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The Promise and Perils of Private Voluntary Regulation: Labor Standards and Work Organization in Two Mexican Garment Factories

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# The Promise and Perils of Private Voluntary Regulation: 

# Labor Standards and Work Organization in Two Mexican Garment Factories 

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#### Abstract

What role can private voluntary regulation play in improving labor standards and working conditions in global supply chain factories? How does this system relate to and interact with other systems of labor regulation and work organization? This paper seeks to address these questions through a structured comparison of two factories supplying Nike, the world's largest athletic footwear and apparel company. These two factories have many similarities - both are in Mexico, both are in the apparel industry, both produce more or less the same products for Nike (and other brands) and both are subject to the same code of conduct. On the surface, both factories appear to have similar employment (i.e., recruitment, training, remuneration) practices and they receive comparable scores when audited by Nike's compliance staff. However, underlying (and somewhat obscured by) these apparent similarities, significant differences in actual labor conditions exist between these two factories. What drives these differences in working conditions? What does this imply for traditional systems of monitoring and codes of conduct? Field research conducted at these two factories reveals that beneath the code of conduct and various monitoring efforts aimed at enforcing it, workplace conditions and labor standards are shaped by very different patterns of work organization and human resource management policies.


Keywords: codes of conduct, labor standards, globalization, work organization.

## Introduction

Globalization and the dispersion of industry supply chains to an ever-greater number of developing countries have provoked a fierce debate over how best to enforce and improve labor standards and working conditions in these emerging centers of production. Child labor, hazardous working conditions, excessive working hours, and poor wages continue to plague many third world factories. To address these issues, the ILO and 175 signatory countries embraced a set of fundamental rights at work (e.g., freedom of association and collective bargaining, the abolition of forced and child labor, nondiscrimination at the workplace, etc.) in 1998 (International Labour Organization, 1998). Yet the implementation of core labor standards has been uneven and weak (Brown, 2007; Mamic, 2003; Wang, 2005; International Labour Organization, 2007, Verité, 2004). Moreover, although many developing countries possess stringent labor and health and safety laws on their books, these regulations are seldom enforced due to the inability (i.e., budgetary and capacity limitations) (Elliott and Freeman, 2003) and/or unwillingness (i.e., fear of driving out foreign investors) (Bhagwati, 1995) of host governments to enforce their own laws. Thus, in the absence of a strong system of global justice, and given the limited ability (perhaps willingness) of many developing country governments to enforce their own labor laws, many global corporations and labor-rights NGOs have developed their own "codes of conduct" as well as a variety of monitoring mechanisms aimed at enforcing compliance with these codes. Yet relatively little is known about the effectiveness of this emergent system of "private voluntary regulation" or how it relates to other means of regulating global labor standards and improving working conditions.

Although much of the literature on labor standards in global supply chains has revolved around a series of highly polarized debates over what should (or should not) be included in the
codes of conduct, how compliance with the codes (i.e., specific audit protocols) should be assessed, and who (company employees, state officials, NGO representatives or even professional auditors) should monitor the factories to ensure the greatest transparency of the process, there appears to be little evidence that this system of private voluntary regulation is at all an effective strategy for improving labor standards. If anything, recent research suggests that monitoring alone does not lead to sustained improvements in working conditions and/or the enforcement of workers' rights. For example, the 2006 Ethical Trading Initiative/Institute of Development Studies report of the impact of ETI's code of labor practice found that although firms adopting this code exhibited some improvements in certain areas (e.g., health and safety, child labor), in other areas (e.g., freedom of association, discrimination, harsh treatment) conditions had not improved at all (Barrientos and Smith, 2006). In a companion paper that analyzed data from factory audits of over 800 Nike suppliers located in 51 countries, we also found that notwithstanding tremendous efforts and investments by Nike in its compliance program, monitoring alone produced only limited improvements in working conditions among its suppliers (Locke et al., 2007).

Overall, the debate over international labor standards gives considerable weight to the legal framework of labor protection and regulation, the formal content of codes of conduct, and the processes underlying measurement and enforcement of these codes but seems to have overlooked that compliance with labor standards is primarily driven by the way work is organized and managed at the workplace level. There is a vast literature on work organization that shows how different systems of production and employment policies affect the working conditions and job satisfaction of factory employees (Ichniowski et al., 1996; Osterman, 1994; MacDuffie and Krafcik, 1992). However, when discussing international labor standards and
alternative approaches to implement them, virtually no role is given to these factors. In this paper, we connect the insights from the literature on work organization with the debate on international labor standards. Through a structured comparison of two factories supplying the same global brand - Nike - we show that beneath and somewhat obscured by debates over international labor standards and codes of conduct, an alternative strategy for improving working conditions in global supply chain factories is emerging. This strategy focuses on reorganizing work and empowering labor on the shop floor and, when combined with more transparent and collaborative relations between suppliers and buyers, this alternative approach leads to significant and sustained improvements in working conditions.

The remainder of this paper is divided into five sections. First we review the debates surrounding codes of conduct, monitoring, and the entire system of "private voluntary regulation". Second, we provide some background information about Nike, the branded footwear and sportswear industry, and the struggles over labor standards. Third, we present findings from our field research in Mexico. This structured comparison illustrates how notwithstanding many similarities between the two plants, working conditions and labor rights at these two facilities vary significantly. In one plant, workers are relatively well paid, work within the legal work hour limits, and participate in decisions affecting the pace and sequencing of their work. In the other plant, employees on average work longer hours for less pay and enjoy few, if any, freedoms at work. The fourth section seeks to explain these differences in shop floor working conditions. After exploring various alternative explanations, we elaborate on our own argument - that working conditions and labor standards are very much the product of divergent patterns of work organization and human resource management. We conclude by pondering the more general
implications this case study may have for on-going debates over globalization and labor standards.

This paper is based on field research conducted over the spring and summer of 2005. Over 90 interviews were conducted with factory owners, managers, workers, NGO representatives, union leaders, and various Nike managers both in the US and in Mexico. Factory visits were also conducted in two Mexican states and in Los Angeles, California. In addition to the Mexican field research, the larger research project entailed matched pair case studies in Northern China, Southern China and Turkey. This qualitative research was complemented by quantitative analyses of Nike's various factory audits for its 830 suppliers located in 51 different countries.

## The Problem

Throughout most of the 20th century labor standards were regulated largely on a national basis through a mixture of laws, union-management negotiations, and company policies. On an international scale, the International Labor Organization's conventions and technical services served as an additional source of moral authority and advice but lacked significant enforcement power. The emergence of global supply chains, however, has rendered these national and international strategies inadequate since authority is dispersed not only across national regimes but also among global buyers and their myriad suppliers. It is in this context that corporate codes of conduct have emerged, often in response to pressures from unions, consumer groups, and NGOs. Whereas initially, these efforts focused primarily on corporate or supplier compliance with national regulations and laws, over time, they have become increasingly concerned with
compliance to private, voluntary codes of conduct, especially as they apply to labor and environmental standards.

This model of workplace regulation has provoked heated debates over either the particularities of the actual codes and their compliance efforts (i.e., how these inspections are conducted, by whom, for what purposes) or their relation to other forms of regulation, especially state regulation. Critics of codes of conduct and voluntary monitoring regimes argue that they displace more thorough government and union intervention and are designed not to protect labor rights or improve working conditions but instead to limit the legal liability of global brands and prevent damage to their reputation (Esbenshade, 2004). Others, however, argue that private codes and monitoring are not attempts to undermine the state but rather appropriately flexible responses to the reality of global production networks and the low capacity of developing country states to fully enforce labor laws and regulations (Nadvi and Wältring, 2004). According to this second group, under certain conditions (but these conditions vary, depending on the author), efforts to promote code compliance by brands, multi-stakeholder initiatives, and NGOs can work to improve labor standards, particularly when states lack the capacity or the resources to carry out systematic factory inspections (Fung et al., 2001; O'Rourke, 2003; Bartley, 2005; Rodriguez-Garavito, 2005).

A related debate over codes and monitoring focuses on whether those conducting the compliance audits can be trusted to make accurate and honest assessments of factory conditions and transparently report their findings. Critics identify a number of important conflicts of interest that exist among the key actors involved in this process (National Research Council, 2004; Esbenshade, 2004; Pruett, 2005; Rodriguez-Garavito, 2005). Given that brands and their suppliers may have an interest in hiding labor violations rather than reporting them, how
trustworthy are these internal audits? Wouldn't the incentives for moral hazard be too great for these interested parties? If these audits are, instead, contracted out to "third party" organizations, be they NGOs or private auditing companies, how competent are the NGOs in assessing certain technical issues (e.g., air quality) and how forthcoming will the private monitoring firms be if they hope to please their clients (the brands and their suppliers pay for these services) and generate future business?

In response to these criticisms, various procedures and policies were established to promote greater transparency and oversight by "independent" organizations. Increasingly, external auditors, ranging from for-profit social auditing companies to local NGOs, are being certified by Multi-Stakeholder Initiatives (MSIs) like the Fair Labor Association and the Fair Wear Foundation. These institutional mechanisms are meant to bolster the credibility of monitors. Still, some (e.g., Workers Rights Consortium) argue that monitoring must be completely independent of brands and factories in order to be truly effective.

While much of the literature on labor standards in global supply chains has focused on the impact of labor standards on employment and growth (Barrientos and Smith 2006, Brown 2007), the relative weight of state vs. "private" regulation in these workplaces, (Gereffi et al. 2001, Jenkins 2001, Esbenshade 2004, Polaski 2006) and the specificities of the codes of conduct and monitoring regimes (O’Rourke 1997, Esbenshade 2004, Rodriguez-Garavito 2005, O'Rourke 2005), implicit in just about all of this literature is a focus on the formal or legal aspects of labor standards rather than on how they interact with/relate to the "facts on the ground", that is, the actual organization of production and work in these factories. Our work suggests an alternative perspective, one that sees labor standards and codes of conduct as one component in a larger integrated system for managing, regulating, and improving working
conditions. Through a structured comparison of two factories supplying Nike, we show that beyond the codes of conduct and various efforts at monitoring for compliance, interventions aimed at reorganizing work and empowering labor on the shop floor lead to significant and sustained improvements in working conditions.

## Context: Nike and the Athletic Footwear/Sportswear Industry

The athletic footwear industry experienced an explosive growth in the last two decades. In 1985, consumers in the United States alone spent $\$ 5$ billion and purchased 250 million pair of shoes (Korzeniewicz, 1994: 248). In 2004, they spent almost $\$ 15$ billion and bought over 370 million pair of shoes (National Sporting Goods Association, 2005). Although the industry is highly segmented - by different sports, models and price - the branded shoe segment is dominated by a few large companies. Nike, Reebok and Adidas account for almost $60 \%$ of the global athletic footwear market. Since displacing Adidas and Reebok in the 1980s, Nike has become the largest and most important athletic shoe company in the world. Even after the recent merger between Reebok and Adidas, Nike still controls over 36\% of the US athletic shoe market and over $33 \%$ of the global athletic footwear market (Petrecca and Howard, 2005).

Although still primarily known as a footwear company, Nike has also moved into other sectors (apparel and sports equipment) and expanded its sales beyond the United States into Europe, Latin America and Asia. In fact, only 70 out of its 830 suppliers produce shoes. In contrast, Nike apparel products are manufactured in 576 factories distributed throughout the world (Nike, 2004: 4). In 2004, the company made about US\$12.2 billion in revenues, of which $\$ 6.5$ billion came from footwear sales and $\$ 3.5$ billion from apparel (Nike, 2004: 2).

Founded in 1964 by Phil Knight and Bill Bowerman, Nike (then called Blue Ribbon Sports--BRS) has evolved from being an importer and distributor of Japanese specialty running shoes to becoming the world leader in the design, distribution and marketing of athletic footwear and sportswear. According to company legend, Nike's business model was developed by Knight while attending Stanford Business School in the early 1960s. Knight realized that while lowercost, high-quality Japanese producers were beginning to take over the US consumer appliance and electronics markets, most leading footwear companies (e.g., Converse and Adidas) were still manufacturing their own shoes in higher-cost countries like the United States and Germany. By designing and marketing high performance athletic footwear at home but outsourcing manufacturing to lower-cost producers, Knight believed that Blue Ribbon Sports (renamed Nike in 1978) could undersell its competitors and break into this market. In 2004, all Nike products (footwear, apparel and equipment) are manufactured by more than 800 suppliers, employing over 600,000 workers in 51 countries. Nike has only 24,291 direct employees, the vast majority working in the United States (Nike, 2004: 3-4).

The same factors that permitted Nike to grow at an impressive rate over the last several decades - taking advantage of global sourcing opportunities to produce lower cost products and investing these savings into innovative designs and marketing campaigns - have also created serious problems for the company in recent years. Over the course of the 1990s, Nike was criticized for sourcing its products in factories/countries where low wages, poor working conditions, and human rights problems were rampant. This criticism was fed by a series of public relations nightmares - involving underpaid workers in Indonesia, child labor in Cambodia and Pakistan, and poor working conditions in China and Vietnam - which tarnished Nike's image.

As Phil Knight lamented in a May 1998 speech to the National Press Club, "the Nike product has become synonymous with slave wages, forced overtime, and arbitrary abuse" (Locke, 2003).

At first, Nike managers took a defensive position vis-à-vis the various labor, environmental and occupational health problems found at their suppliers' plants. Workers at these factories were not Nike employees, and thus Nike felt no responsibility towards them. By 1992, this hands-off approach changed as Nike formulated its Code of Conduct for its suppliers that required them to observe some basic labor, environmental and health/safety standards. (See Appendix A for the most recent version of Nike's Code of Conduct.) All suppliers - current and potential - are obligated to sign this Code of Conduct and post it within their factories. Since 1998, Nike has increased the minimum age for footwear factory workers to 18 and all other workers (apparel and equipment) to 16. It has also insisted that all footwear suppliers adopt US Occupational Safety and Health Administration (OSHA) standards for indoor air quality.

To enforce compliance with its code of conduct, Nike has conducted numerous trainings with its suppliers as well as assembled a team of 90 compliance staff based in 21 countries, to monitor these suppliers (Nike, 2004: ch. 4). In addition to these compliance specialists, Nike has about 1000 production managers working at/with its various global suppliers. All Nike personnel responsible for either production or compliance receive training in Nike's Code of Conduct, Labor Practices, Cross-Cultural Awareness, and in the company's Safety, Health, Attitudes of Management, People Investment and Environment (SHAPE) program (Zadek, 2004).

Aside from the initial, new source approval process that all potential suppliers of Nike must undergo ${ }^{2}$, all factories are subject to three different types of audits: a basic environmental,

[^1]safety and health (SHAPE) audit, a more in-depth management and working conditions audit (M-Audit) and periodic inspections by the Fair Labor Association (FLA). Nike provided us with data from all three of the above audits, as well as from their Compliance Rating program, which we analyzed in a companion paper (Locke et al., 2007). We found that Nike's suppliers appear to be performing above average in terms of their scores on various factory audits, which suggests that working conditions in these factories are not as terrible as one might fear. However, we also found that there exists tremendous variation in working conditions across factories supplying Nike. Some factories appear to be almost in complete compliance with Nike's code of conduct whereas others suffer from endemic problems with poor wages, excessive work hours, harassment, etc. How do we explain this variation? In other words, why do factories making more or less the same products for the same brand treat their workers so differently?

To assess what drives these differences in workplace conditions, we compare two factories, both suppliers to Nike and hence both subject to its code of conduct. Both factories (which we will refer to as Plant A and Plant B) are located in the same country (Mexico) and, therefore, operate in the same political and economic environment and are subject to the same labor regulations. Both plants interface with the same regional office of Nike (based in Mexico City), which is responsible for coordinating orders (sourcing) and compliance visits to the factories. In fact, the very same compliance specialists audit both factories. Compliance scores for the two plants are almost identical. For example, using the M-Audit, the internal Nike assessment tool of labor-management practices and working conditions in the factories, we found that out of a possible perfect score of 100, Plant A received a score of 87 and Plant B received a score of 86 on their most recent factory inspections. This would indicate that both plants are almost in full compliance with Nike's code of conduct. However, beneath these
apparent similarities, very different realities in terms of working conditions and labor rights exist. By systematically comparing the two factories along a number of dimensions (wage systems, work hour regimes, employee representation, etc.), we seek to shed light on the underlying mechanisms generating differences in working conditions at these two plants.

## A Tale of Two Factories

Plant A is located in the Estado de Mexico. The plant is situated in an industrial park where other garment factories are also operating. A Mexican family has owned the group that runs this plant since 1955. Today, the group exports $95 \%$ of its production to Europe, Asia, North America, and South America.

Plant B is located in a western Mexican state, 800 km from the U.S. border and 2,000 km from the Nike regional office in Mexico City. This has historically been an agricultural state but more recently, the state government has been promoting economic development through foreign investment. Plant B is part of a Taiwanese group, which owns three other plants: one in Taiwan (that only manufactures fabrics), one in the United States, and another in the same Mexican state (recently opened to manufacture garments for other brands). The group started producing for Nike in 1991 with its plant in the United States. In 1999, as production orders increased the owner opened Plant B in Mexico, where a low-wage labor force and a bigger facility allowed the company to increase its production.

Both plants are part of larger, vertically integrated groups. Plant A belongs to a group that includes spinning, knitting, and finishing operations in the same location where the garment assembly (sewing) takes place. Plant B is also part of a vertically integrated group engaged in the same range of productive activities. Being part of a vertical group is crucial for selling products
to global buyers. Global brands tend to prefer plants that can offer "full package" services in order to avoid searching for material and component suppliers, which can increase the risk of poor product quality and late deliveries, as well as add to the compliance burden by increasing the number of factories that have to be monitored.

Both plants also manufacture the same product (t-shirts) for Nike and other brands and have similar defect rates. Nike sets a $1.4 \%$ monthly defect rate ceiling for its contractors and considers both plants to be of high quality. Plant A has a $1 \%$ monthly defect rate and Plant B a $0.6 \%$ monthly defect rate. Finally, both plants pay the same legal minimum wage (US \$5.15/day), have the same turnover rates ( $8-10 \%$ per year) and the same informal (based on skill) promotion policies. The labor forces in the two plants are both unionized and the gender composition is the same ( $70 \%$ of workers are women at both workplaces). Table 1 describes the similarities between these two plants.

Table 1: Similarities Between the Plants.

|  | Plant $\boldsymbol{A}$ | Plant $\boldsymbol{B}$ |
| :--- | :---: | :---: |
| Country Location | Mexico | Mexico |
| Legal Minimum Wage | US \$5.15/day | US \$5.15/day |
| Structure | Part of a vertical group | Part of a vertical group |
| Product Type | t-shirts, graphic t-shirts | t-shirts, seamless and <br> high-tech t-shirts |
| Defect Rate | $1 \%$ | $0.6 \%$ |
| Turnover rates | $8-10 \%$ | $10 \%$ |
| System of Promotion | Informal, based on skills | Informal, based on skills |
| Training | 2 months | 1 month (subsidized by <br> state government) |
| Union | Mexican Workers <br> Confederation (CTM) | Mexican Workers <br> Confederation (CTM) |

Notwithstanding their similarities, labor conditions at Plants A and B are, in practice, dramatically different, as illustrated through a more detailed comparison of wages, employee
satisfaction, worker participation in production-related issues, work hours and over time, and worker voice/representation at these two plants.

## Two Worlds of Work

Wages
Workers in Plant A receive higher wages than those in Plant B. Notwithstanding that both plants pay the same legal minimum wage, workers at Plant A earn on average a weekly salary that is $21 \%$ higher than what workers at Plant B earn. The difference between these wages cannot be accounted for by differences in local wage rates since both plants are in the same region with respect to Mexican minimum wage laws. Wage differences are instead due to different plant-level policies used to calculate worker wages.

In Plant A, production workers receive a fixed daily wage of 65 pesos (US\$ 5.8). In addition, individual workers can receive premiums for attendance, punctuality, and overtime, should they work extra hours. As a result, operators receive on average 644 pesos (US\$ 57.6) per week plus any additional bonuses they may accrue. Production bonuses are granted based on team work, and each team receives productivity bonuses once they exceed $70 \%$ of their production targets. On average, most sewing workers earn their basic weekly wage of 644 pesos (US\$ 57.6) plus a weekly bonus of 350 pesos (US\$ 31.14) to earn a total of 994 pesos (US\$ 84.52).

In Plant B, salary is also determined through a mixed system that combines hourly wages and a piece rate system. However, in Plant B, productivity levels are based on individual performance, and not on team work. On average, production workers at Plant B earn between 700 and 800 pesos per week (in US dollars, between \$ 62.2 and \$ 71).

## Employee Satisfaction

Workers in Plant A are more satisfied with their work than are workers in Plant B. In Plant A, employees work in teams, operate more than one type of sewing machine, and are responsible for routine maintenance of the equipment. Interviews conducted during the field research found that workers in Plant A appreciate job rotation. They value knowing how to perform a variety of operations and claimed that this opportunity to work on several operations plus in teams significantly improved working conditions over what existed under the previous, more modular production system where they performed the same repetitive task.

In contrast, employees at Plant B work in fixed, individual stations, are specialized in narrowly defined jobs, and thus perform the same operation over the course of the work day/week/year. The work is highly routinized and repetitive. Our interviews, however, revealed that although workers were not especially fulfilled by their jobs, they were not motivated to acquire new skills or perform a variety of operations. Instead, they preferred to stick with what they know and do well so that they can earn more through increased productivity. This is consistent with the bonus system in place at Plant B. Productivity premiums can significantly enhance the base salaries of average production workers and thus, they avoid all change that threatens to undermine these bonuses.

## Participation in Production Planning

Workers in Plant A participate in decisions affecting the production targets, scheduling and even operations whereas workers in Plant B need to follow orders from above and do not have the opportunity to give their input. The relationship between supervisors and workers in Plant A is more collaborative than hierarchical. Supervisors in Plant A coordinate the work of different cells. Every morning supervisors communicate to each cell the style and quantity of
items they need to produce. Workers then get together and discuss how much they think they are able to produce that day. Finally, the workers meet again with the supervisor, share their opinions, and together reach a final agreement on the daily production target. Our field research indicated that plant management was inclined to accept input from the workers and establish mutually agreeable production targets. If workers and/or supervisors do not agree with a particular sequence of operations, or even with an entire operation, they can suggest changes to the production manager, who usually accepts these changes. In other words, workers can suggest alternative ways to perform an operation, rendering it quicker and easier. We found that the opportunity to participate in decisions related to work process had a strong and positive effect on work climate. It provided operators both with greater control over their work and with opportunities to express their creativity/ingenuity at work.

In Plant B, production orders are communicated from the top of the plant's hierarchy and there is no place for worker participation. The plant manager plans production and distributes the orders to the area supervisors. Production in Plant B is divided into four areas, and each area has a supervisor. In each area, there are six lines, and each line has a supervisor. Area supervisors receive production orders from the plant manager, which they, in turn, divide up among the six lines under their control. The area supervisor is also in charge of explaining and teaching the operations involved in producing a given garment. Operators need to follow the precise instructions that they are given. One of the workers we interviewed claimed: "We cannot change or suggest different ways to produce a garment because it is a chain and we need to follow what they tell us". Moreover, while there is no formal policy against workers talking with one another and diffusing work practice innovations during their shifts, many workers complain that they
simply do not have the opportunity to share work process innovations because the pace of production is fast and they are simply too busy to talk.

## Work Hours and Overtime

Production workers at Plant A work 48 hours every week, from 7:30 am to 5:00 pm Monday through Friday, with a 30 minute break for lunch. In Plant B, there are two shifts for all departments. The first shift begins at 7:30am and goes until 5:00 pm; the second shift starts at 5:05pm and goes until 11:50pm, Monday through Friday. Both shifts include a 30 minute breaks for lunch.

Nike, like most global brands, sets a limit of 60 hours as the maximum workweek permitted under their code of conduct. Since Mexican law limits the regular workweek to 48 hours, workers in both plants can work no more than 12 hours of overtime per week. In both plants overtime is paid according to Mexican law: for the first 9 hours workers are paid twice their regular salary; for the subsequent 3 hours, they are paid three times their regular salary. However, the extent and form of overtime in the two plants are extremely different. When Plant A needs employees to work extra time, it makes workers aware of it and allows them to "apply" for it. Therefore, in this factory overtime is voluntary.

At Plant B, forced overtime is the norm. When they work overtime, employees work between 12 and 15 hours in a day. During our interviews, several workers in Plant B reported that they actually work more than 60 hours per week. This was confirmed by the factory audits performed by Nike compliance staff in 2003 and 2004. Individual workers do not volunteer to work extra hours; the supervisor chooses who has to stay longer. Supervisors explained that this is because they want their most experienced and efficient workers to stay longer in order to reach their production targets sooner. In practice this means that supervisors tend to assign overtime to

Chinese workers because they claim that they work faster. This, in turn, generates animosity between the Mexican and Chinese workers since the Mexican workers, also eager to earn overtime wages, complain that they are being discriminated against.

## Freedom of Association and Worker Voice

Workers at both factories are affiliated with the main Mexican labor union, the Confederacion de Trabajadores Mexcianos (CTM). In addition to the legally mandated yearly collective bargaining agreements negotiated by union leaders and plant management, in Plant A , union representatives meet more or less every week with the HR manager of the plant to discuss a variety of workplace issues. Relations between the HR managers and the union representatives are collaborative and these frequent meetings provide a forum for workers to express their concerns. In Plant B there are 11 union representatives, one for each area of production, and they too meet on a weekly basis with the plant's HR department as well as with the plant's owner. However, these meetings are reported to be more formal, with issues being addressed and solved depending primarily on the desire and mood of the plant owner.

In addition to the union, workers have other channels through which to communicate their grievances and suggestions to management but these practices as well, while apparently similar on paper, are very different in practice. For example, both plants have suggestion boxes that workers can use to voice grievances, ask questions, or even make suggestions to management. However, the implementation of this practice in the two plants varies significantly. In Plant A, workers' questions or comments remain anonymous and are dealt with in a nonpersonalized manner. In Plant B, management posts both the suggestions (including the name of the worker who wrote it) and its response in a public area on the shop floor, thus compromising the anonymity of the worker. As some of these comments are of a personal nature (i.e., questions
about discrepancies in individual paychecks, tensions between operators and their supervisors) this supposedly more transparent practice can at times embarrass individual workers and as a result, discourage them from using this system.

Both plants also possess various "mixed commissions" composed of representatives from the workers and managers that focus on health and safety, training, first aid, etc. These are required by Mexican labor law. In Plant A, these commissions are actively engaged in training and administration of first aid for minor injuries or checking to see that access to fire extinguishers and exits, etc. are all up to code. Plant B also possesses similar commissions on paper but during our field research, we found no evidence that they were actually functioning.

In short, notwithstanding many apparent similarities, including almost identical scores on their M-Audits, working conditions at Plants A and B are in practice quite different. Table 2 summarizes these differences. In Plant A, workers are paid better, work within the legal work hour limits and have a choice of whether or not to work overtime, engage in decisions affecting the pace, target and mechanics of production, and participate in various fora that provide them voice at work. Workers in Plant B are paid less well, often work longer hours, and have no voice over production decisions, let alone other aspects of life in the factory.

Table 2: Workplace Differences

|  | Plant $\boldsymbol{A}$ | Plant $\boldsymbol{B}$ |
| :--- | :---: | :---: |
| Average weekly wage | US\$ 86/week | US\$ 67.8/week |
| Team Work | Yes | No |
| Job Description | Multi-Tasks | Single Task |
| Job Rotation | Yes | No |
| Worker Participation in <br> Work-related decisions | Yes | No |
| Overtime | Voluntary and within limit | Mandatory and over limit |

It is important to note that with the exception of some cases of excess overtime and verbal abuse, Plant B is in compliance with Nike's Code of Conduct and local labor law and on certain issues (i.e., providing on-site day care services for employees) provides benefits that Plant A does not provide. Moreover, Plant A is not without its own issues. Aside from documentation problems, in the past Plant A also had supervisors who verbally abused workers. The point of our comparison is not to present Plant A as "good" and Plant B as "bad" on all dimensions but rather to illustrate the very different approaches to labor standards manifest at these two plants. Plant B managers very much follow the letter of the law and the code. However, their more formal approach to the Code and to labor standards in general very much differs from the more substantive approach pursued by Plant A management.

## Explaining Differences in Working Conditions: Alternative Explanations Considered

Why do these two factories, making more or less the same product for the same brand, under the same national laws and same code of conduct, treat their workers so differently? In this section we review some factors that may explain the different working conditions observed and we show that a particular form of work organization combined with specific management practices explains the observed differences in working conditions at Plants A and B.

Plants A and B are not identical. They are of different size, their ownership is of different nationality, and they dedicate different percentages of their capacity to Nike. They are also situated in very different economic realities (labor markets) that may also shape their approach towards workers. The differences between the two plants are summarized in Table 3.

Table 3: Differences between Plants A and B

|  | Plant A | Plant B |
| :---: | :---: | :---: |
| Ownership | Local | Foreign |
| Proximity to Nike's regional office | Close (50 Km) | Far away (2,000 Km) |
| \% of production for Nike | 10\% | 50\% |
| Surrounding Environment | Industrialized | Agrarian, undeveloped |
| Production Method | Lean (Cell) | Modular (Assembly lines) |
| Number of Workers | 487 | 1,100 |
| Workforce Nationality |  |  |
| Managers | Mexican | Chinese |
| Supervisors | Mexican | Chinese |
| Production Workers | Mexican | 90\% Mexican 10\% Chinese |

Of course these differences matter in shaping the range of possibilities both managers and workers face in these two plants. Below, we examine the role each of these different characteristics played in shaping the observed labor conditions in Plants A and B. We divide our analysis into three categories: factory characteristics, labor market differences, and alternative patterns of work organization and worker empowerment.

## Factory Characteristics

The literature on globalization and labor standards suggests that a variety of factors ownership, size of plant, type/complexity of product being manufactured - may all affect working conditions in the factories. Some have speculated that factories owned/managed by foreigners treat their workers less well (for a variety of linguistic, cultural reasons) than do factories where the ownership/management of the plants share the same nationality as the workers. Others have argued that plants that are owned/managed by particular nationalities (i.e., Korean and Taiwanese) employ less sophisticated personnel management policies and treat workers in "host" countries with less respect and fairness than do factories owned/managed by other nationalities (i.e., US, European) (Frenkel, 2001: 542). Given that Plant A is
owned/managed by Mexicans and Plant B is owned/managed by Taiwanese, perhaps this feature could explain the differences we observed at the two plants.

In addition, some scholars have claimed that larger, more bureaucratic, "modern" factories will be better able to introduce modern management and personnel systems and thus, one would expect that larger factories would on average treat their workers better than smaller, less formally managed plants (Moran, 2002: 16). Given the differences in size between Plants A and B, perhaps this could drive the divergent working conditions we observed. Finally, much has been written about the importance of skill and tacit knowledge in the production of high valueadded, differentiated products. From this we speculate that perhaps factories producing more complex (and expensive) products, which require greater skill and technology, will treat their workers as valuable assets for the factory (Kochan et al., 1986; Piore and Sable, 1984). Given that Plants A and B manufacture somewhat different mixes of products, with Plant B specializing in more high-tech performance T-shirts and Plant A concentrating on simpler, printed T-shirts, perhaps this also could explain the divergent working conditions observed across the two plants. Table 4 summarizes these various factory characteristics, their expected effects on working conditions, and what we actually observed during our field research.

Table 4: Factory Characteristics and Working Conditions

| Characteristic | Expected Effect on Working <br> Condition | Observed Working Condition <br> Between 2 Plants |
| :--- | :--- | :--- |
| Size | Greater Size, Better Working <br> Conditions | Not confirmed. <br> Smaller plant (A) possessed better <br> working conditions |
| Nationality of <br> Ownership / <br> Management | Foreign Ownership (especially <br> Taiwanese and Korean) treat <br> workers less well than Domestic <br> Ownership/Management | Confirmed. Domestically owned <br> factory (A) has better working <br> conditions. |
| Product Complexity | More Complex Product/Product <br> Mix, Better Working Conditions | Not Confirmed. Plant A with less <br> complex product mix has better <br> working conditions. |

Our field research in Plants A and B appears to contradict the expectations derived from the literature in terms of plant size and complexity of product mix. We found that workers in Plant A, the smaller facility manufacturing the less complex/lower tech product, were paid better, worked less overtime, and enjoyed more voice at work than did workers in Plant B. However, our field research does appear to support the claim in the literature that foreign ownership/management negatively impacts labor conditions in global supply chain factories. Why this is so, especially given the long history of managers mistreating workers who were conationals and even working within the same nation-state, is unclear. Our field research suggested two possible explanations for these differences. The first concerns language differences and the difficulties in communication between the Taiwanese managers and Mexican workers on Plant B. Most of the managers in Plant B were not fluent in Spanish and thus could not easily express themselves with the workers. Likewise, the workers found it nearly impossible to express their concerns or issues to plant management because of these same language barriers. This certainly contributed to some of the workplace tensions we observed at Plant B. A second, complementary explanation focuses on differences in commitment and time horizons by the owners of Plants A and B. Because Plant B was foreign owned, having been attracted to Mexico by various fiscal
incentives and the promise of cheap labor, their commitment to improving working conditions was weaker than that of the owners/managers of Plant A, who were Mexican nationals and had been in business for several generations. For example, when asked how they would respond if labor costs increased at Plant B, the managers stated frankly that they would "return to Asia". In short, our interviews at both plants suggested that nationality differences between owners of Plants A and B did play some role in the alternative workplace practices observed at these two plants.

## Labor Market Differences

Plants A and B also operate in very different labor markets, which, in turn, provide management in the two plants with varying degrees of leverage over their workers. Plant A is located in an industrial park close to Mexico City, which is home to a large number of other garment plants. This has two effects on Plant A. On the one hand, it provides Plant A with an abundant supply of skilled and experienced workers who are current or former employees of neighboring plants. On the other hand, these other firms compete with Plant A to hire the same workforce, especially the more skilled and experienced workers. This mixture of threat and opportunity creates an incentive for management at Plant A to seek to minimize turnover. Of course, all firms try to hold on to their most valued employees through higher wages and improved benefits but Plant A also tries to tie workers to the firm through job enrichment and participation on the shop floor.

Plant B is the only garment factory in the area, and therefore in a powerful position vis-àvis its workers-all eager for employment in this underdeveloped state. Moreover, Plant B imports $10 \%$ of its workforce from China, ostensibly to train the local, inexperienced, Mexican workers. These Chinese workers do not speak any Spanish and do not have any networks outside
the factory. They conduct their lives exclusively in the factory, where they work, eat, and sleep (in the factory dorms). Under these conditions, it is very unlikely, if not impossible, that these more experienced and skilled Chinese workers would find an alternative job in a different factory. There simply aren't any other factories (and thus available jobs) around and Plant B uses this position to its advantage. In short, Plants A and B operate in very different local labor markets, providing their respective management teams with very different incentives and leverage over their workforces. These differences clearly account for some of the divergent patterns of working practices and conditions observed at the two plants.

## Work Organization and Employment Relations on the Shop Floor

In order to accommodate rapidly shifting consumer tastes, global brands are pushing their suppliers to reduce cycle times, produce varied products in smaller lots, and rapidly change production from one style to another. Suppliers are responding to these challenges in different ways. Plants A and B appear to have reacted to the same external market pressures by pursuing alternative choices in work organization and human resource management policies, which in turn, generated significant consequences for working conditions at their respective establishments.

## Plant A

Plant A responded to the challenges (and opportunities) presented by global buyers by introducing lean manufacturing processes within their facilities ${ }^{3}$. Workers are organized in groups of six "islands" or production "cells" in which an entire garment is produced. Each worker performs a variety of operations and works on different machines. The machines are
organized in a U-shape formation. The shop floor is clean and uncluttered by extra materials. Inventory is absent because the factory uses a just in time system that does not permit excess inventory.

When this factory began manufacturing, it employed an assembly line (bundle system) production system. In the mid-1990s, Plant A introduced a modular production system but after ten years, it began to transition to lean manufacturing ${ }^{4}$. In order to transform the modules into cells, the factory had to conduct extensive training with its workforce. All workers received 25 days ( 9 hours per day) of on-the-job training plus 10 hours of off-the-job training in preventive maintenance of their workstations. Training was carried out by the plant's human resource department, with the help of a process engineer. In order to motivate workers to participate and not exit the plant, workers were paid their daily salary plus a production bonus during this transition period.

Adjustment to a new system of production can take time. After the shift to cell production, workers who were working at $100 \%$ productivity levels in the previous modular system dropped to $50 \%$ levels. As we saw before, these productivity bonuses are a significant component of workers' wages. In order to facilitate the process of adjustment, Plant A management not only guaranteed a significant percentage of the productivity bonus (81\%) for the entire transition period but also introduced a variety of non-monetary rewards and incentives. For example, at the conclusion of the training, management organized a graduation ceremony

[^2]attended by the owners and top managers of Plant A. All graduates received at-shirt and a cake as a reward. Moreover, whenever particular cells achieved $100 \%$ productivity level under the new system, the cell was recognized with a small gift to celebrate the event and had their picture posted on the board at the factory entrance. At first, we thought that these rewards could not really make a difference, and that workers would not value them. To our surprise, interviews with workers (conducted out of the presence of their supervisors or managers) indicated that, in fact, the small gifts or celebrations made them feel part of the company, and created a more relaxed environment.

Overall, Plant A confirms what the literature on high performance work organizations suggests (Ichniowski et. al., 1996; Osterman, 1994). The HR manager indicated that the change from modular to lean production increased efficiency and quality. By switching to lean manufacturing, the factory formed three cells (18 workers) from two lines (20 workers). With three cells they now produce 2,700 t-shirts, while previously they used to produce $2,400 \mathrm{t}$-shirts with two lines. Quality improved as well. According to the head of operations, defect rates in sewing decreased by $40 \%$. Achieving quality and output targets is considered a collective responsibility at Plant A, in which peer supervision and self-supervision play a large role. The production manager explained that each worker is accountable for quality at his/her workstation and that quality control is part of the basic job. Every worker has to check the quality of one out of every five $t$-shirts. Table 5 presents the differences between the two systems of production at the $80 \%$ productivity level. The numbers show that through cell production, workers have increased their productivity and their weekly salary. The salary has increased both because the factory raised wages and because by increasing their productivity, workers are now able to get greater production bonuses.

Table 5: Comparison between Old and New System of production in Plant A

|  | Old System <br> (module) | New System <br> (cell) |
| :--- | :---: | :---: |
| Number of workers | 10 | 6 |
| Number of t-shirts per day <br> per module/cell | 1,200 t-shirts/module | 900 t-shirts/cell |
| Productivity per worker | 120 t-shirts/day | 150 t-shirts/day |
| Average weekly salary | US $\$ 68 / w e e k$ | US\$ 86/week |

This shift to lean production not only increased productivity, quality and wages but also led to a new work system in which multi-skilled workers operate a variety of machines and actively participate in key decisions affecting production and work orders. In other words, through the introduction of lean manufacturing techniques, Plant A not only enhanced its competitiveness but also improved working conditions.

## Plant B

Plant B's response to increased buyer demands was to invest heavily in a modular system of production with assembly lines. The overall objective of modular production is to facilitate small shifts in large production runs with minimal delays in costs and without requiring specialized machinery. Modularization is one of the ways mass producers are able to increase efficiencies, cut costs, and achieve a modest amount of customization (Knauss, 1998). As the head of operations in Plant B reported, every style requires a specific set of machines and sequence of operations, and requires a large area to set-up the line. This is different from Plant A in which the layout of the machines is more flexible and people move from one machine to another as they do various operations. Cellular production is more conducive to rapid changes in styles and smaller batch production. In contrast, the modular system of production is especially
good for producing large volumes because they do not require changes in machinery or plant layout.

Very much along the lines of Taylor's system of scientific management (1967), Plant B closely monitors and controls its workers. In Plant B, production orders are communicated from the top of the plant's hierarchy and there is no space for worker participation. The plant manager plans the production and distributes the production orders to the area supervisors, who in turn, divide up the work among the six lines of workers under their control.

Table 6 compares the production systems in Plant A and Plant B by comparing the productivity of the two plants for basic t -shirts, a product that both plants manufacture and that require same skills and technology. The table indicates that notwithstanding the high degree of worker specialization in Plant B, and their efforts (incentives) to produce as much as they can, their daily productivity is actually lower than that of workers in Plant A.

Table 6: Comparison of Production Systems in Plant A and Plant B

|  | Plant $\boldsymbol{A}$ | Plant $\boldsymbol{B}$ |
| :--- | :---: | :---: |
| Total \# of workers in one line or cell | 6 | 10 |
| T-shirts per day per line or cell | 900 t-shirts/day | 800 t-shirts/day |
| Daily Wage (fixed salary + bonuses) per worker | US\$ 17.2 | US\$ 13.6 |
| T-Shirts per worker | 150 t-shirts/worker | 80 t-shirts/worker |
| Labor cost per t-shirt | US\$ 0.11 | US\$ 0.18 |

Plant A enjoys higher productivity than Plant B, pays wages that are higher than those paid to workers in Plant B, and has lower unit labor costs than Plant B. Unit costs (along with quality and on time delivery) are what buyers really care about, which suggests that Plant A possesses both better working conditions and better business performance than Plant B. Moreover, its new production system permits Plant A to more quickly respond to shifts in consumer tastes and buyer demands for smaller and more varied batches. In short, Plant A does
not appear to be sacrificing profit for better working conditions. Instead, these two outcomes appear to go hand and hand.

In sum, the differences in working conditions between Plants A and B seem to be the product not solely of geographic location or nationality of ownership but also (and perhaps primarily) the result of very different ways that work is organized in these two factories. In Plant A, work was reorganized along the lines of lean production, which relies on multi-skilled, autonomous work groups engaged in a variety of operations. This new system enhanced the plant's efficiency and quality, which allowed it to better schedule its workload (hence, avoid excessive overtime) and increase the wages of its workforce (share the efficiency gains). Plant B pursued a more scientific management approach, investing heavily in new plant and equipment. The goal of Plant B management is to increase productivity and quality through investment in new technology, strict control over the workforce, and various incentives (productivity bonuses) aimed at achieving ever greater economies of scale.

Yet we should be careful not to conflate particular production systems (lean versus modular) with differences in workplace conditions. Although lean production lends itself to various human resource practices (increased training, autonomous work teams, etc.), there is no automatic link between this system of work organization and better working conditions. There is an extensive literature that shows that firms can (and do) actually mix elements of different production techniques with a variety of human resource management policies, generating mixed results (Knauss, 1998; MacDuffie and Krafcik, 1992). This literature emphasizes the importance of bundling together particular systems of work organization with specific human resource management practices to achieve the greatest results for both companies and their workers (MacDuffie, 1995; Ichniowski et al., 1996).

Closer examination of our two Mexican plants reveals the importance of both work organization and employment practices in shaping workplace conditions. In addition to introducing lean manufacturing, Plant A also employed various human resource management policies that provided workers with greater autonomy and power on the shop floor. For example, Plant A invested heavily in the training of its workers (in part to effectively implement lean manufacturing processes) and thus became wary of mistreating these highly skilled workers for fear that they would lose their investments in these workers. Skilled but dissatisfied workers could easily leave and work for a competitor. These same workers, now trained to stop production when they see defects and/or work in autonomous production cells in which they actively participate in decisions affecting production targets and techniques, also became more empowered to resist management abuses on the shop floor. In the end, a virtuous cycle developed in which new forms of work organization and training led to enhanced competitiveness for the plant and improved working conditions for the workers, including greater discretion and participation over production decisions. Increased employee participation, in turn, generated operational innovations and efficiencies which subsequently produced savings that could be shared by plant owners and workers alike.

Plant B pursued an alternative approach to managing its workforce. Rather than invest in training and encourage worker autonomy/discretion, Plant B developed highly detailed work rules and maintained tight control over the shop floor. In contrast to Plant A, workers in Plant B are not seen as a resource for improving productivity and quality. Instead, management at Plant B considers workers a (variable) cost that needs to be reduced as much as possible. According to the head of operations at Plant B, "It's all about lowering the price of labor and increasing the quantity produced." For this reason, Plant B invested heavily in new process technologies and
devising ever more specialized operations that less expensive, unskilled workers could perform under close supervision by factory managers. Increased productivity and quality resulted not from worker training and creativity but rather from new technologies, close supervision of the work process, and individual incentives that rewarded workers for ever-greater quantities of output and longer work hours.

## Concluding Considerations

A number of debates have emerged around how to mitigate the negative impacts of globalization on workers in developing countries and improve their working conditions. Specifically, the literature on labor standards has focused on the capacity (and perhaps willingness) of local governments (namely their labor inspectorates) to enforce labor regulation, the potential introduction of a "social clause" in the World Trade Organization (WTO) as a way of creating an international system of labor regulation, efforts to increase protection of a set of "core labor standards" through ILO declarations, and the creation of "private voluntary regulation" systems. While the debates focused on these issues and on which actors are better equipped to govern international labor standards (NGOs, local governments, multilateral organizations, or global buyers) using which type of monitoring system, the literature on international labor standards has overlooked (or forgotten) that labor conditions are directly affected by the work organization and employment practices that factories supplying global brands have adopted.

Notwithstanding all the controversies over corporate codes of conduct and monitoring, this form of private voluntary regulation remains the principal way both global corporations and labor rights NGOs seek to address poor working conditions in global supply chain factories. Through a structured comparison of two plants, both located in the same country, producing the
same products, and subject to the same code of conduct and monitoring practices, this paper suggests an alternative model for improving working conditions in global supply chain factories. In contrast to the current emphasis on codes of conduct and monitoring for compliance of these codes, global brands (and perhaps labor rights NGOs as well) could provide suppliers with technical and organizational assistance so that they can tackle some of the root causes of poor working conditions in their facilities.

Our paper shows that through reorganizing the production system and adopting a variety of employment practices, Plant A could improve labor standards and business outcomes at the same time. The choices in work organization and labor practices at Plants A and B very much reflect the assumptions managers hold about workers' motivations. According to Douglas McGregor (1960), workers could be seen as either variable costs to be reduced, reluctant contributors to the firm's prosperity and thus requiring constant supervision and control or as assets to be valued and developed, multi-faceted individuals who are intrinsically motivated to work and contribute to their work organizations. At Plant A, management invested in training and empowered employees to work in autonomous cells, often taking initiative to solve various production-related problems. "We want people here to feel important" reported the owners during our interviews. In contrast, at Plant B, workers are seen as an "input" to be controlled, a "cost" to be reduced. When we asked the head of operations at Plant B what would happen if he could not continue to lower labor costs in the factory, he replied "In that case we will move back to Asia."

However, choices are shaped not only by previously held assumptions about human nature but also by the context and the networks within which managers operate (Granovetter, 1973; Locke, 1995). It is in this context that global buyers can play a significant role. This was
very evident at our two plants, especially in terms of the relationship between plant management and Nike's local staff. At Plant A, relations between factory management and Nike's local staff were collaborative and open. Nike managers would visit Plant A about once a month and the owners of Plant A would also frequently visit Nike's regional office in Mexico City. Nike staff and plant managers reported that they often went out for dinner or played golf together. Over time, these frequent visits led to greater transparency and trust between Nike and Plant A management as well as joint problem-solving. Whenever an issue related to workplace standards arose, both Nike compliance specialists and Plant A management worked together to quickly remediate the issue. Moreover, Nike production and quality managers were instrumental in supporting Plant A in its transition to lean manufacturing. They not only exchanged information and technical advice but also provided moral support to Plant A (in the form of an implicit agreement to continue to source from the plant during its transition) as it struggled to shift from a modular to a lean production system. Interviews with managers at Plant A indicated that they saw Nike as a partner with whom they could collaborate to improve both productivity and working conditions.

The relationship between Nike's regional office and Plant B management is more formal and distant. Plant B receives fewer visits to its facilities (in part because of its geographic distance from Mexico City) and thus much of the communication between the local Nike office and Plant B occurs over the phone or through email. Management at Plant B sees Nike as a buyer whose requirements and deadlines it must respect in order to receive future orders. Nike's local staff, in turn, views Plant B as a technically excellent manufacturer but whose commitment to labor standards is weak.

More frequent visits and more open communication between Nike's regional staff and management at Plant A led to the development of greater trust and a better working relationship between these two actors. This, in turn, contributed to the up-grading of Plant A's production system and its consequent positive impact on working conditions at the plant. Less frequent, more formal communication patterns between Nike's local staff and Plant B management appears to have reinforced the arms-length nature of their relationship, in which Plant B seeks to deliver product to Nike at the lowest cost (highest margin) and Nike tries to ensure compliance with both its technical and workplace standards through ever-more sophisticated systems of policing and monitoring.

Unfortunately, the type of relationship that exists between Plant B and Nike is the more common/typical relationship that exists between global buyers and their suppliers. As a result, these two actors are often locked in a low-trust trap in which suppliers claim that brands are sending them mixed messages, insisting on faster cycle times, better quality, and lower prices while at the same time policing and admonishing them for poor working conditions. Brands, in turn, argue that problems associated with both production and labor standards are the result of the lack of professionalism and short sightedness of their suppliers. The experience at Plant A shows that there is a way out of this trap. Through increased communication and interaction, more collaborative and transparent relations can be created (Locke, 2001). This process takes time and investment on the part of both suppliers and global brands but it promises to generate benefits for everyone involved, including the workers in these global supply chain factories.

Technical assistance will not be enough. Some level of monitoring will still need to take place but perhaps this could be done in collaboration with and increasingly by local unions, NGOs and government authorities who could, in the process, gain capacity and legitimacy to
exercise their roles. However, rather than using factory monitoring and the threat of sanctions to drive behavioral change, the information collected during factory audits and the frequent presence of auditors in the factories could be used to engage in a process of root-cause analysis and joint problem-solving. Looked at from this perspective, our case study suggests that a more systemic approach, one that combines external (countervailing) pressure, comprehensive and transparent monitoring systems, and a variety of "management systems" interventions aimed at eliminating the root causes of poor working conditions, is required to promote improved labor standards for the millions of workers employed in global supply chain factories. In many ways, our argument about the need to complement codes of conduct/monitoring programs with more systemic interventions aimed at tackling the root causes of poor working conditions, is precisely how previous issues (i.e., promoting occupational health and safety, redressing problems of equal opportunity in employment and promotion decisions) were tackled. In each of these prior cases, external pressures led to company-sponsored standards and compliance programs. The limited results of this initial response prompted companies to eventually adopt new management systems that elevated and integrated these issues into the core operations of the business. Programs aimed at ensuring basic compliance with OSHA and EEOC standards were replaced by new forms of work organization and human resource management systems that sought to promote not only more healthy and equitable workplaces but also new sources of competitive advantage for the firms embracing these policies. Improving labor standards in global supply chain factories will require a parallel journey.

## Appendix 1: Nike Code of Conduct

## Nike, Inc. was founded on a handshake

Implicit in that act was the determination that we would build our business with all of our partners based on trust, teamwork, honesty and mutual respect. We expect all of our business partners to operate on the same principles.

At the core of the NIKE corporate ethic is the belief that we are a company comprised of many different kinds of people, appreciating individual diversity, and dedicated to equal opportunity for each individual.

NIKE designs, manufactures .and markets products for sports and fitness consumers. At every step in that process, we are driven to do not only what is required by law, but what is expected of a leader. We expect our business partners to do the same. NIKE partners with contractors who share our commitment to best practices and continuous improvement in:

1. Management practices that respect the rights of all employees, including the right to free association and collective bargaining
2. Minimizing our impact on the environment
3. Providing a safe and healthy work place
4. Promoting the health and well-being of all employees

Contractors must recognize the dignity of each employee, and the right to a work place free of harassment, abuse or corporal punishment. Decisions on hiring, salary, benefits, advancement, termination or retirement must be based solely on the employee's ability to do the job. There shall be no discrimination based on race, creed, gender, marital or maternity status, religious or political beliefs, age or sexual orientation.

Wherever NIKE operates around the globe we are guided by this Code of Conduct and we bind our contractors to these principles. Contractors must post this Code in all major workspaces, translated into the language of the employee, and must train employees on their rights and obligations as defined by this Code and applicable local laws.

While these principles establish the spirit of our partnerships, we also bind our partners to specific standards of conduct. The core standards are set forth below.

## Forced Labor

The contractor does not use forced labor in any form -- prison, indentured, bonded or otherwise.

## Child Labor

The contractor does not employ any person below the age of 18 to produce footwear. The contractor does not employ any person below the age of 16 to produce apparel, accessories or equipment. If at the time Nike production begins, the contractor employs people of the legal working age who are at least 15 , that employment may continue, but the contractor will not hire any person going forward who is younger than the Nike or legal age limit, whichever is higher. To further ensure these age standards are complied with, the contractor does not use any form of
homework for Nike production.

## Compensation

The contractor provides each employee at least the minimum wage, or the prevailing industry wage, whichever is higher; provides each employee a clear, written accounting for every pay period; and does not deduct from employee pay for disciplinary infractions.

## Benefits

The contractor provides each employee all legally mandated benefits.

## Hours of Work/Overtime

The contractor complies with legally mandated work hours; uses overtime only when each employee is fully compensated according to local law; informs each employee at the time of hiring if mandatory overtime is a condition of employment; and on a regularly scheduled basis provides one day off in seven, and requires no more than 60 hours of work per week on a regularly scheduled basis, or complies with local limits if they are lower.

## Environment, Safety and Health (ES\&H)

The contractor has written environmental, safety and health policies and standards, and implements a system to minimize negative impacts on the environment, reduce work-related injury and illness, and promote the general health of employees.

## Documentation and Inspection

The contractor maintains on file all documentation needed to demonstrate compliance with this Code of Conduct and required laws; agrees to make these documents available for Nike or its designated monitor; and agrees to submit to inspections with or without prior notice.

Last updated March 2005
http://www.nike.com/nikebiz/nikebiz.jhtml?page=25\&cat=code
Accessed June 21, 2006

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[^0]:    ${ }^{1}$ This paper is part of a larger project on globalization and labor standards organized by Professor Richard Locke of M.I.T.. In addition to the results presented in this paper (some of which appear as well in Monica Romis, "Beneath Corporate Codes of Conduct: What Drives Compliance in Two Mexican Garment Factories," (Masters Thesis, Dept. of Urban Studies and Planning, M.I.T., 2005)), the project entailed field research in China, Turkey, Europe and the United States as well as systematic analysis of Nike's factory audits of working conditions in over 800 factories in 51 countries. We would like to thank Lucio Baccaro, Suzanne Berger, Joshua Cohen, Simon Johnson and Michael Piore as well as the other members of our research team: Alberto Brause, Dinsha Mistree, Jennifer Andrews, Fei Qin, Rushan Jiang, and Alonso Garza for their insightful comments on previous drafts of this paper. We would also like to thank the numerous Nike managers including Maria Eitel, Hannah Jones, Dusty Kidd, Kelly Lauber, Caitlin Morris, Mark Loomis, Jeremy Prepscius, Charlie Brown, and Catherine Humblet for their helpful comments on previous drafts of this paper, and Mike McBreen who facilitated access to the audit data and the individual factories.

[^1]:    ${ }^{2}$ In 2004, only $57 \%$ of factories that underwent this process were approved. See Nike (2004: 18) for more on this process.

[^2]:    ${ }^{3}$ For a good, general description of lean manufacturing, see Krafcik (1988).
    ${ }^{4}$ In 1995, the owners expanded their plant with another building. In the new structure they adopted a modular production system in order to have a more flexible and shorter production cycle. However, in 2003, the owners of the factory attended a meeting with one of their global buyers and heard about lean manufacturing and its application in the footwear sector. They became interested and learned more about lean manufacturing. The following year, they decided to implement this new system in their plant. For more on the different systems of production in the apparel industry, see (Abernathy et. al., 1999; Dunlop and Weil, 1996)

