric and other purchased inputs (thread, buttons, etc.). This provides a clear picture of the within country cost structure. And data provided by resources of Just Style for the production of a white t-shirt separates out direct labor (production workers) from managerial salaries, which gives a better picture of what production workers earn. What we find is that for a t-shirt costing USD 1.26 to make, 8 cents (6 percent of costs) go to labor. Ten percent goes to profit. And 84 percent goes to overhead, including managerial and supervisor salaries. [See Figure 9.]

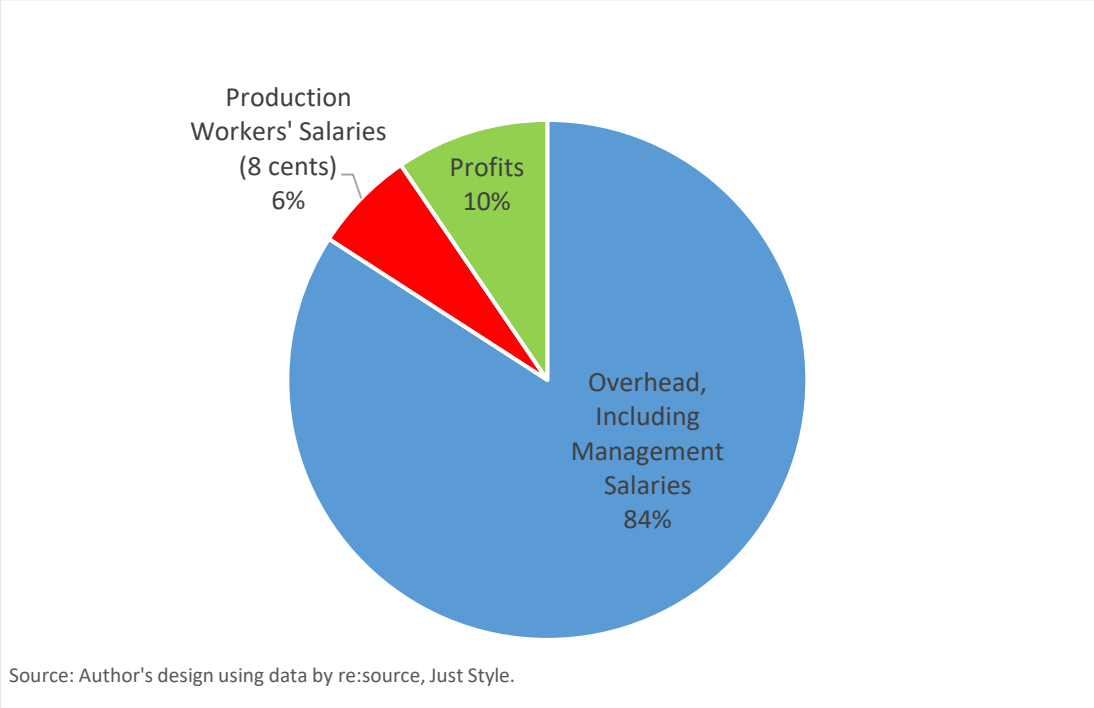


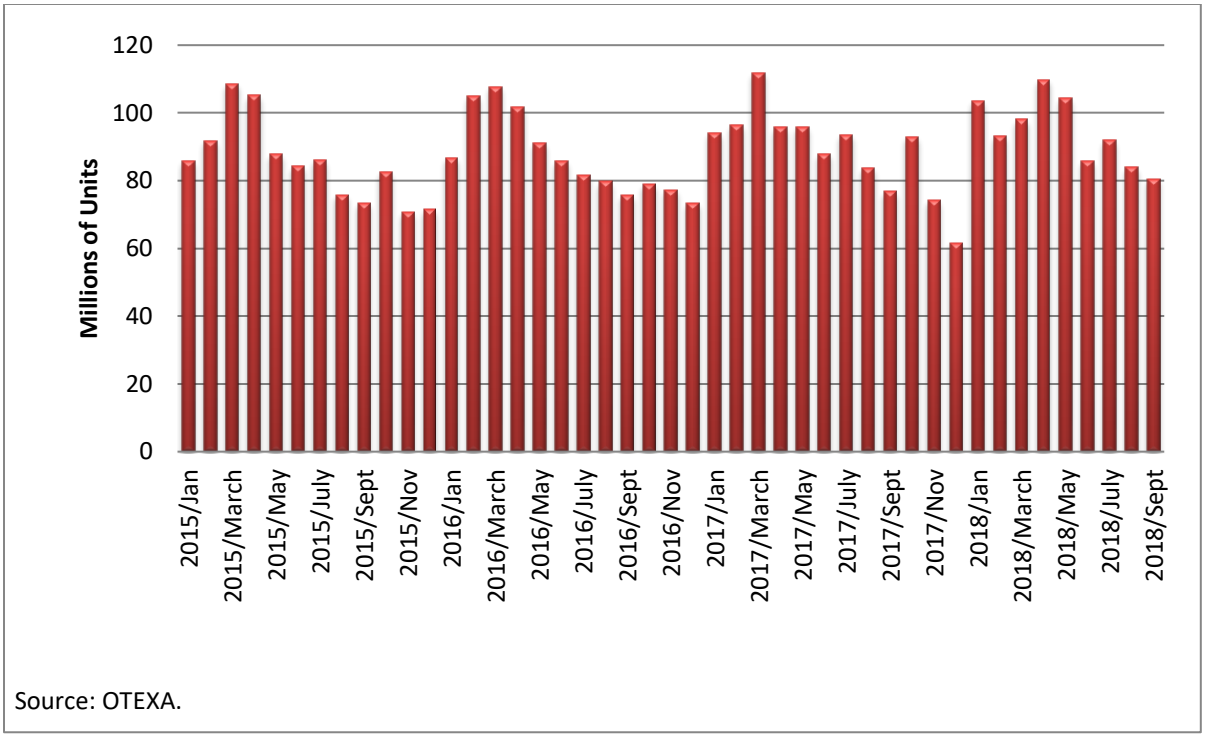
Figure 10: Cut, Make & Trim Cost Breakdown, India, White Cotton USD 1.26 T-shirt

The supplier survey also indicates that 39 percent of suppliers accepted orders below cost during the previous year. [See Figure 10.] This is often done in order to maintain a business relationship and in the hope of getting future orders from a buyer at a higher rate. This finding is consistent with ILO research that found, globally, that 46 percent of textile and clothing suppliers accepted orders below the cost of production (ILO 2017).

Figure 11: Accepting Order Below Cost

Sourcing Squeeze and Contingent Work

As noted above, the price squeeze is only one manifestation of supply chain power asymmetries. Buyers can also change order specifications, shorten lead times, and delay payments. What is particularly noticeable about India apparel exports is seasonal volatility. When we examine the volume of exports by month from India to the United States, we see significant variation. [See Figure 11.] Each year, March/April appears to be a peak period whereas December has the lowest volume of exports. For example, the United States imported 112 million units from India in March 2017 and only 62 million units in December 2017. This represents a 44.64 percent decline. The next month, January 2018, the United States imported 103 million units of apparel from India, a 66 percent increase over the previous month. (It is important to note that these peak months correspond to when products are received in the United States and not when they are made in India.)



Source: OTEXA.

Figure 12: Monthly Apparel exports to US from India (Millions of units)

Our survey of Indian supplier factories provides evidence for other forms of order volatility. We asked suppliers the following question: "After production starts, does your main buyer change order specifications: Never, Sometimes, Often." Eleven percent of suppliers said buyer order specifications were changed often, 69 percent said specifications were changed sometimes, and only 20 percent said orders were never changed. The most common change to order specifications were changes to trim elements, followed by changes to measurements/sizes. [See Figure 12.]

It is important to note that these changes put a considerable burden on supplier factories. Often, such changes violate the terms of contracts but, fearing a loss of future orders, supplier factories find themselves obligated to make the last-minute adjustments without raising concerns about the impact of such changes on their firm, including employment relations dynamics.

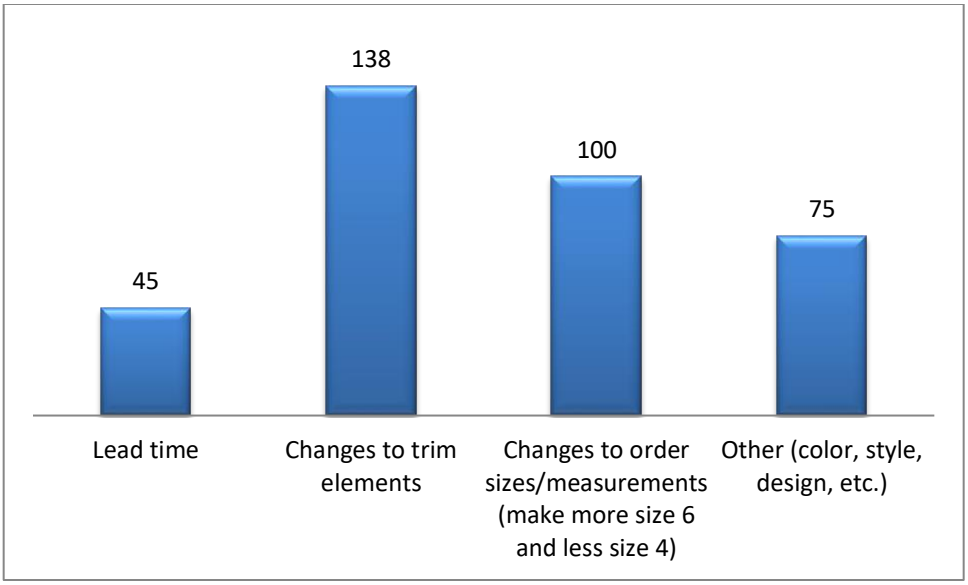


Figure 13: Most Common Changes by Buyers after Production Starts

The problem with such changes was confirmed through interviews with suppliers. In one case, a factory owner explained that the buyer instructed her to add a frill element to a blouse. After production started, and she had already purchased all the frill elements for the entire production run, the buyer phoned to say that it no longer wanted the frill element. Since they frill element entailed an additional cost, the buyer now that said it would reduce the price paid to the supplier. In need of the production order (and future orders) from this large buyer, the factory supplier was unable to protest this decision. She expressed her frustration, stating, "I was furious. I wanted to put all the frill elements in a box and ship them to the buyer and say, 'here, you take them.'" [Employer interview #1.] Of course, taking such action against a buyer is not an option because the supplier knew she could lose her relationship with this large buyer. In the end, she just absorbed the loss and continued the production cycle.

Through interviews, we learned that some factory owners have seen, over time, that order volume is getting smaller and lead times are getting shorter. One small factory owner noted that he used to get orders for 20,000 units; now he was getting orders of 2,000 units [Employer interview #2.] In our survey, 16 percent of suppliers reported that, between 2012 and 2017, their orders had become smaller; 25 percent reported their orders were a little smaller. In contrast, 30 percent said their orders were a little larger and eight percent indicated that their orders were a lot larger. Twenty-one percent indicated that the order size did not change over the previous five-year period. Hence, there is no one trend that captures the entire industry. Indeed, reflecting on variations in market segments, one supplier noted, "Volumes are increasing, but margins are declining." Another stated, "Styles are increasing, but quantity is less."

Another reason why many suppliers did not experience a decrease in order size is perhaps because most suppliers in India, as noted above, are relatively small. Hence, what might be a small order for a large international mass merchandizer would be a very large order for a

factory with only 250 workers (the average Indian factory size in my sample). While most orders may not be getting smaller, 35 percent of respondents said that their orders fluctuated more in 2017 relative to 2012 whereas 19 percent said there was less fluctuation.

Lead times are the time allotted to suppliers to purchase inputs and to make and ship an order. In an era of fast fashion, speed to market is a goal of most retailers and brands. The question we wanted to explore through the survey was whether Indian suppliers were experiencing speed to market pressure through short lead time requirements. The survey results indicate that, in 2012, suppliers were given, on average, 87 days to source inputs and to make and ship an order. In contrast, in 2017, suppliers had an average of 78 days to source inputs and to make and ship an order. The survey asked suppliers, when they were asked to reduce lead times, in which areas they reduce timing and by how much. The data indicate a time squeeze in both areas, with an 11 percent reduction in the lead time for sourcing fabric and a six percent reduction in the lead time given to make a product. [See Figure 13.]

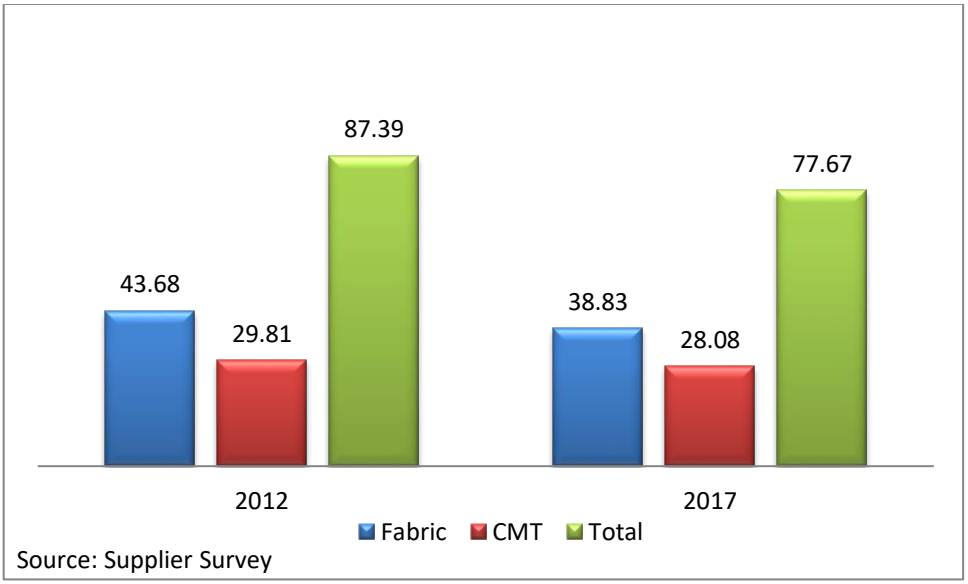


Figure 14: Lead Times (Days)

These findings provide support for the argument that there is an emerging squeeze on lead times as part of a larger trend toward fast fashion production cycles. This, too, reflects power imbalances in supply chains. As one supplier noted, "The lead time is decided by the buyers." That is, in the experience of suppliers, there was no room for negotiations on the lead time – the buyer dictates the terms. Moreover, the consequences for shipping an order late can be extreme. *Apparel Insider* reported that one British apparel retailer "is raking in a seven-figure sum annually by charging clothing garment manufacturers for late delivery."[17] Indeed, retailers may also charge fees if a product arrives too early, presumably because shelf space would not be available.

[17] Brett Mathews, "Brands Charging Punitive Fines for Late Delivery, Claims Supplier." *Apparel Insider*, November 16, 2018.

While lead times given by buyers to suppliers to make and ship orders have been getting shorter, the time buyers take to pay for orders has been increasing. While, in 2012, buyers paid their suppliers, on average, within 47 days after an order shipped, by 2017, buyers were paying their suppliers an average of 54 days after their order shipped, a 15 percent increase in the delay of payments. [See Figure 14.] By holding on to payments, buyers are able to accumulate interests, whereas suppliers often pay out interest as they take out bank loans to cover the costs of the next production cycle.

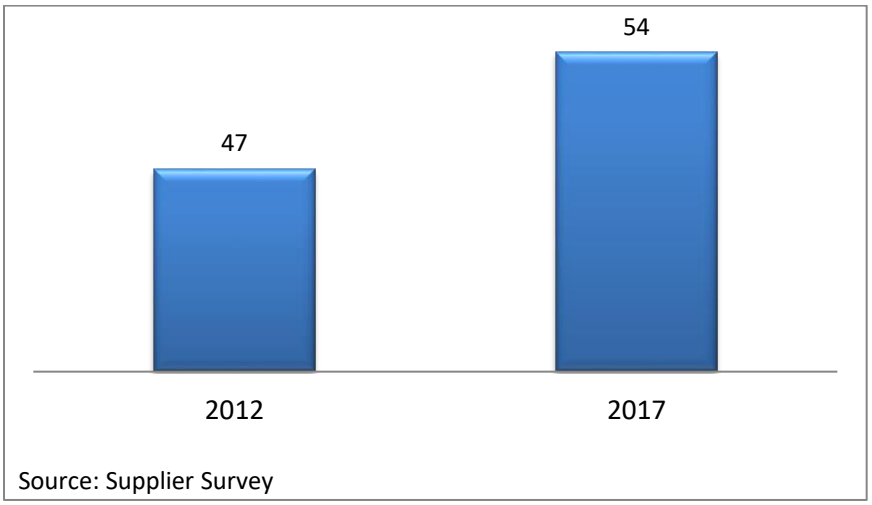


Figure 15: How many days after orders ship do buyers pay suppliers?

The survey asked suppliers how they responded to peak orders. Suppliers, who were able to click multiple responses, said they increased overtime hours (52 percent), increased the use of contingent work (51 percent), and outsourced production (58 percent). [See Figure 15.] We will return to the implications of this finding when we examine the impact of current sourcing practices on employment relations.

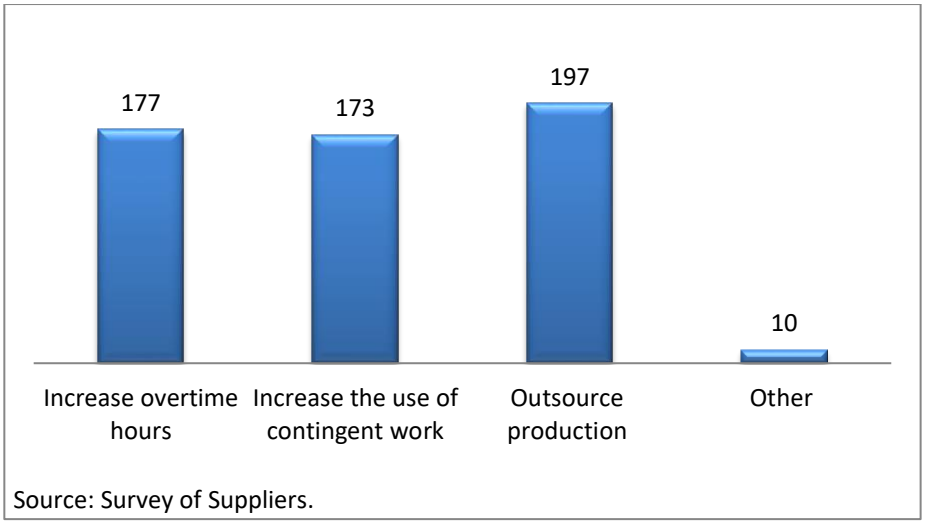


Figure 16: What are your common responses to peak orders from buyers?

To get a better sense of how all the issues outlined above compare in relative terms to each other, we asked suppliers to indicate which sourcing factors they considered of 'very high concern,' 'somewhat high concern,' 'moderate to low concern,' and 'low concern.' Most suppliers indicated that their greatest concerns were that labor costs were too high and profit margins were too low. In a second tier, the majority (200 out of 340) indicated that the lowering of FOB prices and non-labor costs were high concerns. Lead times, order stability and order volume were considered moderate to high concerns. [See Figure 16.]

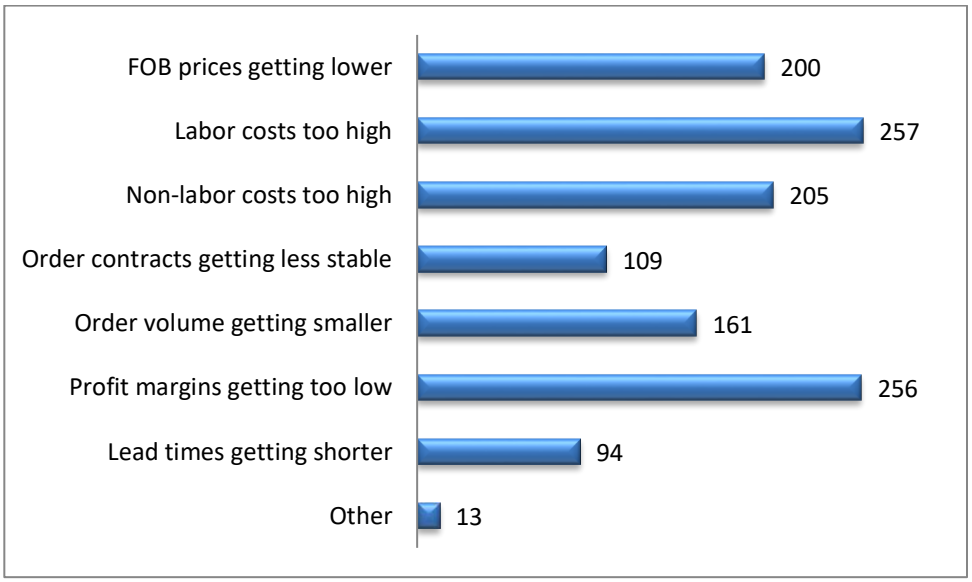


Figure 17: Issues of "Very High Concern" for Suppliers

The fact that suppliers emphasized labor costs and profits at a slightly higher rate than FOB prices reflects the existence of the power imbalances suggested above. Labor costs seem too high and profits margins seem too low to suppliers only because FOB prices are being squeezed downward. However, suppliers have far less ability to influence FOB prices than to adjust wages or take a cut in profits. Indeed, as one supplier noted, "We cannot increase the FOB price according to the cost of labor and fabric." As result, it seems suppliers are more likely to emphasize factors that they believe they can control. In reality, FOB prices and labor and fabric costs are all part of the same equation. The latter would not be a concern if the former was sufficient to cover costs. Other rising cost components include transportation costs, including air freight, and the cost of new equipment that is imported.

Other factors mentioned by suppliers but not on the list above include what one supplier referred to as the "stable labor problem." This refers to the high turnover rate in factories. Many suppliers emphasized their concern with worker skill level and their high dependency on internal migrant workers. Of course, if older skilled workers are quitting due to low wages and being replaced each month by less skilled workers, this will hurt firm productivity levels. Several suppliers remarked that the government should create more worker training institutes and programs. An additional factor was the cost and quality of fabric. As noted, fabric costs make up

the most significant share of FOB prices and are therefore more important to suppliers than labor costs. One supplier noted, “There is no good quality fabric available in India.” In interviews, several suppliers noted the challenge of obtaining fabric for cold weather clothing.

Impact of Purchasing Practices on Employment Relations

As might be imagined, such purchasing practices have an important impact on employment relations. We explore most of the employment relations issues by interviewing and surveying workers. However, we did include a few employment relations questions on the supplier survey. Many suppliers mentioned their concern with the labor laws. Several noted their desire to use more ‘floating labor,’ but this was limited, as one supplier noted, “because we cannot pay them in cash.” In general, employers wanted to have more flexible employment relations. One noted his frustration over the law’s prohibition of contingent workers. Another supplier expressed a similar concern and shared, “The law prohibits us from using contractual labor. But we do use contractual labor because we need to,” presumably as a result of buyer order fluctuations. He added, “We know how to get around the auditors. But this takes time.” Another supplier expressed a similar view with regard to visits from government inspectors: “Labor inspectors will not bother us. They are much better now.”

Interviews suggested that out-of-state migrants received lower wages than locally-based workers. Hence, relying on out-of-state migrants reduces production costs and thus allows employers one way to respond to the price squeeze outlined above. Moreover, out-of-state migrants allow employers to respond to fluctuations in production demands. During peak production periods, employers can be expected to rely more on out-of-state migrants to meet their labor power needs. During low production periods, these workers are let go and often return to work the land in their home villages. We asked employers what percentage of their workforce is made up of out-of-state migrants. On average, employers responded that more than 31 percent of their workers were out-of-state migrants. However, the survey data indicate dramatic variation across regions, from 53.99 percent in the NCR to 5.56 percent in Bengaluru. [See Table 5.]

Another issue of concern for employers and workers is the monthly turnover rate. If workers are unable to receive the wages or the treatment they desire, they may ‘vote with their feet’ by exiting their jobs (Freeman 1980; Hirschman 1970). High turnover rates can be costly for employers as they need to recruit and train new workers. And they are stressful on workers, who may need to go for long periods of time without income as they look for a new job. The Society for Human Resource Management, for international benchmarking purposes, calculates average employer turnover rates to be approximately 19 percent per year, or 1.58 percent per month.[18] What our survey results indicate are average monthly turnover rates of 12.82 percent. Once again, we find significant regional variation, with higher rates in the NCR and lower rates

[18] See: https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2016-Human-Capital-Report.pdf

elsewhere. However, in all regions monthly turnover rates are several times higher than an ideal rate of less than two percent. [See Table 5.]

Table 5: Out-of-State Migrants and Monthly Turnover Rates

	Delhi NCR	Tirupur	Bengaluru	Mumbai	Average
Out of State Migrants	53.99%	14.29%	5.56%	50.20%	31.14%
Monthly Turnover Rate	14.00%	8.83%	8.27%	7.39%	12.82%

Goods and Services Tax (GST)

In July 2017, the government in India implemented the Goods and Services Tax (GST). We had not anticipated this reform to the value-added tax system when we originally designed our survey. As result, we did not ask specific survey questions about the impact of the tax on the garment export sector in India. However, we did include an open-ended question in which we asked suppliers to express any additional concerns that they had about garment production in India. The vast majority of responses were related to the GST. Suppliers noted that the result of the tax was a decline in cash flow for the export sector. At the same time, other export incentives such as duty drawbacks and rebates on state levies (ROSL) were reduced.

Suppliers referred to a drop from a 7.6 percent to a two percent rate on duty drawbacks. And some suppliers said they were not being properly refunded by the government for the GST tax. One mentioned that he had to bribe government representatives to get his refund at 10 percent of the value of the refund. Another supplier noted, “The government is looting exporters.” Some had trouble with the online system used to file for the refund, noting that HS codes[19] are not properly registered.

The problem with the new tax system and the reduction in the drawback rate is that it comes at a time of heightened competition. Bangladesh, the second largest apparel exporter in the world, not only has a lower wage rate, it also has duty-free access to the E.U. market. One supplier noted, as a result of the new system, “There is no margin left in the industry; everyone wants to leave.” Another supplier stated, “After the implementation of GST, we entered the local domestic market.” A different supplier made a similar observation: “The margins in the domestic sector are the same [as in the export sector]. But other costs are less, so we moved into the domestic business.” A third supplier expressed his frustration at the situation by noting, “Earlier there were incentives for exporting. Now these are not there. How can we survive?”

Summary of Employer Survey Findings

[19] “HS codes” stands for Harmonized Commodity Description and Coding System. HS codes are the common international standard for categorizing commodities. HS codes maybe be grouped at the 2-digit, 4-digit, or 6-digit level.

To summarize, our employer survey revealed certain trends and nuances in the industry. From 2012 to 2017, we found in certain segments – notably in knits, European buyers of bottoms, and larger supplier factories – an increase in the payment for cut-make-trim production. However, most sectors experience a decline in the price they received from the supplier by, on average, 7.14 percent. Indeed, 39 percent of suppliers indicated that they accepted more orders below cost when compared to the past year in order to keep their factories running. According the supplier survey, the biggest squeeze was on their profit margins, which declined on average from 13.20 percent to 9.45 percent. The price squeeze was not the only challenge facing supplier factories. Data indicate considerable order volume fluctuations. Eighty percent of suppliers indicated that their buyers often or sometimes changed their order specifications *after* production started. Lead times given by buyers to suppliers to make and ship products were also getting shorter, from 87 days on average in 2012 to 78 days in 2017. At the same time, buyers were taking more time to pay their suppliers after orders shipped, from 47 days to 54 days, on average. Finally, these sourcing squeezes impact employment relations, motivating an increased use of contingent work, overtime, and outsourcing. The average monthly turnover rate was 12.82 percent, suggesting a high share of workers were either quitting or being fired and replaced each month. And the GST and reduction in drawback further hurt the industry at a time of heightened global competition.

Findings, Part 3: Worker Survey and Interviews

To better understand how purchasing practices impact employment relations, we interviewed and surveyed 560 workers. It is important to note that all interviews and surveys were conducted in workers' homes and neighborhoods. They were not conducted on workplace premises, as is often the case for interviews conducted during buyer audits. Indeed, several workers commented to us that this was the first time anyone made the effort to talk to them away from the factories where they could speak more freely.

These workers were equally divided between the NCR and Bengaluru. Workers in the survey had, on average, 7.73 years of education. Most workers (65 percent) were between 26 and 40 years of age. Twenty-one percent were between 18 and 25 years old. On average, workers had been working 8.63 years in garment export factories.

In the sections that follow, we document our findings from this worker survey on a range of employment relations questions, starting with wages.

Wages

In this report we argue that power asymmetries in global supply chains have allowed buyers to use their purchasing practices to squeeze their suppliers. Trade and survey data provide evidence for these trends. The question this report will explore now is whether the squeeze on suppliers results in a squeeze on workers. We will start by exploring wages, hours of work, and work intensity. We will then explore forms of employment (formal, contingent, piece rate, etc.).

Garment workers' wages in India are influenced by minimum wages. In 1948, Parliament enacted the Minimum Wages Act. According to this Act, minimum wage should not only cover bare subsistence (food, shelter, clothing), but also provide for education, medical expenses, and entertainment. Work for wages below the minimum wage is considered a form of forced labor. Wage rates differ, however, by state, skill levels, and occupation (although this system is currently under review).

What the survey data indicate is that, on average, workers receive 10,090 rupees per month in straight wages and 12,082 in total wages (including overtime and bonuses). However, once again, we find significant variation by region and by gender. Male workers in the NCR earn the highest total wages, 12,302 rupees per month. Female workers in Bengaluru receive the lowest total wages, 9,526 rupees per month. What is also noticeable is how important overtime hours and bonuses are for workers' income. For example, 20 percent of female workers' wages in the NCR are due to overtime and bonuses. Their straight wages only came to 8,305 rupees per month. [See Figure 17.]

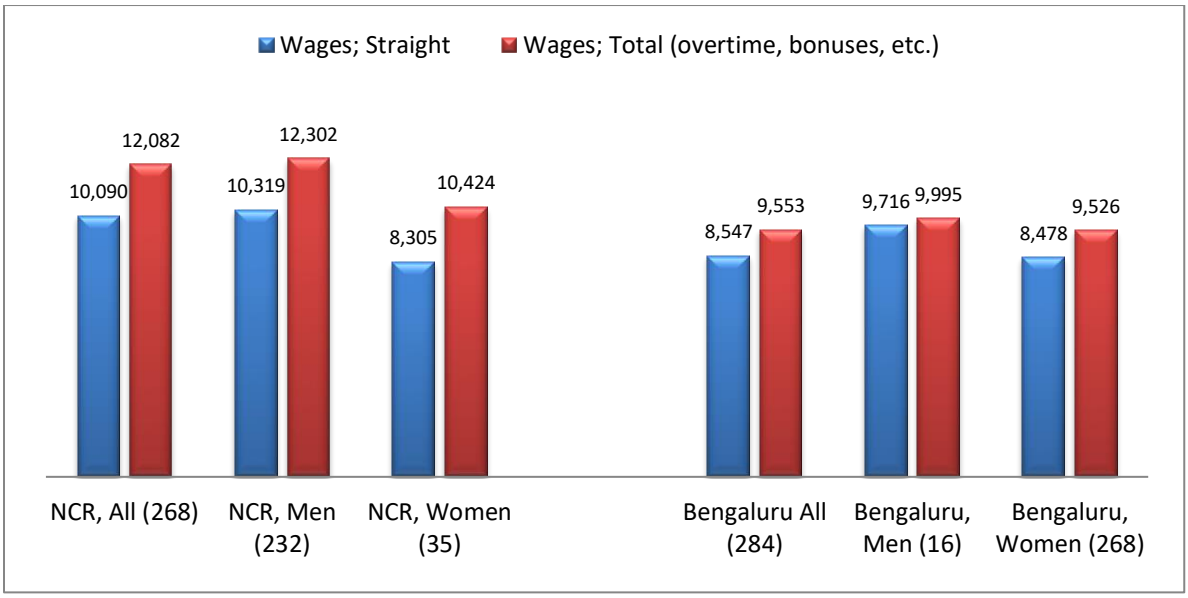


Figure 18: Wages in NCR and Bengaluru (rupees)

Eighty percent of workers stated that straight wages are never enough to cover all living expenses. In the open-ended questions, workers repeatedly and emphatically noted how wages do not fully cover their monthly expenses and need to be increased. Several workers noted that their wages are below the legally-mandated minimum wage. Some workers indicated that they were given higher wages and paystubs in the days prior to the visit of auditors or buyers. However, the following month, when there were no auditors visiting the factories, their wages were reduced by as much as 23 percent. Many workers indicated that either the employer was not deducting social security fees or that they were deducting these fees, but the fees were not getting paid to the appropriate state agencies. As a result, they did not have access to medical

care. One worker noted that domestic workers were getting paid as much as 15,000 rupees per month, while she was only making 7,000 to 8,000 rupees per month as a garment worker.

There was an important gender dynamic to the wage findings. Ninety-six percent of women said straight wages did not cover their living expenses, whereas 61.5 percent of men said straight wages did not cover their living expenses. Most workers buy less nutritious food when their wages do not cover all of their living expenses, followed by cutting their educational expenses for their children. Often, this entails putting children in poor-quality government schools. [See Figure 18.] Forty-seven percent of workers report sending remittances to family members back in their villages. On average, these workers send home 3,386 rupees per month

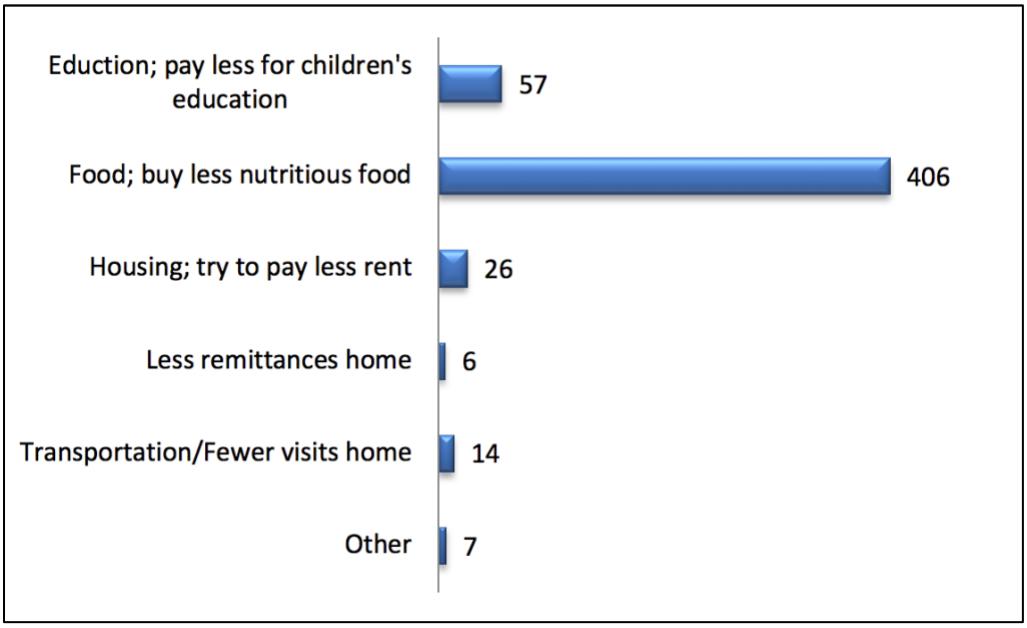
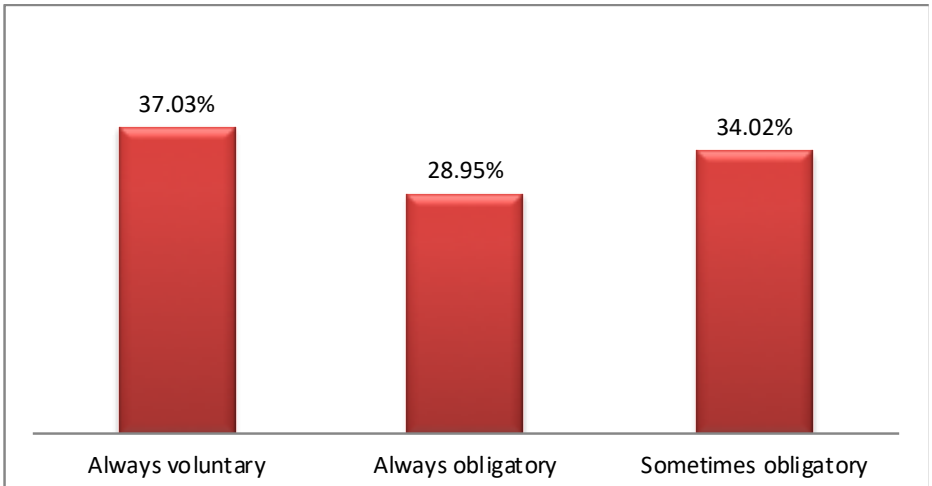


Figure 19: What low income workers reduce from their budget first.

Overtime Hours

As noted above, when supplier factories were asked how they responded to a peak in orders, their first response was that they increased overtime for existing workers. This can be expected. It is easier to have employees work longer hours than to hire new workers. New hires require training and benefits. Thirty-seven percent of workers indicated that overtime was always voluntary, 34.02 percent said it was sometimes obligatory, and 28.95 percent said it was always obligatory. [See Figure 19.] Since production cycles vary so significantly, factory owners only require overtime when an order must be shipped. However, according to ILO standards, overtime should always be voluntary.



Source: Author's survey of factory workers.

Figure 20: Are Overtime Hours Voluntary or Obligatory?

According to Indian labour law, overtime should be paid at a rate of 200 percent of the straight wage rate. Nonetheless, 32 percent of workers indicated that they were paid their regular straight wage rate when performing overtime hours and four percent of respondents indicated they were not paid anything for overtime. In these cases, most often workers who did not meet a production target during their regular shift were instructed to stay after hours and work off the clock to meet their target.

Work Intensity and Verbal Abuse

A significant concern for workers was the issue of work intensity. Eighty-one percent of workers indicated that they have production targets. Moreover, the survey findings indicate that production targets are increasing over time. In 2012, 15 percent of workers reported having production quotas of 60 or more operations per hour. In 2017, more than 50 percent of workers reported having production quotas of 60 or more operations per hour. And while in 2012 less than one percent of workers reported having production quotas of 100 or more operations per hour, by 2017, 20 percent of workers indicated that they had production quotas of 100 or more operations per hour.

These quotas are often aggressively imposed on workers. Sixty-four percent of workers said they had been yelled at by a supervisor, most often for not meeting a production target. In interviews, workers emphasized the change in work intensity. One worker in the Delhi region told us he had worked in the industry for 29 years. We asked him what, during this period, changed the most for him. He responded that employers used to give him daily production quotas and now they imposed hourly production quotas that were much higher. A female worker in the Bengaluru region also emphasized this point during an interview. She noted that she used to have to perform 60 to 80 operations per hour (depending on the product she was making) and now she has to do 80 to 100 operations per hour.

The change from daily quotas to hourly quotas impacts the ability of workers to control their shift. With a daily quota, workers could work harder in the morning and then slowdown in the afternoon if they were on track to meet their daily requirement. This would allow them, for example, to take a restroom break when needed without the worry of missing their quota. Under an hourly system, this is not possible. Indeed, one worker noted that in her factory supervisors go around every hour to work stations with tokens. If a worker has met her production target for the hour, the supervisor places a token on her work station, which allows her to go to the bathroom. If she did not meet the production target, she does not get a token.

One woman referred to the 'tortuous' production quota. In other cases, while a token system was not used, workers felt obligated to avoid bathroom breaks in order not to fall behind on their production quota obligations. One worker stated, "Because of high production targets, I don't drink water as I have to use the toilet if I drink water. Some days I even don't use the toilet once." Another confessed, "Sometimes I even cry that I should not go to work because of high production targets." A third observed, "Over the last three to four months, the torture has been increased a lot to reach the target."

When we asked workers what happened when they did not meet a production target, the most common response (293) was that they were yelled at. In 60 cases (12 percent of the total), workers were yelled at and forced to perform unpaid overtime work to reach a production target. [See Figure 20.]

Many workers noted temporary changes in anticipation of buyer visits. One states, "When buyers visit, then the company provides masks and ID cards. The company should give masks to workers while working [all the time]."

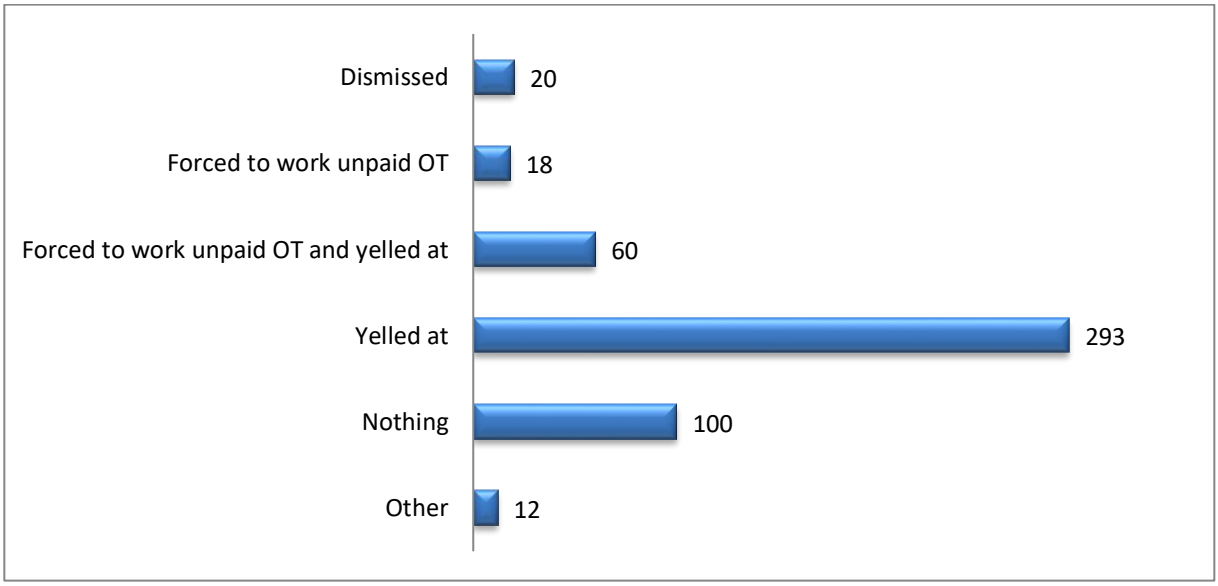


Figure 21: Consequences of Not Meeting Production Targets

The survey results reveal that verbal abuse is common in the garment factories. Sixty-four percent of workers report being yelled at by their supervisor. We asked the workers what the supervisors said when they yelled at them. Here are some of their responses:

> *They call us dogs and donkeys. They ask us if we came to the factory to die. They tell us to work faster or go home. They say we are owls and rascals. They call us beasts and pigs. They ask, 'Did you come here for cattle farming? What do you have in your stomach, mud?' They use vulgar words*.

Local experts in Bangalore noted that some women workers found the treatment was better in smaller factories because the relationships were closer. In large, impersonal factories, supervisors seemed to feel freer to abuse workers. What is notable is that some workers indicated that they would even take lower wages if it meant less abuse.

In an interview, one worker said that, when she could not meet a production target, a supervisor yelled, "Why did you come here dressed so pretty when you don't work? You should be out on a street corner." We were told that many workers quit their jobs because they could not take the verbal abuse any longer. One worker noted, "There was too much yelling initially but when the union had a meeting with the management the yelling has been stopped." However, the survey data indicate that less than two percent of workers are represented by unions.

A detailed examination of trade union rights in the garment sector in India was beyond the scope of this research project. However, data from the Labour Rights Indicators present a worrisome trend. For the past decade, India is among the 20 countries with the highest scores in the world for worker rights violations. Indeed, India has not ratified the ILO Conventions on the Freedom of Association and Protection of the Right to Organise Convention (No. 87) and on the Right to Organise and Collective Bargaining (No. 98). The ILO Committee on Freedom of Association has noted, "with great concern that nearly all legal proceedings concerning dismissals [for trade union activity] remain pending many years after the termination of the plaintiffs' employment."[20] The Committee has requested the Government to give due consideration to the adoption of legislative provisions that further the goal of preventing anti-union discrimination, including by providing for sufficiently dissuasive sanctions against such acts" (Ibid.). These observations by the ILO Committee provide insights as to why the unionization rate in the garment sector is so low.

Job Stability

Frequent adjustments to working hours and increases in production quotas are two ways suppliers respond to buyer purchasing practice. Another response is to increase the use of non-

[20] See: Center for Global Workers' Rights. (2016). Labour Rights Indicators. Retrieved from http://labour-rights-indicators.la.psu.edu/. (Date accessed: May 25, 2019.). For methods behind the data, see (Kucera and Sari forthcoming).

standard, precarious work. Research has shown that, while in some states in India, it is hard to fire permanent workers, these laws do not apply to workers who are hired through contracting firms (Chaurey 2015). Contract and informal workers are also not covered by unionization rights (Ibid). And informal workers do not receive social security benefits. For the workers who do receive social security benefits, the issue is that they cannot receive their 'gratuity pay' until after completing five years of work.[21] This gratuity pay is very important to them because it is used for weddings and critical family expenses. As a result, the need to complete at least five years of work has become a control mechanism of workers since many are afraid to speak out about poor treatment and conditions for fear of losing their jobs and thus their accumulated benefits.[22]

In the survey, 68 percent of workers referred to themselves as 'permanent' workers, 27 percent said they were temporary, and five percent said they were piece rate workers.[23] Yet, only 53 percent of workers had a work contract. [See Figure 21.] This trend was emphasized by workers during interviews. One worker noted that he had worked for 27 years with the same supplier factory. However, his work was provided by an employment agency that, according to his understanding, is established by the factory. Every six months, he is dismissed and the so-called employment agency that contracted him goes out of business. Immediately afterward, a new employment agency appears that gives him a six-month contract to work for the same company.

To make his point, he showed paychecks, all of which had different employment agency names. He said this was done to keep him precarious and not to allow him to accumulate benefits. This male worker with 27 years working for the same employer in a factory with more than 2,000 workers would be seen by most as the epitome of the stable; a core male worker. However, on closer inspection, he is in fact a contingent worker with no formal job security. When asked whether he considered himself a permanent or a temporary worker, he responded that he considered himself to be 'permanently temporary' [Worker interview #1, Noida]. Other workers emphasized how this system of employment agencies was also used to reduce employment during the off season.

[21] Payment of Gratuity Act of 1972. See https://clc.gov.in/clc/sites/default/files/PaymentofGratuityAct.pdf and https://www.india-briefing.com/news/applicability-calculation-gratuity-india-6435.html/.

[22] The author thanks Parvathi Madappa for this important insight.

[23] In should be noted that the survey focused on factory workers, not homeworkers. Homeworkers are an integral part of the production process and they are mostly paid on a piece-rate system.

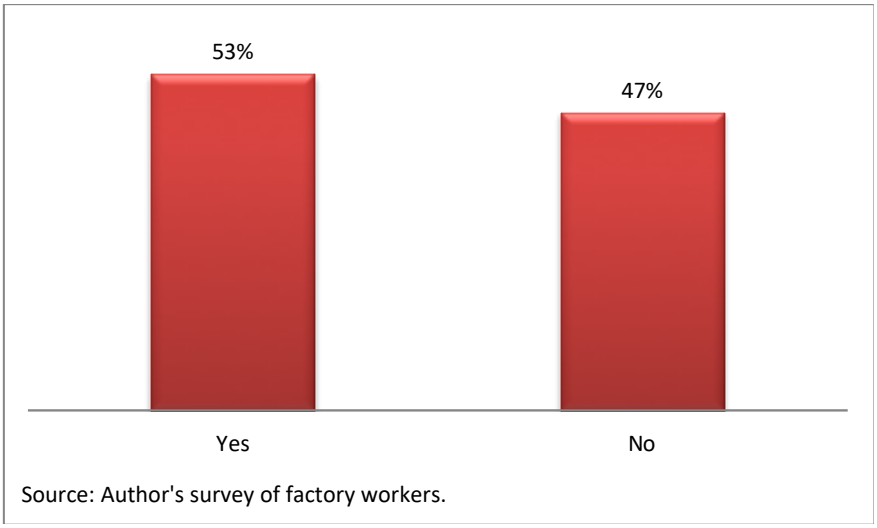


Figure 22: Do you have an employment contract?

We interviewed one worker in 2017 and then again in 2018. When asked if anything had changed in the past year, he said that his work situation had gotten worse, stating, "They used to pay us 200% for overtime hours. Now they pay us 100%. On our paystubs, instead of putting overtime hours, they record this payment as 'incentive pay'." [Worker interview #1, Noida, July 2018.] It is important to note that under the India Labour Law (Factories Act, Section 59) work performed for more than nine hours in any day or for more than 48 hours in any week is to be paid at the rate of twice the ordinary rate of wages.[24] Hence, this practice of paying overtime wages at the straight wage rate is a violation of the law.

This same worker said that he noticed that recently at his factory the staff in the administrative office was growing – suggesting that they were dealing with a growing number of orders – however the workforce at the main facility (which once had 3,000 workers) was in dramatic decline. It was speculated that this was because, to save costs and increase their flexibility, the firm was relying less on its main facility and more on a network of smaller and lower cost subcontractors. Often these are 'hidden' suppliers known as fabricators. Another interesting trend, he explained, is that more women are entering the factories in the Noida region. This is because the factories are paying lower wages and when the wages go down, the men – who expect a higher wage – quit. But the women continue to work for this lower rate of pay. He said that at his factory the workforce is now 70 percent female. [Worker interview #1, Noida, July 2018.]

This is a significant change for a region known to have a majority male workforce (Mezzadri 2016). Indeed, employers in Noida indicated in the survey that only 22 percent of their workers were female. No doubt, there will be considerable variation across firms and the survey did not allow us to measure changes over time in this area. However, one factory visit did provide some insight as to why official figures may put the share of male workers so much higher than the share of female workers in the region. Before touring the factory, we asked the owner what

[24] See: https://paycheck.in/labour-law-india/work-and-wages/work-hours-in-india

share of the workers were male and female. He responded that, in his factory of 200 workers, he had 100 percent male workers. When the interview finished and the factory tour began, about 20 women sitting on the floor could be seen cutting thread off garments as part of the finishing process.

We commented to the owner that we thought his workers were 100 percent male. He responded: "Oh, them; they don't count." [Employer interview #5.] What the comment and the attitude suggested is: 1) Women garment workers are most likely significantly under accounted for; 2) Contingent work is also significantly under accounted for; and 3) Women are more likely to do contingent work than men. During another factory visit, the topic of hidden contingent workers was also revealed. In this case, as we toured the factory, we discussed order fluctuations and how the factory met the demands of the buyers. The general manager stated, "You see this line [of workers]; they are all contingent." He then added, "You know, this is illegal in India. So, we have to hide it from the auditors. That's easy to do, but it is a hassle because it takes time."[25] [Employer interview #6.]

Hourly contingent work is not the only form of informal employment relations practices within factories. In Noida, a worker reported that he was paid on a piece-rate basis – his entire salary is based on how fast he works. He said he works in a factory with 300 workers and they produce for export. He goes to work every day at 9 a.m. and works for 10 hours, six or sometimes seven days a week. His job is to sew the back pockets on pants. He is paid three rupees (about USD five cents) for each pocket he sews on. He noted that he can sew on between 25 and 30 pockets per hour, which comes to an hourly rate of about USD 1.38. In his workplace, approximately one third of the workers earn a piece rate, one third are hired under day contracts, and one third have longer term contracts. But even these 'longer-term contracts' are often for not more than six months. The worker reported that he is not paid for sick days or vacation days. He said he was single and that his parents and his siblings in his home village depend on his income. He sends them about 6,000 to 7,000 rupees per month, which leaves him about 7,000 to 8,000 rupees per month to cover his own expenses.

Toward the end of the interview, we asked, "Is there anything you would like to see done differently at work?" There was a long silence, and then he said, "I have never thought of this question before." [Worker interview #2, Noida, October 2017.] The response seems to suggest that the degree of power imbalance is so significant in the workplace that the workers learn to accept conditions as they are, without ever trying to imagine how things could be different. It seems his only sense of power was choosing at which factory he would work. He said other factories pay five rupees per task, but that the work available at these factories was less stable and that he prefers stable work, even if it pays less. [Worker interview #2, Noida, October 2017.][26]

[25] Presumably, the time he was referring to is the time it takes to create false payroll/employee lists.

[26] While this worker performed unregistered piece-rate work inside the factory, a significant number of workers perform piece-rate work from their homes. While we spoke with some piece-rate workers, we were not able to conduct a full survey of these workers. However, other researchers have done so. Blum found that most

A woman worker in Noida said that she worked as a helper in a factory. She worked from 9 a.m. to 6 p.m. cutting the threads off of garments. She was paid the minimum wage for this job classification of 7,400 rupees per month. She said she had been working at the factory for five years and was never paid one cent above minimum wage. The wage, she emphasized, was not enough to cover all of her living expenses. She also said she was never given the chance of a promotion or the chance to do a different task from which she might earn a little more money.

When we finished the interview, the worker got up to leave the room and then turned back to us and said, "You know, I work in a big factory. Foreigners like you come frequently and they go all around the factory asking questions. But this is the first time someone has come to my neighborhood to ask me questions away from the factory." [Worker interview #3, Noida, October 2017.] The point she was making was that, for the first time, she could at least express some of her concerns about her conditions. Her point also raised broader issues of how buyers conduct their social compliance surveys.

The second site for our interviews with workers was in the southern city, Bengaluru. As noted, Bengaluru is a major hub for apparel export production. The most noticeable difference between Noida and Bengaluru is the gender composition of the workforce. A second difference is that factories tend to be much larger in the south. Yet, other factors are similar, notably the increase in work intensity over time. One local labour relations expert in Bengaluru says that garment workers often comment, "We are like sugarcane to them [the factory owners]. Once they squeeze out all the liquid, they throw us out." He said very few workers are able work past the age of 40.

One union leader in Bengaluru who worked in the industry for decades spoke of this trend:

> *In 1993, we would be required to do 30 to 35 pieces per hour. We had time to sit and joke with our co-workers. We could even take a break and nap. This was for an export brand. Then things got tougher. If you missed a day of work, you were forced to stay standing for an entire day. By the late 1990s, things began to get very bad. The production targets got more intense. Supervisors started yelling more at us. They called us 'dogs' and said we were useless. We felt very sad. We were working so hard and they were yelling at us. They spat on us, threw the garments in our faces, and twisted our ears to make us work faster. We worked long hours, and we were forced to work extra hours for free, off the clock. Some of us spoke back, we said we are here to do our jobs* [Worker interview #2, Bengaluru, July 2018.]

Another worker we interviewed in her home told us that she used to do 450 operations a day. Now she has to do 800 operations a day. She added that they are tracking her by the hour, not by the day. In addition to the increased work intensity, she said that there is more yelling by

homeworkers in the garment export sector worked six to seven days per week for six to eight hours per day. More than 99 percent earned between 50 and 90 percent less than the state-stipulated minimum wage. (Kara 2019)

supervisors at workers than there was years ago. She noted that some workers have begun speaking back, saying, “We can’t do this. This is a new style. Give us time to learn the new style. We are already doing so much work for you. Why are you yelling at us?” [Worker interview #3, Bengaluru, July 2018.] This worker added that, with the intensity of all the work, sometimes her body just cannot take it anymore. At these moments she said she would put on a sweater to start to sweat. She then would tell her supervisor that she was ill. He would see that she was sweating, so he would send her home. [Worker interview #3, Bengaluru.]

One of the growing trends in Bengaluru and elsewhere is the increased reliance on out-of-state migrants. The employer survey indicates that some 41 percent of workers are out-of-state migrants. One migrant worker said, “We cried for the first two to three months when we arrived [from our villages]. Then, for a bit, it was fun to see the city of Bengaluru. But now we are ready to go back to our villages.” [Migrant worker interview #3, Bengaluru, July 2018.] These workers described very intense work schedules.

What was notable is that these migrant workers said that recently the factory where they work switched from producing apparel for export to producing apparel for the domestic market, and that they got paid more and have less intense work schedules producing for the domestic market. Much of the scholarship on development assumes conditions are worse when producing for the domestic market, but this is clearly not the case for these women. They were making silk shirts for domestic consumption and, it seems, the factory owner did not feel the same price squeeze and lead-time pressure when producing for the domestic market as he felt when producing for export.

These 12 migrant women lived in a small apartment with two bedrooms and almost no furniture except for some mats on which to sleep or sit. Some of them had lived there for years, but they said it was the first time someone had come to their dormitory to ask them about their lives and working conditions. In the factory, they said, they talk to a lot of social auditors and managers always tell them what to say before the auditors arrive. Once again, questions about the quality of social audits were raised by the workers.

Factory safety

The majority of workers (87 percent) consider their workplace to be safe. Thirteen percent said they had gotten sick or injured at work. Eighty-eight percent said they are given adequate break time and 93 percent said they are able to visit health facilities when necessary during working hours. Yet, many workers complained of health problems. The most common problems included fainting, feeling feverish, high blood pressure, vomiting, and sewing machine needle injury. One worker stated, “Because of too much of dust, I coughed frequently and once I felt unconscious. I was given treatment and sent home for rest.” Another stated, “Two or three times I was injured by the needle. I was taken to the nurse’s room where the injury was dressed, and a hand plaster was applied. I was not given any time to rest. I was sent back to work.” [Addendum: What this survey was not able to adequately explore was building safety. However, the relevance of this issue was illustrated on December 9, 2019, when 43 workers

were burned to death in a factory fire in New Delhi, India. The factory, which operated in the neighborhood of Anaj Mandi, made hats and handbags. According to press reports, many workers died due to partially blocked exits and sealed windows. The factory was operating illegally, and it appears many migrant workers slept inside the factory due to inadequate wages, which prevented them from finding adequate living quarters. (Addendum added December 11, 2019.)]

Comparisons with previous jobs

Twenty-four percent of workers interviewed say they work in agriculture when there is a downturn in garment production. In comparison with previous jobs, 68 percent work in agriculture and nine percent work as domestic workers. Twenty-five percent said their previous job paid more or about the same as their garment factory job, whereas 75 percent said their current job in the garment industry paid more. However, 72 percent said they work longer hours in their current garment export job relative to their previous job. Hence, much of the difference in income may be a result of working longer hours. Forty percent said their current garment job has better conditions relative to their previous job, while 35 percent said their previous job had better conditions. Twenty-five percent said conditions were similar.

Conclusions

This report has argued that apparel global supply chains are characterized by growing power imbalances between finance capital and buyers that sit at the top of the chains and the suppliers and their workers at the bottom. The model suggests that buyers squeeze suppliers on price and suppliers squeeze workers on wages and working conditions. What this study found was considerable evidence of a price squeeze. Indeed, for products exported to the US since 1994, there has been a 63 percent decline in the real dollar price per unit paid by US buyers to Indian suppliers.

Lead times have also been reduced by 10 percent, order volume has fluctuated making workforce allocation difficult to plan, and order specifications often are changed by buyers after a production cycle starts. The impact on suppliers has resulted in a decline in profit margins ranging between 13.20 and 9.45 percent. Suppliers have also responded by increasing work intensity through the worker production target system and by increasing use of contingent workers and subcontracting.

The impact on workers has been significant. Eighty percent of workers said their straight wages did not cover their living expenses. Seventy-nine percent of workers said that when their wages do not cover their living expenses, the first step they take is to buy less nutritious food for their family. Sixty-three percent of workers said overtime work was sometimes or always obligatory. Thirty-two percent of workers indicated that they were not paid the legal overtime rate of 200 percent.

Work Intensity is a profound concern among workers with increased worker intensity. Production targets have gone from daily targets to hourly targets and they have increased to what some workers refer to as an inhumane pace of production. Rather than the factory term of 'production target,' some workers refer to their 'production torture.' Sixty-four percent of workers said they had been yelled at by their supervisors, often for not meeting their production targets. They indicated they are often called vulgar names when they did not meet targets. Interviews and meetings with local experts indicate that workers were often sexually harassed and faced physical abuse at work.

The majority of workers indicated that they face some degree of precarious employment. Many are home-based workers, in-factory piece rate workers, or contingent (no-contract) workers. Many of the so-called 'stable' contract workers report that they are on six-month contracts via employment agencies that keep closing and re-opening under different names.

Recommendations

- **Buyers: Total Costing for Workers' Rights and Sustainable Development.** One of the most fundamental findings of this report is that the prices paid by buyers for garments produced in India do not cover the costs of living wages and respect for workers' rights, and they are eroding supplier factory profit margins. Moreover, low costs often result in environmentally-damaging production practices. And they do not allow for any significant revenue for governments in the form of taxes that would permit investments in infrastructure, worker training facilities, and a well-staffed and compensated labor inspectorate.

  In this regard, this report calls on buyers to provide written and fair contracts to their suppliers that cover the full costs of social compliance. The idea of 'total costing for social compliance' builds on the work of Rejaul Hasan (Hasan 2019). Simply put, it means that when a buyer set the amount it will pay a supplier, that amount should cover the cost of decent work, safe buildings, living wages, environmental sustainability, and revenue for the government that it can use to improve infrastructure, workplace inspections, schools, and health care.

  Report findings also indicate that buyers must adjust other purchasing practices, including unreasonably short lead times and changes to order specifications after the production cycle starts. Buyers should also improve their planning and forecasting, and, when a change in suppliers is necessary, pursue responsible exit strategies.

  Buyers also must do more to ensure full transparency in their supply chains, including by providing data on unionization rates and collective bargaining agreements and plans to ensure living wage payments to the workers in their supplier factories.

  Finally, there should be zero tolerance for all core labor standards violations as well as violations in the areas of health and building safety, violence and harassment in the world of work, migrant workers' rights, and homeworkers' rights.

- **Governments in Buyer Countries: Regulations for Sustainable Investing and Development.** Governments in buyer countries play a crucial role in setting the rules that govern supply chains and shape the dynamics of competition. In recent decades, state policies often have deregulated financial markets and liberalize trade, which has contributed to a crisis of overcapacity and hyper cost-based competition.

  This indicates the need for governments to modify regulations and incentives for sustainable supply chain investing and to enact mandatory due diligence legislation that covers all multinational buyers, not just the very largest. Mandatory due

diligence legislation should not be limited to child and forced labor. Rather, it should cover all core labor standards as well as building safety, and violence and harassment in the world of work.

Governments in buyer countries also have the power to shape trade regimes. Trade policies must ensure long-term investment practices and not hyper-mobility production regimes that contribute to 'race-to-the-bottom' practices.

Governments in buyer countries can also pursue development programs that encourage production diversity and not overcapacity in a limited range of goods.

Finally, governments in buyer countries can also regulate finance market to encourage firms that pursue sustainable policies.

- **International Labour Organization: Follow up on the 2016 ILC resolution and conclusions on Decent Work in Global Supply Chains.** In June 2016, the Committee on Decent Work in Global Supply Chains gave the ILO a mandate to address governance gaps in global supply chains by providing guidance, programs, measures, initiatives and possible standards to promote decent work in global supply chains. The ILO should move forward in that process with renewed urgency.

- **Indian Government: Labor laws and enforcement, transparent work contracts, and ratification of ILO Convention 190.** This report finds that less than two percent of Indian garment workers are organized in labor unions. The Indian central government state governments can strengthen labor union rights in India through more effective enforcement of labor laws. The findings in this report also suggest the need for minimum wage levels that fully cover living expenses. Ratification of ILO Convention 190 on violence and harassment in the world of work would help to address verbal and physical abuses that are often linked to extreme worker production targets. Finally, the state should enact regulations that ensure written and transparent contracts and full freedom of association and collective bargaining rights for all workers, including in-factory piece rate workers, homeworkers and other contingent workers.

- **Suppliers: Total Cost Pricing with Worker Participation.** While the price and sourcing squeeze no doubt contribute to low wages and poor conditions, there is no justification for abusive treatment of workers. Suppliers must come into compliance with local laws and international standards and terminate all abusive supervisor treatment of workers, including verbal abuse and sexual harassment. To address the buyer squeeze, suppliers should do their part to calculate the total cost of sustainable production including the elements outlined above and present this pricing data to buyers as part of their 'total-costing for workers' rights' imperative. The process and implementation of total costing should be done with the participation of workers and their representatives (see next point).

- **Worker-Driven Social Responsibility.** No sustainable solutions to the problems outlined above are possible without the participation of workers and their representatives. Workers must be allowed to freely exercise their rights to organize, bargain collectively, and strike. They also need to be involved in developing a total costing model for sustainable development. And they should be involved in initiatives to monitor social compliance. Workers and local specialists repeatedly noted the limitation of traditional Corporate Social Responsibility (CSR) monitoring programs. Indeed, we were informed of how CSR auditors do not interview workers away from the factories. Worker involvement in social responsibility program design, implementation and governance ensures that these programs are trusted, transparent, and effective.

- **Consumers:** Consumers can play an active role in ensuring garment global supply chains are more sustainable. This requires being more pro-active, monitoring brands' commitments to workers' rights, and demanding changes from brands that fail to meet their social obligations. This requires actively looking for information on brands to learn about their sourcing practices. How deeply are these brands committed to environmental sustainability? Have they committed to and do they now ensure that their suppliers pay a living wage to workers? How many of their supplier factories have unions and collective bargaining agreements? Are they members of multi-stakeholder initiatives with labor unions? Much of this information is available online. Consumers should make use of this information and make informed decisions.

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