

## THE EFFECTS OF GLOBALIZATION ON WORKING CONDITIONS IN DEVELOPING COUNTRIES

### *An Analysis Framework and Country Study Results\**

Globalization—defined as falling barriers to, and the increase in, trade, migration, and investment across borders—directly affects workers in both developed and developing countries. While most global trade and investment is between the developed countries, globalization has increased dramatically in a number of developing countries.

According to the World Development Indicators database, the ratio of trade in goods to gross domestic product (GDP) in the low and middle income countries has increased between 1990 and 2003; with some countries, experiencing especially large changes.

Changes in foreign direct investment (FDI) have also been significant. For South and East Asia, the ratio of inward FDI to GDP increased between 1990 and 2003. As with trade, changes in FDI varied a great deal across countries. These dramatic changes in trade and FDI hold both promise and peril for workers in developing countries.

Understanding the effects of globalization is critical for governments concerned about employment, working conditions, and, ultimately, poverty reduction. Broadly defined, working conditions includes wages and other key job characteristics including (but not necessarily limited to) health and safety, hours, security, benefits, and representation. These conditions have

direct and indirect effects on the risk of falling or staying in poverty.

As Brown (2007) notes in her literature review, the existing evidence is somewhat inconclusive and there are only a few studies that systematically evaluate the effects of globalization and working conditions either within or across countries.

This note outlines an approach for a systematic cross-country comparison of the relationship between globalization and working conditions. In addition, the results from applying this approach to five countries (Cambodia, El Salvador, Honduras, Indonesia, and Madagascar) are presented.

### **An Analysis Framework**

In studying the impact of globalization on working conditions, it is important to account for each country's unique history, institutions, and economic conditions. In particular, defining globalization and working conditions in terms of dimensions relevant to each country's experience is vital for conducting a meaningful analysis. Furthermore, how one defines globalization and working conditions will shape how one thinks about globalization's effects on working conditions and, therefore, the appropriate way to study the link between them.

\*This note was prepared by Ruwan Jayasuriya, based on a forthcoming study by Drusilla Brown, Raymond Robertson et al, "Globalization and Working Conditions: Evidence from Five Developing Countries" (working title). The World Bank Employment Policy Primer aims to provide a comprehensive, up-to-date resource on labor market policy issues. The series includes two products: short notes, such as this one, with concise summaries of best practice on various topics; and longer papers with new research results or assessments of the literature and recent experience. Primer papers and notes are available on the labor markets Website at [www.worldbank.org/labormarkets](http://www.worldbank.org/labormarkets), by contacting the Social Protection Advisory Service at (202) 458-5267, or by email at [socialprotection@worldbank.org](mailto:socialprotection@worldbank.org).

### Measuring Globalization

Globalization has many faces. It deals with the increase in values and volumes of trade in goods and services among countries, which generally result from reducing tariffs, quotas and other barriers to trade. The associated FDI aimed at facilitating this process is also a key factor.

Globalization also deals with the development and spread of technologies, especially Information and Telecommunication Technologies, which allow access to information all over the world, and to connect with production, distribution and knowledge networks, rapidly increasing the potential for development around the globe.

Furthermore, it also deals with international migration between developing and developed countries, and among themselves, which changes the economic relations and structures among and within countries. The spread of democracy and democratic institutions in the world along with the role of international non-governmental organizations is another facet of interest.

All these faces can affect the behavior and the structure of labor markets within a country. In particular, depending on which of these features are more important for a particular country, and the particular (idiosyncratic) characteristics of the country that determines how it is prepared (or not) to take advantages of the new opportunities and challenges posed by globalization, will lead to a different impact.

For example, FDI that produces for the domestic market may increase competition for firms causing them to lower costs by making working conditions worse. In contrast, FDI that produces for export may increase the demand for workers, which may cause firms to improve working conditions as a way to attract or retain workers. In addition to the nature of changes in globalization, the speed with which liberalization is implemented (i.e., gradual phase-in vs. sudden) and number of industries (many vs. few) impacted are both relevant to understand how globalization affects workers.

Therefore it is important to first characterize the country's experience with globalization that will aid in selecting the suitable approach to analyze its impact on working conditions.

### Measuring Working Conditions

Defining working conditions in terms of dimensions relevant to each country's experience is important

in conducting a meaningful analysis. Within this context, providing a description of the existing labor standards along with their evolution, information on private voluntary initiatives that allow consumers and investors to express their values relating to working conditions, details on trade agreements that have been used to affect working conditions, and an explanation of any interventions, regulations and monitoring programs will provide valuable additional insight.

In addition, changes in a country's average working conditions can occur as a result of changes in industry composition or in within-industry changes in working conditions over time; in particular, if working conditions differ across industries in a significant manner and are constant over time, movement of workers between industries would change average working conditions. If workers moved from industries with poor conditions to industries with better conditions, average working conditions would improve (and vice versa).

Similarly, exposure to international markets can increase international attention paid to local working conditions, and could cause domestic firms to improve their working conditions. The effects of FDI on working conditions is not clear *a priori*, but rather depends on the difference between the standards in foreign firms relative to domestic firms. If firms from countries with better working conditions find it advantageous to keep working conditions somewhere between the domestic level and those in the capital's origin country, this would increase the average level of working conditions and may induce domestic firms to improve working conditions in order to keep and attract workers. In order to analyze these kinds of changes, it is important to have information on how working conditions change over time; ideally at the firm-level.

Working conditions can be categorized into wages and non-wage working conditions (i.e., health and safety, hours, security, benefits, union representation, and details about the working environment)<sup>1</sup> in studying their relationship with globalization; in particular, indi-

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<sup>1</sup> In addition to the Core Labor Standards established by the International Labor Organization (ILO), Elliott and Freeman (2003) also list dark, crowded, hot, noisy workplaces, no emergency exits or fire extinguishers, inadequate or no time to go to the toilet, no canteen or place to eat, abusive supervisors who strike young workers, below-minimum wage payments, absence of written contracts, compulsory overtime, sexual or other harassment of workers, and late or short wage payments among other concerns about working conditions in developing countries.

vidual-level measures of wage and non-wage conditions are needed to conduct a meaningful analysis.

The country studies presented in this note use labor force survey data to compare industry specific wage and non-wage working conditions of industries directly affected by globalization with other industries to provide valuable insight into the impact of globalization on working conditions. The labor force survey data used all have comparable measures of wages, making wages (and inter-industry wage differentials) a natural choice for working conditions measure that is comparable across countries. This data also contains different (not comparable) measures of non-wage working conditions that provide country-specific detail on working conditions unique to each country.

Furthermore, it is important to develop an understanding of the relationship between wages and non-wage working conditions because a negative correlation between the two would suggest that changes in one offset the other in a manner that would make conclusions about a net effect of globalization on working conditions difficult to identify.

### Empirical Application

The link between globalization and working conditions is not clear *a priori* in the sense that globalization holds the potential to both help and hurt workers. Globalization may increase foreign investment and exports in ways that would increase labor demand. On the other hand, globalization may primarily be manifested as an increase in imports and loss of protection, forcing firms to attempt to reduce costs by worsening working conditions. In any case, globalization involves adjustment and empirical work can help identify the forces that may affect working conditions. Furthermore, different measures of globalization have different implications for working conditions; hence, having a sound understanding of what measures of globalization and working conditions are used along with a country's experience will aid in conducting a meaningful analysis.

Within this context, an effective study of the effects of globalization on working conditions should initially provide a descriptive analysis of the country's experience with globalization and working conditions to identify key variables (i.e., tariff changes, FDI, and etc.), and also assess the degree of competition for domestic firms brought about by globalization. Three analytical meth-

odologies can be used in the analyses: (i) event studies, (ii) price studies, and (iii) quantity studies.

Event studies compare working conditions before and after a clearly identified liberalization event, while controlling for other confounding factors that may have changed concurrently.

Price studies, based on neoclassical trade theory, rely on changes in relative prices to capture the effects of liberalization. A change in the price of a good relative to other goods in the economy will affect the conditions of workers (especially wages) within that industry; thus, can be used to capture the impact of globalization on working conditions.

Quantity studies link imports, exports, FDI and other quantity measures with working conditions. By using disaggregate industry-level import/export data, industry-specific effects of trade can be captured while controlling for other factors that may affect working conditions and globalization measures.

To investigate the effects of globalization on working conditions between industries, wage differentials between industries can be estimated. In addition to globalization variables, worker characteristics (such as gender, age, education and other factors) that also affect wages should be included in the regression analysis as controls.

Based on data availability, non-wage working conditions (i.e., health and safety, hours, security, benefits, union representation, and details about the working environment) of industries directly affected by globalization can be compared with other industries to develop a more comprehensive understanding of globalizations impact on working conditions.

Labor force surveys, which are becoming increasingly available, generally contain this data that can be used in analyses.

### Country Study Findings

Data from Cambodia, El Salvador, Honduras, Indonesia, and Madagascar were used to analyze the link between globalization and working conditions. These five countries have all had significant experiences with liberalization and globalization in the last twenty years. Together they represent Latin America, South-East Asia, and Africa, and vary significantly in terms of their geography, size, population, and income. The heterogeneity between these countries creates a useful comparison of the effects of globalization on working conditions.

The methodology described in this note was applied in each of the country studies, where worker-level data with information on working conditions and industry-level globalization measures were used in the analyses. Industry-specific wage premiums that controlled for worker characteristics were estimated, and industries that were particular recipients of FDI and engines of export growth were identified. Although the countries depict much heterogeneity, the prevalence of FDI focused in the textile/apparel sectors producing for export is a common characteristic in at least some period covered by each country study.

Consistent with theory, these countries have experienced an increase in demand for labor in sectors attracting FDI flows and a fall in the employment shares of import-competing industries for which FDI inflows are negligible. In fact, evidence that support a decline in the employment share particularly in agriculture and a corresponding rise in the employment shares in the FDI-intensive/export industries is observed.

Data on industry-specific wage differentials and measures of working conditions for Cambodia, El Salvador, Indonesia and Madagascar indicate that labor in the FDI-intensive/export industries have generally better wages and non-wage working conditions than much of the rest of the local economy. In each case, wages and non-wage working conditions in agriculture—the default industry—were found to be far below the economy-wide average. In contrast, wages and non-wage working conditions in the FDI-intensive/export industries were found to be either at or above the economy-wide average.

Cambodia is especially unique because it is the first country to have quota access specifically tied to non-wage working conditions. Interestingly, Cambodian apparel workers also receive the highest wage premiums of any of the five countries included in the analysis.

This important finding of a positive correlation between wages and non-wage working conditions is at odds with Adam Smith's *compensating differentials* argument, which theorizes that jobs in less favorable non-wage working conditions must be compensated with higher wages.

The observed positive correlation between wages and non-wage working conditions 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, inter-industry wage differentials would need to be non-existent (or minor) after controlling for demographic characteristics.

Thus, it appears that labor markets in export-oriented sectors which attract FDI are characterized by “good” jobs with high wages and better non-wage working conditions. In contrast, agriculture, in particular, offers “bad” jobs with low wages and poor non-wage working conditions.

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 may create the presumption that changes in wages indicate similar changes in working conditions.

In the case of Cambodia and Honduras, changes in inter-industry wage differentials over time following an episode of increased integration into world markets were observable and are suggestive of a pronounced impact of globalization on their respective workers. The FDI-intensive/export sectors were found to either pay wages significantly above the mean or the wage premium in that industry either increased over time or changed with patterns of exports and FDI. In Cambodia, workers in the textile industry earned as much as 35 percent above the mean wage, even though these workers are primarily young women. In Honduras, apparel workers also earned a significant wage premium. In El Salvador, workers earned low wages, which grew with FDI and exports.

Given the statistically and economically significant differences in wages between industries, the movement of workers between industries also has important implications for average working conditions. To the extent that agriculture, which has wages and non-wage working conditions that are significantly lower, is a primary alternative for many domestic workers, the 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, which is suggestive of an increase in demand for workers that is consistent with theory. As long as labor markets are imperfect (i.e., wages do not immediately equalize across industries) the increase

in demand should increase both wage premiums and employment shares. The observed results confirm this outcome.

Evidence was also found which suggested that in industries where FDI exits, employment shares and wage differentials fall. In the countries included in this study, there are two main causes for the fall in FDI. First, the Asian crisis resulted in a significant decrease or negative FDI flows for several years. During this crisis period, employment shares in agriculture increased and wage premiums in manufacturing fell. Second, the

approach of the Agreement on Textiles and Clothing (ACT) ending has resulted in a fall in FDI; especially in Madagascar.

A summary of the key elements related to the country studies is presented in Table 1.

## Conclusions

The country study results described in this note support the hypothesis that globalization has contributed to a shift of workers from sectors with low wage and poor

**Table 1: Summary of Country Study Results**

	Cambodia	El Salvador	Honduras	Indonesia	Madagascar
<b>Globalization Experience</b>	<ul style="list-style-type: none"> <li>• Evolved from a tightly controlled socialist economy in 1980 to a free market economy</li> <li>• Rise in FDI and exports in the garment sector</li> <li>• To a lesser extent, rise in construction related to tourism</li> <li>• Quota access specifically tied to non-wage working conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Mainly trade liberalization, export promotion, and attractive FDI framework</li> <li>• Rise in FDI to the garment and non-tradable sectors</li> <li>• Development of <i>marquila</i> sector</li> <li>• Key role played by large outward migration and resulting flows of remittances</li> </ul>	<ul style="list-style-type: none"> <li>• Mainly trade liberalization, capital inflows, and labor outflows</li> <li>• Rise in FDI and exports in the garment sector</li> <li>• Development of <i>marquila</i> sector</li> </ul>	<ul style="list-style-type: none"> <li>• Moved from an import substitution strategy in 1970 to a more export-oriented economy in the mid-1980s</li> <li>• Rise in FDI and exports in the garment sector and in chemicals</li> <li>• The Asian crisis led to a significant decrease or negative FDI flows for several years</li> </ul>	<ul style="list-style-type: none"> <li>• Mainly trade liberalization, export promotion, and capital inflows</li> <li>• Success of Export Processing Zones (EPZ) in export and employment growth</li> <li>• With the phase-out of the MFA quotas, Madagascar has lost market share to China and other Asian countries</li> </ul>
<b>Measures of Working Conditions</b>	<ul style="list-style-type: none"> <li>• Wages</li> <li>• Hours</li> <li>• Accidents and disabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Wages</li> <li>• Hours/Conditions</li> <li>• Contracts, social security/payments</li> </ul>	<ul style="list-style-type: none"> <li>• Wages</li> <li>• Social benefits</li> <li>• Unionization</li> <li>• Formal training</li> </ul>	<ul style="list-style-type: none"> <li>• Wages</li> <li>• Facilities, medical, safety, transport, and overall</li> </ul>	<ul style="list-style-type: none"> <li>• Wages</li> <li>• Hours</li> <li>• Benefits and other conditions</li> </ul>
<b>Analysis Methodology</b>	<ul style="list-style-type: none"> <li>• Regression analysis of wages and accidents</li> <li>• Comparison of hours worked</li> </ul>	<ul style="list-style-type: none"> <li>• Regression analysis of wages and remittance impact</li> <li>• Compare hours, conditions, benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Regression analysis of wages and remittance impact</li> <li>• Compare benefits and conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Regression analysis of wages and non-wage measures</li> <li>• Comparison of non-wage measures</li> </ul>	<ul style="list-style-type: none"> <li>• Regression analysis of wages</li> <li>• Comparison of benefits and other conditions</li> </ul>
<b>Observed Results</b>	<ul style="list-style-type: none"> <li>• Garment sector wages and working conditions are above the industry average</li> <li>• Earnings that are over 50 percent higher than the average wage</li> <li>• Has relatively few accidents</li> </ul>	<ul style="list-style-type: none"> <li>• Garment sector wages and working conditions are above the industry average</li> <li>• Remittances reduce labor force participation and the receipt of other non-wage benefits</li> </ul>	<ul style="list-style-type: none"> <li>• 20 percent wage premium in the garment sector</li> <li>• Non-wage conditions similar across sectors</li> <li>• Negligible impact of remittance on labor force participation</li> </ul>	<ul style="list-style-type: none"> <li>• Wages and non-wage measures are higher and + correlated in the garment sector and in chemicals</li> <li>• Case studies depict potential issues missed when using aggregate data</li> </ul>	<ul style="list-style-type: none"> <li>• EPZ wages are lower than in the industrial sector but higher than in the informal sector</li> <li>• Phase-out of MFA has progressively reduced EPZ wages and non-wage measures</li> </ul>

non-wage working conditions (i.e., agriculture) to sectors with relatively higher wages and better non-wage working conditions.

One main concern, however, is that the better wages and non-wage working conditions identified in the textile/apparel sector may be an artifact of the Multi-fiber Agreement (MFA) or the subsequent Agreement on Textiles and Clothing (ACT). These agreements allocated bilateral production quotas across many countries and created economic rents in the form of higher wages and better non-wage working conditions; some of which may have been captured by workers.

Some results indicate that FDI has progressively diminished in some countries with the phase-out of MFA quotas. Preliminary evidence suggests that the fall in FDI and exports may be linked to falling wages and non-wage working conditions in FDI recipient sectors, which represents an important and emergent line of inquiry to better understand the consequences of globalization for labor outcomes.

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