New Directions in Globalization and Working Conditions

This book has taken a fresh look at the links between globalization and working conditions. It has brought insight to the topic and has suggested that globalization has overall been associated with positive developments for workers in developing countries. A number of issues, however, have not been addressed. This chapter puts these results in the perspective of the impacts of globalization on labor markets by summarizing the lessons learned from these country studies and describing an agenda for future research. Specifically, section 1 summarizes the five main findings of the book and compares these findings with expectations from theory. Section 2 discusses implications for future work by identifying issues and areas that the studies in this volume did not cover and providing several specific suggestions for ways to address these issues. One key similarity among all of the countries studied in this volume was that apparel exports played a significant role in their globalization experience. In order to provide a foundation for analyzing one seemingly salient characteristics of globalization for developing countries - the global apparel trade - on working conditions, the last part of section 2 provides a detailed foundation for analyzing how the end of the multi-fiber agreement might be affecting working conditions in developing countries. Section 3 concludes.

1. Expectations and Findings

The five country studies in this volume applied a similar empirical approach to analyzing the effects of globalization and working conditions in developing countries. When taken together, five main results emerge that are worth discussing in turn. The remainder of this section does just that and compares and contrasts each finding with prior expectations.

The first main finding is that the globalization experiences in the five countries share many strikingly similar characteristics. In this book, countries were chosen such that, at first glance, they seemed very different. They vary in size, geography, level of development, and history. Furthermore, aspects of globalization and working conditions that are relevant for one country may not be relevant in another. Nevertheless, these countries have had surprisingly similar experiences with globalization.

First, globalization in each of these countries has been characterized by FDI-driven exports. The similarity in their experiences may be a function of a relatively less-
developed industrial base and the fact that these are relatively low-wage countries. The fact that much of the FDI was focused on exports, rather than on the domestic market, suggests that other domestic producers may have had little to fear from the entrance of foreign firms.

Second, FDI has been concentrated in relatively few sectors. Export-driven FDI in the apparel sector plays a prominent role in each country, although to somewhat varying degrees. In Cambodia, apparel made up 82 percent of all merchandise exports in 2003. Nearly two-thirds of that total was destined for the US market. Virtually all of the factories in the Cambodian garment sector are foreign-owned (UNCTAD and Appelbaum 2005). Honduras rose from being the thirty-fourth supplier of apparel to the U.S. market in 1990 to fourth place in 2003. In 2003, two-thirds of all Honduran exports to the U.S. were garments and more than 82 percent of all Honduran workers worked in foreign-owned factories (UNCTAD and Appelbaum 2005, p. 41). A similar pattern emerges for El Salvador. For Madagascar, apparel exports from the Zone Franche were the primary force behind the remarkable export growth and transition from exporting primary products to manufactured products between 1990 and 2005. By 2001, Madagascar had become the second most important clothing exporter in sub-Saharan Africa.

Indonesia, being much larger than the others, is somewhat more diversified. Indonesia had two distinct periods of liberalization. The textiles and apparel sectors were important in the first, while other heavier industries were more important in the second. Nevertheless, in 2003, Indonesia was the eighth largest apparel exporter in the world, ranking just below the U.S. Indonesia later increasingly received FDI in metal products and machinery and chemical industries. These industries experienced a corresponding increase in exports following the FDI inflows. Indonesia’s more recent period, therefore, stands in contrast to other countries in the study for which FDI and exports still tend to concentrate in the textile and apparel sectors.

In the context of industrial development, it is perhaps not surprising (or possibly consistent with expectations) that apparel would play such a significant role in these countries. Many more developed countries (including the United Kingdom, the United States, and Japan) had relatively large apparel sectors in the early stages of their

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1 UNCTAD and Appelbaum (2005).
development. To the extent that apparel is often found in the early stages of development, the focus on apparel was not entirely unexpected.

Third, when defined broadly to include interactions with foreign governments or NGOs, globalization has affected institutions that play a significant role in shaping working conditions. The qualitative analysis from each section suggests that governments responded to external pressure, such as from foreign governments, the ILO, or other NGOs to improve working conditions. The case of Cambodia is especially distinctive because it is the first country to have quota access specifically tied to working conditions. Interestingly, Cambodian apparel workers also receive the highest wage premiums of any country in our sample. This effect was not unexpected for those who have seen the positive effects of monitoring. Monitoring changes the incentive structure of firms directly and therefore finding a positive effect of monitoring seems to be consistent with several strands of economic theory.

Fourth, in each country, FDI is associated with either a significantly positive or rising wage premium in the apparel sector. For this analysis, each country study estimated inter-industry wage differentials (IIWDs). The finding of statistically significant differences in wages across industries (even after controlling for all observable worker characteristics) is useful for two strands of analysis. First, a comparison of changes in these differentials over time between FDI-intensive/export industries and other industries generates some clues as to how globalization might be affecting particular industries, especially in the short run. Second, it is possible to compare changes in employment shares over time, thereby measuring shifts in employment across industries.

Most of the empirical economics literature suggests that inter-industry wage differentials are significant and stable. Changes in these differentials over time following an episode of increased integration into world markets, therefore, would be suggestive of a pronounced impact of globalization on workers. Where change was possible to estimate, the evidence suggested three connections between globalization and the inter-sectoral wage differentials. We observed (i) FDI-intensive/export sectors paid wages significantly above the mean (Cambodia and Honduras) (ii) the wage premium in FDI/export industries increased over time or (iii) the wage premium was positively correlated with exports and FDI.

Workers in the Cambodian textile industry earned as much as 35 percent above the mean wage, even though these workers are primarily young women. Honduran apparel
workers also received a significant, though smaller, wage premium. In El Salvador, apparel workers were paid below average wages (negative wage premiums) when FDI began to enter, but the apparel wage premium grew along with FDI and exports. Apparel workers in Madagascar’s Zone Franche earned a significant wage premium that fell as the MFA was phased out.

Given statistically and economically significant differences in wages between industries, the movement between industries also has important implications for average working conditions. To the extent that agriculture is a primary alternative for many workers, the fact that wages and working conditions are significantly lower in agriculture suggests that a move from agriculture to the FDI-intensive/exporting sectors represents an improvement in overall working conditions. The FDI-intensive/exporting sectors were found to experience rising employment shares and wage premiums at the same time, suggesting an increase in demand. The latter is consistent with theory: the increase in export opportunities and the increase in FDI are both expected to increase the demand for workers in a particular sector. As long as labor markets are imperfect (that is, wages do not immediately equalize across industries) the increase in demand should increase both wage premiums and employment shares. Apparently, it does.

The implication of this result is that, relative to other sectors in the economy, the sectors that are characterized by export-driven FDI pay higher wages for otherwise low-wage-earning workers. While the countries vary somewhat in the link between FDI and exports, the general pattern seems to be that the entrance of foreign firms increases the demand for labor in sectors that have generally better working conditions than much of the rest of the local economy. These patterns seem to fit with theory. FDI and exports typically induce workers to move from other sectors into the export sector attracting FDI as they combine to increase the demand for labor. Likewise, a fall in the employment shares of import-competing industries for which FDI inflows are negligible is expected. In fact, there is evidence of a decline in the employment share particularly in agriculture and a corresponding rise in the employment shares in the FDI-intensive/export industries.

The country studies also suggest that the positive impact of globalization is reversible. This is a somewhat disappointing result as we might have hoped that the benefits of globalization would include increased market-related social capital and learn-by-doing. In industries where FDI declines, employment shares and wage differentials fall. If rising FDI and exports increase labor demand, then falling FDI and exports should reduce it. In
the countries included in this study, the most prominent cases of falling FDI are Indonesia and Madagascar. The Asian crisis hit Indonesia especially hard. FDI flows were significantly negative for several years. The fall in FDI flows is detectable in the data on employment shares in agriculture. At the time of the Asian crisis, employment shares in agriculture increased, while wage premiums in manufacturing fell. Evidence from Madagascar and preliminary evidence from El Salvador suggest that the end of the MFA may be triggering a movement of capital out of these countries’ apparel sector towards lower-wage countries. As capital leaves, wage premiums in apparel fall.

The fifth main finding is the positive correlation between working conditions and wages. From a theoretical perspective, the relationship between wages and non-wage working conditions could be positive or negative. While it is possible that inter-industry wage differentials arise as a consequence of labor market imperfections, such differentials may emerge even when labor markets are competitive. From Adam Smith, economists have theorized that workers who take jobs in less favorable conditions must be compensated with higher wages, commonly referred to as compensating differentials. If the theory holds, workers in developing countries who accept jobs with less favorable working conditions would earn higher than average wages, suggesting that wages and working conditions would be inversely related.

Empirical evidence of the compensating differential hypothesis has been surprisingly mixed. Villanueva (2007), Viscusi and Moore (1991), and Cousineau et al. (1992) find a positive relationship between risk and wages, while Dorman and Hagstrom (1998) find little, if any, evidence for compensating differentials for risk. Hersch (1998) finds strong evidence of compensating differentials for risk for women, but a negative relationship between risk and wages for white males. Studies in developing countries, such as Moll (1993) for South Africa and Abarache (2001) in Brazil, reject the compensating differential hypothesis. Daniel and Sofer (1998) find a negative relationship between wages and good working conditions in France, but a positive link for unionized workers. These results may suggest that in developing countries with questionable union strength, the relationship between wages and working conditions cannot be determined a priori. Therefore there are no clear expectations or consensus regarding the link between wages and non-wage working conditions and the research here contributes to the academic literature in a potentially important way.
Cambodia, El Salvador, and Indonesia all had data on non-wage working conditions. Each country study provides a comparison of industry-specific measures of working conditions with wage differentials. In all cases, conditions in agriculture were found to be far below the economy-wide average. That is, working conditions in the default industry, agriculture, are very poor. In contrast, non-wage working conditions in the FDI-intensive/export industries were found to be either at or above the economy-wide average.

Although the theory of compensating differentials suggests that higher wages may be necessary to offset adverse working conditions, the measures of working conditions were positively related to wages. This result is consistent with the presence of labor market segmentation. For, if labor markets were perfect or at least characterized by easy movement of labor between industries, industry-specific wages would be expected to exhibit insignificant differences (inter-industry wage differentials) after controlling for demographic characteristics. Thus, it appears that labor markets in export-oriented sectors that attract FDI are characterized by “good” jobs with high wages and better conditions. In contrast, agriculture (or the informal sector in the case of Madagascar), in particular, offers “bad” jobs with low wages and poor conditions of work. Thus, the positive correlation between wages and working conditions is highly suggestive of labor market imperfections rather than compensating differentials.

The positive correlation of wages and non-wage working conditions is particularly informative because wage data are often more complete than data on specific aspects of working conditions. A robust positive correlation between wages and non-wage working conditions suggests that changes in wages may indicate similar changes in working conditions.

2. Implications for Future Work

2.1 Remaining Gaps

The correlation between FDI flows and intersectoral-wage premiums is certainly suggestive of a link between globalization, wages and working conditions. However, one significant gap in some of the country studies is the lack of evidence of a causal link between FDI and exports, on the one hand, and changes in wage differentials and working conditions, on the other. There are several reasons for this gap. First, a formal
empirical analysis would require complete sector-specific FDI. Such data are either rare or non-existent. Second, analysis would rely on relatively few observations, as there are few industries that are consistently identifiable in household surveys over time. This suggests that increased availability of comprehensive sector-specific FDI data would be extremely useful for future research. One strategy would be to significantly expand the country set and take advantage of cross-country variation in FDI flows and exports and industry differentials. This is an important avenue for future research.

A second significant gap is a formal analysis of the role of monitoring conditions of work or labor market regulations. The fact that wage differentials in Cambodia's apparel sector are larger than those estimated in any of the other apparel-exporting countries suggests that monitoring is very important. As mentioned above, this is the case since Cambodia's Multi-fiber Agreement (MFA) access was the first to be specifically tied to monitoring and working conditions.

### 2.2 Suggestions for Future Work

The results of these studies suggest several avenues for future work. A first step would be to follow the same approach in this volume for additional countries, including countries characterized by export-processing zones, middle-income countries with more developed industrial bases prior to liberalization, and the larger developing countries (e.g. China and India). Bangladesh, Sri Lanka, and Nicaragua are all low-income countries that have also concentrated in apparel and therefore might make good candidates. While the countries in this volume were chosen for their potential diversity, expanding the approach to other country sets could potentially reveal a great deal about the generality of the results.

A second avenue would be to pool worker-level surveys to perform a cross-country comparison. Specifically, such an analysis could involve estimating inter-industry wage differentials from worker-level data, controlling for individual characteristics from several countries and then pooling these data with information about sector-specific FDI, trade, and other measures of globalization. This approach would allow for both cross-sectional and time-series variation of globalization measures, and has proven effective for studies examining globalization and non-wage measures of working conditions.²

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² For example, see Mosley and Uno (2007).
A third direction would be to focus on the textile/apparel sector generally rather than taking a country-specific approach. The main issue here is the MFA. FDI and exports tend to concentrate in textiles and apparel. The end of the MFA in 2005 provides a natural experiment in which to disentangle the conflicting effects of globalization on wages and conditions of work. The next section outlines this possible extension in detail with the hopes of providing background and structure for future work.

2.3 Specific Example: Apparel Trade

From 1973 until 2005, global apparel trade was largely governed by the Multi-Fiber Agreements (or Multi-Fiber Arrangement, MFA). The MFA created access to markets (Canada, Europe, and, especially, the U.S.) that may have raised the price of exports to the point of creating an incentive for FDI inflows to produce specifically for exports and creating rents that could have been shared with workers. If the MFA increased the availability of rents to producers, then the end of the MFA should cause these rents to disappear. In general, this would lead to a decline in sector-specific labor demand that may have been the driving force behind higher wages and better non-wage working conditions in our sample countries. In several countries, such as Madagascar, El Salvador, and Honduras, there is evidence of a decline in wages and a deterioration of non-wage working conditions attendant to the end of the MFA.

Given the importance of the apparel sector in each of the countries in this volume, the end of the MFA raises very significant concerns. If the apparel sector represents a sector paying higher wages and offering better working conditions than other domestic sectors, then understanding the link between the MFA and these premiums is critical. In particular, if the reason the apparel sector was able to pay higher wages was because it had access to higher prices in protected markets, then the end of the MFA places these higher wages and better conditions are in jeopardy. Evidence from Madagascar suggests that such a process has begun.

In order to facilitate and encourage future research into this pressing question, the following sections provide a theoretical background and a roadmap for future research focused on understanding the link between MFA and working conditions. In order to provide sufficient context and background, section 3.1 contains a brief history of the MFA. Section 3.2 explores the theoretical link between the expansion and subsequent
termination of the MFA to wages and non-wage working conditions. Section 2.3.3 contains a discussion of an approach for identifying countries that would make additionally good candidates for future studies and the possible role of safeguards and monitoring. In brief, three main research questions emerge: 1) to what extent did the MFA contribute to rising FDI in these countries?; 2) to what extent will/did the fall in FDI affect working conditions?; and 3) what is the role and effect of monitoring and international pressure on working conditions?

2.3.1 Why Textiles and Apparel Matter: A Brief History of the MFA

In 1973, the United States, Canada, and Europe adopted the Multi-fiber Arrangement (also known as the Multi-fiber Agreement). Created in response to concerns with the loss of domestic textile and apparel jobs from mainly low-income countries, the MFA established a system of quotas to limit the quantity of imported textile and apparel products from specific countries. The quota system was both product and country specific. For example, Canada set up its own restrictions on the quantity of sweaters imported from each of a variety of low-income countries. Each low-income country had a different quota allocation.

One of the main effects of this bilateral system was to create export opportunities for countries that would not have otherwise filled their quota allocation. A country that fills its quota would have an incentive to set up operations in countries that had unused quota allocation. In this way, the MFA may have had a significant effect on the pattern of FDI flows across countries.

The MFA was originally designed to be temporary, but continuous annual renewals made the Agreement seem permanent. In response, The World Trade Organization modified the MFA into a new agreement called the Agreement on Textiles and Clothing (ATC) in January 1995. The goal of the ATC was to integrate the quota system into GATT rules. The ATC also laid out a plan to phase out the quota system by December 31, 2004. The plan to phase out the quota system had four phases. The third phase, running from 2002-2004, involved 18 percent of the quotas.³ Phase four eliminated the remaining 49 percent by January 1, 2005. Since January 1, 2005, WTO rules apply to products formally affected by the quota system.

U.S. quota data reveal patterns of the evolution of the phase out. Figure 1, for example, shows the evolution of the mean (positive) quota by year across all countries. This is just the simple average across all countries and sectors, but it shows that the average size of the quotas was rising over time as the MFA was phased out. The beginning of the phase out in 1994 is immediately apparent in Figure 1. Figure 2 shows the mean amount of imports applied against the quota in each year. Textile imports rose under the quota system each year, as would be necessary for an increase in exports from low-wage, textile-exporting countries to affect working conditions at home. Figure 3 shows the evolution of the mean “implied” quota fill rates (the amount of imports divided by the quota limits) over time. These are falling, suggesting that the quotas are expanding faster than trade. This may suggest that the effects of the phase out might be detected in many countries prior to 2005.

There have been several papers that have studied the potential effects of the end of the MFA. Evans and Harrigan (2004) find that filled MFA quotas generate significant wage premiums for the exporting countries. These premiums may both have increased the incentive to invest in these countries and have increased the wages paid to workers. Wage patterns are consistent with industry-specific wage premiums like those that could be generated by quota access. UNCTAD and Appelbaum (2005) suggest that the end of the MFA might change the location incentives of FDI and cause FDI to leave countries that previously enjoyed quota access and move to countries with lower wages or other production advantages.

Several authors have suggested that the end of the MFA may mean a loss in both exports and FDI. If FDI and exports are both positively linked to working conditions, and the results of these studies seem to suggest that they are, then the reduction of FDI and exports might lead to falling wages and non-wage working conditions, both within industries and between industries as workers return to (or do not leave) agriculture. In the few examples where capital outflows were observed, a fall in wage premiums was detected.

2.3.2 Theories of the MFA and Working Conditions

Evidence presented in this volume and elsewhere suggests that a simple textbook model of trade and wages is unlikely to provide much insight into how workers will fare in a
globalizing economy. Over the past two decades, in particular, sleek streamlined highly efficient supply chains have pulled up alongside labor markets that are characterized by imperfect competition, workers with low literacy and market experience, government failure and poorly protected property rights. Supply chains may be bringing all kinds of benefits such as knowledge capital and improved international allocation of production, but they may also be scouring the planet searching for vendors who are particularly adept and monopsonistic exploitation of labor.

Globalization and its implications for wages and working conditions in developing countries will ultimately depend on many factors. These include technology, worker preferences and bargaining power, the cross-sectoral integration of labor markets, the quality of governmental institutions, international trade policy, the transmission of knowledge through supply chains, the establishment and enforcement of international labor standards, the leverage exercised by consumers, stockholders and reputation-sensitive international buyers and the stability of labor markets.

During negotiations to terminate the MFA in the mid-1990s, the principle expectation was that greater market access to Western apparel markets would expand exports in labor-intensive goods, raise the equilibrium wage of unskilled labor and turn the terms of trade in favor of developing countries. In fact, the impact has been far more complex. The benefits in terms of increased apparel exports have been concentrated in a relatively small number of the most competitive countries, the wage premium for workers employed in the textile and apparel firms is declining and the terms of trade have deteriorated for many developing country apparel exporters. As difficult as conditions of work may have been in apparel factories during the MFA, even greater challenges may arise in protecting the rights of workers in the absence of bilateral quantitative constraints.

The theory assumes, as a starting point, that principles and agents throughout global supply chains are acting to maximize some objective function given information available and ethical and contractual constraints. Agents in the supply chain begin with stockholders and consumers, move through corporate sourcing and code compliance officers, factory managers and engineers, and end with workers and their families. The central question is how do globalization, in general, and trade policy, corporate policy, NGO interventions and local government policy, in particular, affect the objective function, information set, and constraints that bind at the margin the actions of agents in
the supply chain? From an empirical point of view a more pointed question might be: What does a change in the globalization and policy environment reveal about the binding constraints and their consequences for working conditions?

The literature concerning the interactions between technology, goods markets and labor relations is vast. Lazear and Oyer (2007) provide a detailed account of the theory and available empirical evidence concerning the determinants of working conditions. Consider, for example, a few of the constraints:

**Technology**

Apparel is a sector characterized by extremely fine division of labor. The production process of every single garment has been decomposed into a set of standardized seams of a particular type and length. In most apparel factories, each tailor sews only one seam on each garment. International standards relating to the time it should take for a skilled tailor to complete a particular task have been determined within the industry by time and motion studies.

As a consequence, the effort by an apparel worker should be fully contractible. One would expect to observe the following:

- piece-rate pay closely linked to individual production targets
- comprehensive data collection on individual output
- workers highly mobile across employers
- uniform pay by skill grade across apparel firms, and
- multiple work shifts which optimize the use of capital and labor.

Given the nature of technology in the apparel industry, why then does the use of non-pecuniary motivational techniques, such as verbal and physical abuse, exist? Why do apparel firms renge on wage commitments that elicit work effort? Why do apparel firms renge on commitments that reward duration of employment, thereby losing investments in worker training? Why do apparel firms commonly choose a single shift with a shift length set beyond the point of diminishing returns for labor productivity?

The personnel economics literature suggests a number of explanations for such market outcomes. For example, workers may be risk-averse. Factory managers may respond by paying workers by the hour rather than by the piece. However, while such a change in the compensation structure may address worker concerns with pay stability, incentives
for effort are diminished. Factories supervisors may then resort to non-pecuniary motivational techniques.

Alternately, international buyers may be concerned with product quality. While a factory manager may be able to easily observe effort related to quantity of garments sewn, worker effort relating to product quality may be more difficult to quantify. In such a situation, the firm may employ multi-dimensional pay designed to prevent a worker from focusing exclusively on quantity produced.

**Imperfections in the Market for Information**

There are, in fact, multiple explanations for managerial decisions that convert a common factory into a sweatshop. Some relate to failures in the market for information. A factory manager may attempt to cheat workers out of their wages if the workers are young, female, illiterate and/or with limited market experience. That is, the firm is exploiting deficiencies in the worker’s information set.

Several factors may work to reduce exploitation over time. For example, reputation-sensitive international buyers may effectively pressure their suppliers to improve conditions of work. Corporate, third-party or legal codes regulating treatment of workers may remedy the information market failure affecting the ability of workers to bargain effectively on their own behalf. Or workers may become more market savvy after a period of factory employment.

Alternatively, factory supervisors may resort to traditional strategies for managing workers because they lack the knowledge to use more sophisticated systems of human resource management. Experimentation with management innovations is costly and risky. This is particularly the case with innovations relating to labor management, as human behavior is sometimes difficult to predict. Factory managers may find that the productivity implications of adopting new machinery and equipment are more predictable. Such calculations introduce a capital-bias in the innovation process. Corporate codes of conduct that require factory managers to change their approach to labor management may, inadvertently, push factories to discover more humane labor management practices that also improve productivity. Thus, it is possible that the main effect of corporate code enforcement is to transmit information to managers relating to humane labor management strategies that are also profit-maximizing.
Aligned Incentives
It is entirely possible that humane labor management practices maximize the total surplus of an apparel enterprise. However, the switch from sweatshop-like labor management practices to higher-level systems may increase labor’s cost share so much that the return to capital declines. The nature of pay incentives and pay level necessary to induce labor performance that optimizes the total value of the enterprise may significantly alter the division of an enterprise’s total surplus. As a consequence, factory managers may not introduce efficiency-enhancing innovations in the absence of pressure from competitors or consumers to do so.

In addition, corporate codes may force firms to pay wages actually promised or to honor long-term contracts. Imposing such constraints on factory managers may have the effect of inducing firms to substitute to a more sophisticated labor management strategy. That is, constraining the firm’s behavior along a couple of labor management dimensions may significantly alter the profit-maximizing strategy for managing workers. Factories forced to pay promised wages may choose to rely more heavily on the use of pay incentives that induce worker effort. Factories forced to pay severance pay may choose to invest in training and skills upgrading and to provide other incentives for workers to remain with the firm.

Factor Markets and Factor Prices
Wages in apparel relative to both the return to capital and wages in other sectors depends critically on the nature of the underlying factor markets. In a standard Heckscher-Ohlin type model in which factors are freely mobile between sectors, the quantitative restriction on output by the apparel industry dictates relative factor prices. The impact on factor prices from the removal of the MFA depends on whether a country is a winner or a loser from the termination of the system of bilateral quotas. Relatively high-cost producers will lose market share while low cost producers will expand output. A country such as China that enjoys an expansion of exports as a consequence of the elimination of quantitative restrictions will see apparel output rise. This increase in apparel output is accompanied by a rise in the demand for unskilled labor, thereby raising wages relative to capital. By contrast, a country that loses a market for its apparel exports once the MFA has been eliminated will see apparel production. Wages relative to the return to capital will also decline.
Evidence suggests, though, that the textbook view relating export quotas and wages is too simplistic to adequately understand the impact of the MFA on wages. As discussed previously in this volume, workers in apparel appear to earn a wage premium relative to agricultural wages after controlling for worker characteristics. There are several possible explanations. These explanations are not necessarily mutually exclusive.

First, labor markets may be segmented. That is, workers may not move easily from one sector to another. This could be particularly the case for young rural female workers with low literacy and market experience who must migrate from the countryside to urban factory jobs. They may be leaving behind families or even, in many cases, their own children. In addition, it may be difficult to enter manufacturing. Higher-than-market wages generate job queues that allow employers to be selective when hiring. The gains from being selective (for example, in terms of higher worker productivity) may outweigh the gains from paying market wages.

Second, there may be unobservable worker heterogeneity. That is, workers employed in the apparel sector may have acquired skills earned with experience, abilities unrelated to educational attainment or personality characteristics that are rewarded in a factory setting. The observed apparel-agricultural wage premium may simply be a return to these acquired skills.

Third, apparel workers may have succeeded in capturing some of the quota rents generated by the MFA. Such an outcome could occur if quota licenses are not allocated to the highest bidders.

Fourth, the apparel-agriculture wage premium may also be the result of reputation-sensitive international buyers. Anti-sweatshop agitation beginning in the early 1990s may have pushed vendors supplying the international market to upgrade working conditions, including wages.

**Quality Downgrading**

One of the more curious features of quantitative restrictions concerns their impact on product quality. Quantitative restrictions tend to increase product quality. The price of a quota license is uniform across products within a quota category. For example, the cost of an import license may be $5 for a shirt no matter what the shirt’s price. For a high quality shirt that retails for $50, the quota license imposes a 10 percent additional cost.
By contrast, for a basic shirt that retails for $20, the quota license imposes an additional 25 percent cost. As a consequence of the lower percentage cost of the quota license, firms selling higher quality/higher priced goods bid up the quota license price. Cheaper/lower quality products are squeezed from the market. Removal of the quantitative restrictions should reverse the process. Indeed, a decline in average quality of apparel imports by the United States accompanying the end of the MFA has been documented by Harrigan and Barrows (2006).

The decline in the average quality of apparel imports is welfare-improving when viewed from the perspective of Western consumers. For the quality upgrading that occurred during the tenure of the MFA was an artifact of its implementation. However, the decline in demand for quality may affect both wages and the overall human resource management strategy for an apparel factory for several reasons.

For example, producing quality garments requires skill and knowledge. Factories would optimally respond to the demand for quality by investing in training and skill development, introducing worker-friendly innovations that help the firm retain newly-skilled workers and compensating workers for the market value of their skills. As a consequence of the fall in the demand for skilled tailors accompanying the end of the MFA, factory managers may come to view individual apparel workers as disposable. The incentive to provide a worker-friendly environment could be greatly diminished.

Furthermore, quality can take a couple of different forms. Most conventionally, quality is related to the materials used and workmanship. However, some Western consumers also consider the underlying conditions of work as a quality characteristic when purchasing apparel. Reputation-sensitive firms are more likely to enforce corporate codes of conduct relating to the treatment of workers than firms that compete on price alone. Quality-sensitive international buyers have a closer relationship and visit their vendor factories frequently for the purpose of ensuring quality. These visits have been shown to improve conditions of work (e.g., Locke et al; 2006). Thus, quantitative restrictions provided reputation-sensitive international buyers that sell premium-priced goods some protection from firms that compete on price alone. Thus, quality down-grading following the end of the MFA may take the form of reduced sales by reputation-sensitive firms and diminished monitoring relating to conditions of work.

2.3.3 Empirical Strategies: Quantitative and Qualitative Approaches
Three main empirical strategies can be pursued to better understand the inter-linkages between international economic integration and working conditions.

First, the end of the MFA provides a natural experiment that can produce considerable evidence on the interaction between labor market outcomes and institutions. A number of inferences can be made concerning the impact of globalization on workers by observing changes in total apparel production, global market share, the apparel-agriculture wage premium, the wage-rent ratio and labor’s cost share. For example, a rise in the wage-rent ratio in countries acquiring market share and a decline in countries losing market share would be consistent with the standard textbook theory of trade and wage determination. By contrast, a decline in relative wages for all apparel workers is consistent with the view that apparel workers had managed to acquire some of the quota rents. Alternatively, market share and its relation to wages may depend on the activities of reputation-sensitive international buyers or NGO activity targeting working conditions. A decline in the apparel-agriculture wage premium may also indicate a decline in the market share of reputation-sensitive international buyers or a fall in the reputation price premium.

In contrast, if the apparel-agriculture wage premium persists in the absence of the MFA, this will provide evidence that supply chains brought knowledge capital that permanently improved the management of labor in developing countries. In addition, inferences concerning the impact of corporate codes of conduct on labor outcomes may become evident. An outcome where some countries with an established reputation for humane treatment of labor are able to retain market share without reducing price may also be observed. Such a price premium would be indicative of western consumer’s willingness to pay for “good” working conditions. Alternatively, apparel producers in such countries may be able to remain price competitive without reducing wages. Such an outcome would indicate that humane labor management practices are also profit-maximizing.

Second, framed field experiments have been used extensively in development economics generally, within the field of personnel economics and in the study of human resource management practices in apparel and footwear factories. However, there does not exist to date a single field experiment in global supply chains that was sufficiently carefully designed to draw conclusions concerning the causal link between management of supply chains and outcomes for workers, their families and communities.
Finally, the role of qualitative analysis is also potentially significant, especially in understanding the roles of safeguards and monitoring. Qualitative evidence (e.g., Polaski; 2006) from Cambodia suggests that safeguards and monitoring play an important role in improving working conditions. External pressure from the ILO also played a significant role in changing government regulations in Indonesia and El Salvador. These successes raise interesting hypotheses. For example, it is possible that FDI without monitoring may not have increased either wages or working conditions. If that is the case, the end of the MFA may not have significant implications for working conditions if monitoring mechanisms remain in place even if FDI were to leave. Therefore, including qualitative assessments of the practice and efficacy of monitoring could improve the accuracy of any future study of globalization and working conditions.

3. Conclusions

So what is the current understanding of the relationship between globalization and outcomes for workers? Much of the economic analysis undertaken in the 1990s, particularly by trade specialists, was fairly optimistic: (1) the impact of trade on labor was small but largely positive; (2) trade appeared to have little impact on wages and the distribution of income; (3) foreign-owned and export-oriented firms paid higher wages and (4) there was little to no evidence of a race to the bottom in labor standards. However, several empirical results suggest that trade economists may have been underestimating the impact of globalization on wages and working conditions.

In the studies presented in this volume, there is emergent evidence that the observed positive impact of globalization on workers in developing countries is an artifact of the MFA. Bilateral quotas allocated production across many countries and created economic rents some of which may have been captured by workers. For these reasons, trade economists may need to look again at the impact of globalization on labor practices, legally mandated protections, the types of jobs available, wages and employment benefits. Careful analysis of the determinants of employer-based access to health insurance and retirement benefits may support the anecdotal evidence that trade is indeed substantially eroding labor’s income share.

A second line of analysis concerns the mechanisms through which trade may be affecting workers. Standard trade theory tells us to look at relative factor abundance to determine
relative factor rewards. However, there may be a set of labor market inefficiencies that are aggravated by increased globalization.

Consider, for example, the factors that undermine the bargaining power of workers vis-à-vis factory managers. Both as an historical matter (Brown, 2002) and in factories around the world today, apparel workers are often very young, female, poorly educated or illiterate and may not speak the language of their managers or supervisors (Kim, 2007). Workers migrating to urban areas from the countryside may not even have market experience with any arrangement other than a barter economy.

Several factors then conspire to preserve the bargaining imbalance. The use of the police power of the state to intervene in capital-labor strife on the side of capital has historically played a significant role in preventing workers and factory managers from negotiating a market clearing equilibrium wage. As described in the country studies, concerns about government hesitation to actively support free association, particularly in EPZs, have been raised in several countries, especially in Honduras and El Salvador.

A second factor, often mentioned in passing but under-appreciated, is the role that macroeconomic mismanagement plays in undermining the bargaining power of workers. The presence of a pool of unemployed workers out the back door of the factory greatly dampens the willingness of workers to give voice to their grievances. Frequent economic downturns often wipe out the gains that workers might have won during a preceding period of economic growth. Indonesia is the most dramatic example of this aspect among the countries studied in this volume.\footnote{This phenomenon was also evident during the anti-sweatshop movement of the early 20\textsuperscript{th} century. For a detailed account of the relationship between macroeconomic volatility and working conditions in the U.S. apparel industry, see Brown (2002).}

Third, multinationals roaming the globe seeking out the lowest production cost may unwittingly seek out precisely those firms that are most successful at engaging in monopsonistic exploitation. Anti-sweatshop activists have played an important role in unleashing the cascade of events that have addressed some of the market malfunctions that produce poor outcomes for workers in a globalizing economy. Harrison and Scorse (2003), in their analysis of wage formation behavior in Indonesia during the 1990s, make a compelling \textit{prima facie} case that a labor-management bargaining imbalance was particularly acute in the textiles, apparel and footwear industries. Factories, forced to
raise wages as a consequence of government action and anti-sweatshop agitation, were able to do so without cutting employment or production.

Anti-sweatshop agitation has also been critical in transforming the state’s role in worker-management conflict from one taking the side of capital into one of honest broker. NGO or government sponsored programs targeted at providing a general education and informing workers about their options can also help redress the bargaining imbalance. (See for example, Kim (2007) and Polaski (2006).)

On a more positive note, there is some evidence that humane labor management practices are also more efficient. Several studies provide an indication that at least some labor management innovations increase profitability. Multinationals can play a critical role in helping the vendors in their supply chains uncover labor practices that are both more humane and more efficient. Multinationals also have a role in helping producers to access specialty markets that are willing to pay for more costly, sustainable, and humane production techniques, as argued by Sabel et al (2000). More evidence on this topic is clearly needed and, thus, represents an important and emergent line of inquiry in our understanding of globalization and its consequences for labor outcomes.
References


Mosley, Layna and Uno, Saika (2007) “Racing to the Bottom or Climbing to the Top?” Comparative Political Studies 40(8), August, pp. 923-948.


**Figure 1: Mean Positive Quota by Year**
Figure 2: Mean Applied Imports by Year

Mean Applied Quantity

Year Approximation


5.3e+06 8.1e+06
Figure 3: Mean Implied Applied Fill Rate