

Labor Standards and Human Resources:
A Natural Experiment in an Unlikely Laboratory*

Andrew Schrank
Department of Sociology
University of New Mexico
Albuquerque, NM
87131-0001

Tel: 505.277.1295
Email: schrank@unm.edu

Prepared for:

“Observing Trade: Revealing International Trade Networks and Their Impacts”
Princeton Institute for International and Regional Studies
Princeton University

March 9-11, 2006

Abstract: Do international labor standards impede or facilitate industrial upgrading? The Dominican Republic (DR) offers a quasi-experimental answer. While the island nation’s policymakers responded to foreign pressure by adopting a new labor code in the 1990s, and thereby brought their laws and edicts into compliance with internationally recognized norms and standards, they allocated their enforcement resources unevenly, and thereby created a natural experiment. I analyze the experiment by examining qualitative and quantitative data collected in the Dominican Republic in 2004 and 2005. I find a positive relationship between the degree of labor law enforcement and the propensity to upgrade human resources across the DR’s 30 provinces net of other factors and I therefore suggest that qualified labor inspectors not only block the low road of sweated labor and despotic industrial relations but pave the high road of skill formation and human resource development as well.

Draft: Not for circulation or citation

* I would like to thank Marcus Kurtz, Michael Piore, Richard Locke, Victoria Murillo, Gay Seidman, Ken Shadlen, Judith Tandler, and my various sources and interlocutors in the Dominican Republic—most particularly Vice President Rafael Alburquerque—for their generous contributions of time and insight. The usual caveats apply. All translations from Spanish are my own.

Introduction

The United States (US) and Canada are beginning to impose labor standards on their less developed trading partners. The Generalized System of Preferences (GSP) conditions “better-than-most favored nation” access to the US market on evidence that beneficiary countries are taking (or have taken) steps to defend “internationally recognized worker rights” including not only collective rights to organize, associate, and bargain collectively but individual rights to “acceptable conditions of work with respect to minimum wages, hours of work and occupational safety and health” (USTR 2005, p. 19; see also Compa and Vogt 2001). The parties to the North American Free Trade Agreement (NAFTA) have an admittedly controversial labor “side agreement” of their own (GAO 2001; Compa 2001). And NAFTA’s various rivals and successors—e.g., the US-Jordan FTA, the Canada-Chile FTA, the US-Cambodia textile agreement, the African Growth and Opportunity Act, and the recently negotiated US-Dominican Republic-Central American FTA—include labor standards as well (Polaski 2004).¹

Latin American policymakers are particularly vulnerable to the efforts and entreaties of their North American counterparts for at least two reasons. First, Latin American exporters are disproportionately dependent on North American trade preferences. The US and Canadian markets already absorb almost 60 percent of the region’s merchandise exports (WTO 2004, Table III.21, p. 51) and China’s recent accession to the World Trade Organization will in all likelihood reinforce, rather than relieve, the temptation to trade sovereignty for market access in the future (Shadlen

¹ Japan, Australia, and the European Union condition better than MFN access to their domestic markets on compliance with international labor standards as well (Compa and Vogt 2001, p. 237). Bilateral and multilateral agreements are more variable across Europe and Asia. While the Japan-Singapore FTA includes labor provisions (World bank 2005aa, p. 35, Table 2.2), the EU’s various trade agreements include a more general “human rights and democracy” clause (Der-chin Horng 2003).

2005).² And, second, Latin American employers cannot escape North American scrutiny. After all, US and Canadian human rights activists and social movements are particularly active—and at times influential—in Latin America (see, e.g., Frundt 1998; Evans 2000; Gereffi et al. 2001; Stillerman 2003; Anner and Evans 2004; Cook 2004; Murillo and Schrank 2005; Rodríguez-Garavito 2005; and Seidman 2005 for examples).

Neither the motives of the activists (see Krueger 1996; Friedman 2000; DiCaprio 2005) nor the merits of their proposals are obvious, however, and the costs and benefits of their campaigns are therefore at the heart of an impassioned debate between orthodox trade economists like Jagdish Bhagwati and Jeffrey Sachs and their myriad critics (see, e.g., Myerson 1997; Passell 1997). What are the likely consequences of North American pressure on Latin American employers and policymakers? While the trade economists portray low cost labor as the region’s principal competitive advantage, and therefore anticipate divestment, export diversion, and job loss (Golub 1997), their critics portray low cost labor—and unregulated labor markets more generally (Cradden and Holloway 1997)—as an impediment to “industrial upgrading” (Piore 2004a), and therefore anticipate more salutary outcomes. For instance, Joseph Stiglitz derides the international donor community’s “low road” approach to industrial relations on economic as well as normative grounds (Stiglitz 2000, p. 15). Peter Evans identifies and champions a “high road” alternative (see Evans quoted in Miller 2003, p. 104). And Harley Shaiken notes that “core labor standards can provide an important set of incentives to guide traffic in the right direction” (Shaiken 2003, p. 1).

² According to Ken Shadlen, China’s accession to the WTO is animating a desperate scramble for preferential trade arrangements in Latin America. The region’s policymakers are willing to pay almost any price—including the loss of sovereign control over their labor markets—for preferential access to the US market for goods and services. DR-CAFTA is the most recent example (Shadlen 2005).

The Dominican Republic offers a particularly fortuitous opportunity to adjudicate the debate. While President Joaquín Balaguer and his Ministry of Labor (Secretaría de Estado de Trabajo, or SET) adopted a series of legal and administrative reforms in the 1990s, and thereby transformed a “history of labor repression” (Murillo and Schrank 2005, p. 988) into “the most successful application of trade-based labor sanctions” in Latin America (Frundt 1998, p. 227; see also Senser 1994; Jessup and Gordon 2000; Murillo and Schrank 2005), they “rationalized” their enforcement procedures and personnel gradually (Weber 1904-11 [1968]; Ritzer 1975), and thereby exposed their various provinces—and, in turn, their various constituents—to differing degrees of labor law enforcement at the same point in time. By examining the multifaceted relationship between human resource development and administrative rationalization at the provincial level, therefore, I hope not only to illuminate but to account for the relationship between industrial upgrading and labor market regulation more generally.

I have divided my paper into four principal sections. First, I provide historical context. I trace the reform of the Dominican Republic’s labor code and the gradual rationalization of the Ministry of Labor’s enforcement division to the threat of US trade sanctions in the 1990s. Second, I analyze qualitative data drawn from interviews with more than 15 SET officials and inspectors—as well as representatives of the private sector, trade unions, and donor agencies—and find that professional labor inspectors not only block the low road by deterring repression and exploitation but pave the high road by encouraging and facilitating vocational education and training. Third, I analyze quantitative data provided by the SET and the National Institute for Technical and Vocational Training (Instituto Nacional de Formación Técnico Profesional, or INFOTEP)

and find that the depth of human resource development is indeed a function of the degree of administrative rationalization—net of both control variables and selection effects. And, finally, I discuss my findings and their implications not only for the debate over labor standards but for sociological theory more generally. Ultimately, I hold that “despotic” (Burawoy 1985, esp. 261-3) labor relations are no more conducive to innovation and investment in twenty first century Latin America than they were in nineteenth century Europe—and that labor standards therefore constitute a prerequisite for, rather than an impediment to, more thoroughgoing industrial transformation.

Intellectual context

The Generalized System of Preferences offers almost 5,000 products from approximately 140 developing countries duty free access to the US market (Compa and Vogt 2001, p. 201). The US Trade and Tariff Act of 1984 not only conditions access to the GSP on evidence that beneficiary countries are taking steps to defend internationally recognized labor rights but allows interested parties like labor unions and human rights organizations to ask the United States Trade Representative (USTR) to review their records, evaluate their laws, and eventually even withdraw their trade preferences for noncompliance. And eligibility (or non-eligibility) for the GSP has “ripple effects” on eligibility for other trade preferences and agreements—and sends potential investors and trade partners a signal about the nature of the business climate more generally (Compa and Vogt 2001, p. 204). Keith Maskus has therefore portrayed the US as a particularly “active nation” in the campaign for international labor rights (Maskus 1997, p. 63).

The Dominican Republic offered the North American activists and policymakers who imposed the conditions a particularly tempting target. On the one hand, President Balaguer and his backers tolerated—and arguably encouraged—gross violations of labor rights in a number of different sectors. Sugar and coffee exporters relied upon semi-servile migrant labor from Haiti (Grasmuck 1982; Martínez 1999). Family farmers employed their own children in large numbers (ILO 2002a). Tourists exploited child and adolescent prostitutes (French 1992, ILO 2002a; Brennan 2004). And textile, clothing, and footwear exporters mistreated their vulnerable assembly workers and inhibited their unionization efforts (Safa 1997, 2002; Frundt 1998). On the other hand, the United States had real influence over the Balaguer administration. North American markets absorbed well over half of all Dominican exports (Economist 1994, 2005). North American cities like New York and Miami played host to large communities of Dominican and Haitian exiles, immigrants, and activists (Itzigsohn 2000; Mindlin 2005). And North American trade unions and human rights organizations already had their eyes on the Caribbean Basin (Compa 1987; French 1990; Noble 1992; Chang 1996).

America's Watch and the American Federation of Labor-Congress of Industrial Organizations (AFL-CIO) therefore began to put pressure on the Dominican Republic during the first Bush administration (Méndez 1993; Payne 1993; Frundt 1998; Murillo and Schrank 2005). They asked the USTR to investigate allegations of mistreatment and abuse in the country's sugar plantations and export processing zones (EPZs) in particular. Balaguer responded to the prospect of trade sanctions by appointing three of the country's best known labor lawyers—Rafael Albuquerque, Lupo Hernández Rueda, and Milton Ray Guevara—to draft an alternative to the country's draconian labor code and

placing Alburquerque in charge of the Ministry of Labor. And Alburquerque and his collaborators not only expanded and enforced the rights of Dominican workers but—perhaps unintentionally—subjected their consequences to a natural experiment.

The natural experiment derives from three different elements and/or periods of the Dominican Republic's reform effort. First, the so-called Labor Reform Commission provided procedural guarantees by designing and facilitating the adoption of a new labor code in the spring of 1992 (Méndez 1993; Payne 1993; Frundt 1998; Murillo and Schrank 2005). The new code clarified labor's rights in general, underscored the rights to organize, strike, and receive a just wage in particular, provoked outrage and evasion among the country's employers, and therefore prompted a new round of North American pressure in 1993. Second, Alburquerque provided substantive guarantees by enforcing Articles 6 and 7 of the ILO's Convention on Labour Inspection (No. 81) in the mid-1990s (Jatobá 2002, p. 33 as well as SET 2000b for a detailed history of the reforms). Articles 6 and 7 call for the recruitment and retention of competent, independent, and stable labor inspectors capable of enforcing the relevant national laws and statutes (ILO 1947). And Alburquerque therefore established new hiring criteria—including possession of a law degree and superior performance on a competitive civil service examination—and offered qualified candidates income and job security (GAO 1998, pp. 12-14; ILO 2002b, p. 92).³ And, finally, Alburquerque and his successor, the aforementioned Milton Ray Guevara, transformed the SET's provincial offices into natural laboratories by imposing their new hiring criteria through the gradual attrition and replacement—rather than the mass dismissal—of unqualified incumbent inspectors who had been appointed through

³ For example, the SET more than tripled the average inspector's salary (GAO 1998, p. 14; Jatobá 2002, p. 33) and adopted an internal labor market with prospects for career advancement. See Schrank (2005) for a more detailed analysis of the process of professionalization itself.

patronage (Frundt 1998, p. 216; Montero 2003, p. 5; Albuquerque 2005, p. 3). By the late 1990s, therefore, more than half of the country's 203 labor inspectors had been incorporated into the country's embryonic civil service and the SET's provincial offices ranged from fully professionalized—i.e., staffed entirely by civil servants with law degrees—to not professionalized at all (SET 2000a; Jatobá 2002, p. 33).

The recruitment, retention, and reinforcement of professional labor inspectors are constitutive elements—and not merely symptomatic or generative—of higher labor standards. Professional inspectors are better able to protect the rights of workers, according to the ILO Convention on Labour Inspection, and workers are therefore entitled to professional inspections. “Even where laws exist,” argues ILO representative Lee Swepston, “lack of enforcement can turn what is nominally the formal sector into a close facsimile of the informal sector. If the laws are maintained on the books, but there are no labor inspections, will employers continue to provide safe and healthy labor conditions? If the legislated minimum wage is abandoned, or if it is allowed to fall so low that it bears no relation to living costs, will a worker be able to feed himself or herself and a family by putting in what we have come to consider a ‘normal’ work day?” (Swepston 1994).⁴ By recruiting qualified inspectors through competitive examinations, therefore, Albuquerque and his associates raised their country's labor standards directly as well as indirectly. By recruiting qualified inspectors gradually, however, they created a natural experiment through which to study the relationship between standards and outcomes.

⁴ Zafar Shaheed describes adherence to the Convention on Labour Inspection as a “key supportive mechanism” in enforcing statutory minimum wages (Shaheed 1994).

Are labor standards upgrading or undermining the Dominican Republic's comparative advantage? I hope to answer the question by examining the relationship between professionalization and human resource upgrading across the country's 30 provinces. I draw upon two different types of data: First, I employ qualitative data drawn from interviews with 15 individual inspectors in eight of the SET's provincial offices as well as private sector labor lawyers, representatives of foreign governments and donor agencies, directors of two of the country's three principal union confederations, high ranking officials at INFOTEP, the director of the SET's Department of Inspection, and former Secretary of Labor Albuquerque himself—who is currently the country's vice president. The interviews occurred in the summer of 2004 and the spring of 2005 in each of the country's major cities and distinct agricultural zones; lasted anywhere from an hour to half a day; included a number of return visits to particularly informative sources; and occurred against the backdrop of interviews with more than 30 different textile and apparel exporters—as well as a number of their import-competing counterparts—that I have been carrying out continuously since 1998 (see, e.g., Schrank 2003, 2004, 2005). Second, I employ proprietary quantitative data obtained from the SET and INFOTEP. I use the quantitative data to determine whether participation in INFOTEP's "model" (UNESCO 2003, p. 22; see also World Bank 2005a, p. 163; Garmendia Arigón 2000) vocational education and training program is a positive function of the degree of labor law enforcement at the provincial level.

Comparative analysis

The authors of the Dominican Republic's system of industrial and labor relations found their primary inspiration in France (Wiarda 1978; Albuquerque 2003). After all, the Dominican legal system is a product of the Franco-Iberian tradition. The principal author of the new labor code, Rafael Albuquerque, is a product of French law schools. And Albuquerque and his team received technical assistance from ILO consultants who tend to be partial to the French model of industrial relations (SET 2000b).

A small but growing body of literature distinguishes the “tutelary” and flexible Franco-Iberian approach to labor law enforcement from the adversarial and inflexible Anglo-American alternative (Piore 1980, 2004b; Reid 1986, 1994). The Anglo-American model is designed to deter illicit activity by raising the probability and cost of detection and North American labor inspectors are therefore law enforcement officials *sensu stricto*. They are subject to a rigid division of labor (i.e., the Occupational Safety and Health Administration monitors safety and health, the Immigration and Naturalization Service looks for illegal aliens, and the Wages and Hours Division of the Department of Labor enforces the minimum wage) and are expected to go “by the book.”

By way of contrast, the Franco-Iberian approach is designed to maintain social order by bringing firms into compliance with the law, and the French *inspecteurs du travail*—to take but the most familiar example—are therefore “expected to use persuasion in preference to repression” (Reid 1994, p. 297). They are responsible for the entire body of labor law (i.e., safety and health, immigration, wages and hours) and are expected to weigh the relative costs and benefits—to the employer, to the workers, and to society at large—of persuasion and punishment before taking any action at all (Piore

2004a). While the original *inspecteurs du travail* could neither charge an employer with a violation until they had first issued a warning nor trust the courts to prosecute scofflaws in any event, they had broad discretionary authority with which to coax, cajole, harass, or shame employers into compliance not only with the law but with community norms and standards more generally. They coaxed and cajoled by asserting, demonstrating, and sometimes even ensuring that “compliance is good business” (Reid 1986, p. 77). They harassed and shamed by informing workers of their rights, encouraging their unions, and publishing “annual reports of the inspectorate’s activities” (Reid 1986, p. 81). And they thereby treated the inspection process not simply as a law enforcement exercise but as an opportunity “to assess the moral environment of the firm” (Reid 1986, p. 69; see also Piore 1980).⁵

The Dominican inspectors I interviewed bear a striking resemblance to their French predecessors and role models. They are responsible for the prevention or prosecution of all manner of labor and employment law violations including wages and hours, severance payments, child labor, immigration, social security, and even safety and health (Albuquerque 1998, p. 24). They describe their primary mission as the “orientation” of workers and employers. And they use their deliberately broad discretion—and a number of concrete strategies pioneered in nineteenth and early twentieth century France—not only to improve wages and working conditions but to “preserve harmony and ensure that conflict between the parties does not foster a breakdown of the employment relationship” (Albuquerque 2003, p. 157).

⁵ The pedagogical approach to labor inspection is in some sense akin to the “watchman style” of policing described by James Q. Wilson in *Varieties of Police Behavior* (1968, Ch. 5).

In other words, the inspectors are trained to bring firms into compliance without driving their owners out of business. After all, the Dominican Republic is not only a poor country but is almost devoid of a social safety net and job loss therefore comes at a particularly high price. How do inspectors balance the need for employment preservation with the goal of standard setting? How do they respond to employers who literally cannot comply with the law without sinking into bankruptcy? On the one hand, they do their best to make sure that compliance is indeed good for business by encouraging employers to take advantage of various human resource development programs and “best practices” more generally. On the other hand, they do their best to make sure that noncompliance is bad for business by holding the threat of harassment and/or prosecution in their back pocket in case persuasion alone is insufficient. Capsule case studies from three different sectors—commercial agriculture, light manufacturing, and heavy industry—serve to illustrate my point.

Human resource upgrading in the countryside.

The relationship between entrenched poverty and child labor is one of the best known vicious circles in the social sciences (Weiner 1991). While impoverished children and families need material resources in the short run, and therefore prefer the labor market to school, they need human capital in the medium to long run, and therefore tend to reproduce their own poverty over time. A substantial and growing body of literature therefore portrays effective labor law enforcement as an answer to the dilemma (Marshall 2005).

An adversarial or punitive approach to child labor law enforcement is likely to prove ineffective at best, however, for most children are employed by their desperately poor parents and “employer sanctions” like fines and imprisonment are therefore likely to aggravate—rather than ameliorate—their already desperate circumstances. A recent survey suggests that more than 400,000 children and adolescents—approximately 18 percent of the population between the ages of 5 and 17—are working in the Dominican Republic and that they are disproportionately employed by their parents in commerce, the urban informal sector, and—most particularly—agriculture (see ILO 2002a). A serious effort to fine and/or incarcerate their parents would be impractical at best and irresponsible at worst.

The SET’s inspectors have therefore pursued an alternative tack. They have been trained to detect and denounce the “worst forms” of hazardous child labor including tomato harvesting in Azua, coffee cultivation in Peravia, and rice production in the northern Cibao Valley. They have worked with the Ministry of Education (Secretaria de Estado de Educación) to make parents and adolescents aware of the myriad benefits of schooling including not only human capital development in the long run but free school breakfast programs, parental subsidies, and free school supplies in the short run. And they have thereby prevented 3,500 children from entering the labor market, withdrawn 2,350 more, and introduced more than 4,000 children and 800 families to previously underutilized educational services and vocational training initiatives (ILO 2002a, p. 7-10; World Bank 2003, p. 3).

The Dominican Republic’s child and adolescent labor crisis is not limited to the provinces of Azua, Peravia, and the Cibao Valley, however, and the inspectors are

therefore extending their pilot programs with the Ministry of Education to the rest of the country and joining their counterparts at INFOTEP in a second collaborative endeavor. The so-called Youth and Employment Program (*Juventud y Empleo*) is designed to combat unemployment and informality by targeting not children per se but undereducated and underemployed adolescents and young adults—ages 16-29—who are too old to return to school but insufficiently qualified to participate in the formal labor market. They are given a small daily stipend and placed in a five month long vocational training program. Course offerings are determined on the basis of surveys of employer need and formal classroom activities are followed by internships with local employers (Vargas 2003).

What are the results? According to the SET, the pilot program has simultaneously trained more than 20,000 adolescents in skilled trades and professions (e.g, mechanic, plumber, machinist, electrician) and met the needs of countless employers (Martínez 2005; Quiroz 2005). ILO consultants underscore the program's overwhelmingly positive benefit-cost ratio in their recent study of the Dominican labor market (OIT 2003, p. 60). And the SET has therefore renewed and expanded the program for the years to come (Plasencia 2005).

The point is most assuredly not that professional inspectors opened the door to *Juventud y Empleo* for all 20,000 graduates. Many participants found their way to the program through distinct information channels. But interviews with officials of both the SET and INFOTEP suggest that inspectors played a key part in many cases—and that the overall crackdown on noncompliance and informality provided the broader context in which the program could succeed.

Human resource upgrading in the export processing zones

The US campaign for improved labor standards could not have come at a worse time for the 400 employers of approximately 150,000 workers in the Dominican Republic's export processing zones. After all, the EPZs already confronted a number of grave challenges including macroeconomic volatility, regulatory uncertainty, growing competition from a newly pacified Central America, and the North American Free Trade Agreement and corresponding risk of trade diversion to Mexico (Schrank 2003). The new labor code and accompanying enforcement provisions were portrayed as the final straw—a direct threat to the “free zones” and their many employees (see, e.g., Méndez 1993). And Albuquerque's demonstrated willingness to deny export licenses to particularly recalcitrant employers gave the new code particularly sharp teeth (Fruendt 1998).

Nevertheless, the EPZs survived the challenge and emerged stronger than ever. By the dawn of the new millennium, for example, they had added more than 100 firms, well over 50,000 new jobs, and hundreds of millions of dollars in new investments (see, e.g., Schrank 2005). And the Dominican Republic had been christened a “miracle” economy by international observers. (see, e.g., Oppenheimer 1999; Lozada 2003). While the zones paid an admittedly high price for their dependence on the US market in the aftermath of the dot-com bust, and suffered again in the wake of China's accession to the WTO, they are not only regaining lost ground but diversifying their wares from low end textiles, apparel, and footwear to more durable consumer goods and services (Schrank 2006).

How did the EPZs not only survive but exploit the crisis of the mid- to late 1990s? My ongoing interviews with both free zone owners and managers and the labor inspectors who allegedly threatened their survival suggest that human resource upgrading played a vital part in the story (Schrank 2003). The free zone owners who struggled relentlessly against the new labor code simultaneously struggled to devise a new vocational training and education system. While they were legally obligated to deliver 1 percent of their gross payroll expenditures to INFOTEP in exchange for the agency's training services, they rarely utilized the services in question—which they believed were ill-suited to their needs. The exporters therefore demanded and received a new deal in 1992—the same year they lost the battle for the labor code. Under the new agreement, INFOTEP would return one-third of the free zone sector's training tax to a committee of free zone representatives who would work jointly with INFOTEP to design new programs better suited to their needs.

The results were almost immediately apparent. Public-private cooperation took effect and participation in training programs skyrocketed. By 1997, according to Oscar Amargós, more than 74,000 free zone workers—almost half the total at the time—had been trained by INFOTEP (Amargós 1998, 230). And free zone managers gave the training programs credit for improved performance and the unanticipated growth—rather than contraction—of investment in the late 1990s (Amargós 1998, p. 230; as well as Mertens 2004).

In fact, INFOTEP's training programs for line workers and middle managers played a key part in three important transitions in the character of the free zones. First, they facilitated the apparel industry's shift from linear to modular production in the mid-

1990s. By adopting the modular system earlier than their neighbors, I have argued elsewhere (Schrank 2003, 2005), the more dynamic Dominican apparel entrepreneurs positioned themselves not only to survive but to expand during the initial crisis engendered by NAFTA. Second, they facilitated the apparel industry's vertical integration—backward into textile and fabric production, dyeing, and cutting; and forward into packaging and design—in the late 1990s and early 2000s. While the apparel industry will inevitably chase the “cheapest needle,” and vertical integration and so-called full package production are therefore palliatives at best (Schrank 2004), they bought at least some of the free zones and their tenants the time they would need to adjust. And, finally, they are facilitating diversification out of apparel and textiles and into more sophisticated products including consumer electronics, information technology (IT), and a variety of tradable services (Schrank 2006). In fact, the Dominican Republic hopes to position itself as a source of “nearshore” IT and IT-enabled services like call centers and business process outsourcing in the years to come, and INFOTEP therefore provides computer literacy and software programming classes at more than a dozen different training centers (Hewitt 2005, p. 32).

The professional inspectors are arguably in the background of the free zone story but they are by no means unimportant. They not only foreclosed the most repressive alternatives—if *by no means* all repression and exploitation—in the free zones but simultaneously introduced owners and managers to INFOTEP's varied offerings and served to distribute information about best practices more generally. While scofflaw employers frequently assert an inability to comply with the law and remain profitable, professional inspectors respond—at least occasionally—by pointing to their compliant

neighbors and their organizational differences: What differentiates the compliant firms from their non-compliant neighbors? They train their managers. They use modular production. They take advantage of INFOTEP. They pursue vertical integration. And they sometimes diversify out of textiles and apparel and into more remunerative activities. By distributing information on training and best practices, in other words, the inspectors overcome an important market imperfection and thereby make compliance good for business.

Human resource upgrading in heavy industry

The Dominican Republic's new labor code stipulates that no more than 20 percent of a firm's workforce be composed of aliens (Albuquerque 2003). While the code's various immigration provisions have frequently been used to harass impoverished Haitian immigrants, and have thereby gained a certain amount of notoriety, they are not entirely unjustified. After all, the multinational investors who take advantage of the Dominican Republic's low cost labor frequently bring their own middle managers with them—and thereby inhibit the very technology transfer and learning that foreign investors are expected to provide.

Take, for example, the case of Domicem—an Italian owned cement factory opened in Santo Domingo's satellite city of San Cristóbal in early 2004. The factory is exactly the type of heavy investment the Dominican Republic hopes to attract to offset the country's diminishing comparative advantage in light manufacturing: a US\$120 million plant designed to utilize the latest technology, employ hundreds of skilled workers, replace imports, and foster exports, technology transfer, and skill formation as

well. By summer of 2004, however, labor inspectors had discovered approximately 250 illegal Chinese immigrants working in the factory and the bloom had come off the rose. While Colacem, the Italian parent company, asserted a paucity of qualified Dominican labor, and thereby justified their boldfaced violation of the labor code, Secretary of Labor Milton Ray Guevara and his director of enforcement, Washington González, backed up their inspectors and demanded action. The Italians ultimately agreed to train Dominicans to take over the jobs—thereby fostering at least a modicum of knowledge and technology transfer—and gradually deported the Chinese technicians (Hoy 2004a, 2004b, 2004c).

The Domicem story can be viewed as either an isolated incident or an irrational act of nationalism. However, I draw a different conclusion. I think the Domicem incident underscores the flexibility of the Franco-Iberian approach to labor market regulation. After all, the inspectors describe their primary goal as neither the deterrence of illicit activity—which is at best difficult—nor the punishment of scofflaws—which is of little practical value—but the defense and upgrading of the country’s employment base through a combination of coercion and cooperation. And the Franco-Iberian-derived labor code gives the inspectors the discretion and authority they need to bring firms like Colcem into compliance without undermining the value of their investments.

Quantitative analysis

The capsule case studies are products of my interviews. The inspectors and informants to whom I spoke described the various relationships between labor standards and human resource upgrading and I attempted to confirm their accounts through both a deliberate effort to triangulate my different respondents and a careful review of secondary sources.

A quantitative exploration of the relationship between vocational education and training and professionalization of the inspectorate across the Dominican Republic's 30 provinces would nonetheless constitute a more demanding test of my argument.

Fortunately, the data for a quantitative test are available. On the one hand, INFOTEP has provided data on the number of INFOTEP graduates by province for 2003 (INFOTEP 2003). INFOTEP meets more than half the Dominican Republic's demand for vocational education and training and is by far the most important and respected training institution in the country (World Bank 2005b). I treat the percentage of each province's economically active population (ONE 2003) to graduate from an INFOTEP program in 2003 as my dependent variable. On the other hand, the SET has provided data on the number and distribution of professional inspectors by province (SET 2000a). I treat the professional (i.e., credentialed with a law degree) percentage of each province's inspectorate as a rough proxy for the degree of professionalization of the province's enforcement division.⁶ By regressing the percentage of INFOTEP graduates on the degree of professionalization, therefore, I produce a more demanding test of my argument.

Figure 1 presents the graphic and algebraic results of a bivariate regression of training on professionalization across the Dominican Republic's 30 provinces. A ten percentage point increase in the degree of professionalization is associated with almost a half a percentage point increase in the percentage of the economically active population undergoing vocational and technical training (see Fig. 1).

PLEASE INSERT FIGURE 1 ABOUT HERE

⁶ An alternative measure, the ratio of professional inspectors to workers, produces broadly similar results but is theoretically less satisfying since it ignores non-professional inspectors rather than acknowledging that they are often positively counterproductive.

While the bivariate results are statistically as well as substantively significant ($t_{\% \text{ professional}} = 3.39$; $p = .002$), and therefore add credibility to the interview data, they are nonetheless vulnerable to a number of different specification errors. After all, the interviews not only illuminated the relationship between labor standards and human resource upgrading but simultaneously cast the “purity” of the natural experiment into doubt on three different—if partial—grounds. First, they revealed that selective attrition might have been possible. We cannot simply assume that the retirement and replacement of incumbent inspectors was randomly distributed across the country. Second, they revealed a significant increase in the size of the inspectorate in the mid- to late 1990s. The net additions to the inspectorate did not replace incumbents and were therefore distributed purposively. And, third, they revealed relatively frequent transfers of inspectors. While the inspectors and their supervisors agreed that the more qualified inspectors were given the more difficult jobs, they parted company over which jobs were more difficult: larger provinces with more territory to cover were by all accounts the most difficult; urbanization is correlated with professionalization at a relatively high level ($r = .5$); and others suggested that EPZ host areas and regions at high risk for child labor were the most challenging.

I respond to the aforementioned concerns in five different ways. First, I control for the factors expected to influence vocational education and training in general. The existing literature on vocational education and training suggests the need to control for three additional variables:

- Average years of schooling in the adult population (ONAPLAN 2002, Cuadro 3.12B). More educated workers should express lower levels of demand for more education and training (see, e.g., Jimenez and Kugler 1987, pp. 234-6).⁷
- Population density (ONE 2003). Workers who face more competition in saturated labor markets are expected to upgrade their skills (Tang 1997, p. 3).⁸
- Average number of workers per firm (ONE 1998). Large firms are expected to train their workers at a higher frequency than their smaller counterparts (LaBelle 2000, p. 29).⁹

Second, I note that selection bias—i.e., the disproportionate assignment of professional inspectors to regions that are already prone to train their workers for exogenous reasons—is rendered unlikely by the decentralized nature of INFOTEP. After all, the agency’s programs are available in more than 200 different offices as well as mobile training missions spread throughout the country and are targeted at local populations and their needs (Casilla Benzant 1999). We have no *ex ante* reason to believe that one region is more likely to foster participation than another let alone that professional inspectors are disproportionately likely to wind up in that region. Third, I note that by assigning professionals to the more difficult tasks or areas the SET is in all likelihood introducing a conservative form of bias. We would not expect the most recalcitrant employers or conflict-ridden zones to produce a disproportionately high level of human resource

⁷ Puryear finds that vocational training and formal education are substitutes for each other in Colombia (1979, p. 291).

⁸ Furthermore, Anderson treats the variety of education available as a partial function of population density and holds (1965, p. 149) that “more densely populated countries” have “more complex education systems,” including more highly developed vocational and training institutions, in Western Europe.

⁹ Large firms in more developed countries are expected to train their workers in-house or on the job. However, Puryear finds that the opposite is the case in Colombia (1979, pp. 285-6). LaBelle holds that small firms expect training to encourage mobility and turnover (2000, p. 29)—a prospect less likely in larger firms that provide more desirable jobs.

development. Fourth, I control for the variable most strongly correlated with professionalization—the percentage of the provincial population living in urban areas (ONE 2003)—as well. And, finally, I use a two stage estimation procedure and treat the urban population percentage (ONE 2003) and provincial surface area (ONE 2003) as instruments for the degree of professionalization.¹⁰

Table 1 presents the results of three statistical models. Model 1 is the baseline model estimated by ordinary least squares with robust (heteroskedasticity-consistent) standard errors. Model 2 adds a control for the percentage of the population living in urban areas. And Model 3 employs two stage least squares with both robust standard errors and small sample corrections and instruments for professionalization with urbanization and the provincial surface area. Regression coefficients are placed above their parenthesized robust standard errors. Diagnostic statistics are available from the author upon request. And the results are more or less consistent across ordinary and two stage least squares specifications.

PLEASE INSERT TABLE 1 ABOUT HERE

All variables are in the expected direction and—with the notable exception of schooling—statistically as well as substantively significant. Professionalization exerts a particularly pronounced effect. A ten percentage point increase in the degree of professionalization is associated with a statistically significant one-third to one-half point increase in the percentage of the labor force graduating from an INFOTEP program net of controls and regardless of specification. The statistical record is therefore broadly

¹⁰ The relevant instruments emerged from my interviews with inspectors who suggested that professionals tended to be assigned to conflict-ridden urban environments or to larger provinces with more ground to cover. Other combinations of instruments (e.g., the presence of EPZs, high risk of child labor, etc.) produced broadly similar results; however, I ultimately followed Baum et al.’s recommendation “to be parsimonious in the choice of instruments” (Baum et al. 2003).

consistent with the evidence derived from qualitative interviews and goes a long way toward explaining the otherwise surprising compatibility of improved labor law enforcement and rapid export and economic growth in the Dominican Republic over the course of the past decade. In fact, the qualitative and quantitative data suggest that many—if by no means all—Dominican employers responded to the imposition of labor standards not by declaring bankruptcy, pulling up stakes, or laying off their workers, as predicted by neoclassical theory, but by upgrading their human (and physical) resources with the support and assistance of their various public sector interlocutors.

Discussion

I have argued that labor standards are more likely to upgrade than to undermine human resources in developing countries. Professional labor inspectors not only foreclose the low road of factory despotism and sweated labor but pave the high road of skill formation and human resource upgrading—and they thereby constitute an essential prerequisite, rather than an inveterate obstacle, to modern economic growth. While my findings would appear to gainsay the regnant neoclassical orthodoxy, and are therefore at odds with the policy advice emanating from many—if not all—of the international financial institutions (IFIs), they are consistent with a large body of sociological research which underscores the more or less simultaneous and complementary upgrading of labor standards and human and physical resources not only in late nineteenth and early twenty first century Europe (Burawoy 1985; Reid 1986, 1994), North America (Stark 1982; Piore 1997), and Japan (Dore 1969) but in late twentieth century East Asia as well (see, e.g., Kuruvilla 1996; Morris 1996; Deyo 1997).

The point is neither to exaggerate the achievements nor to minimize the legitimate grievances of the Dominican labor force. Dominican employers are at best paternalistic and at worst recalcitrant. And Dominican workers are therefore overworked, underpaid, and profoundly insecure. While proponents of the impending Central American Free Trade Agreement (CAFTA) praise Albuquerque's "major modernization effort" (IDB 2005, p. 23), and portray the SET as a model bureaucracy, their critics counterattack by underscoring the persistent shortcomings of Dominican labor law and practice. Union-busting is common—albeit more difficult, and therefore more subtle, than in the past—and poverty and informality are widespread. Real wages are stagnant. And bureaucrats and planners have been all but unable to translate Latin America's best late twentieth century growth performance into meaningful improvements in the living standards of the majority of their compatriots (see, e.g., Michael 2001).

Nevertheless, the transition from despotic to hegemonic labor relations—let alone to a more fundamentally just social order—is neither instant nor inexorable (Burawoy 1985), and the SET's reforms are indeed a step forward, their admitted shortcomings notwithstanding. Public officials, like children, have to learn to walk before they can learn to run—and at the outset of the reform era Dominican labor inspectors and their supervisors had yet to learn to crawl. They now know how to walk. And they may someday, like their French predecessors, learn to run.

The Dominican Republic's reform efforts are also relevant to at least three different debates at the heart of classical sociology, however, and each merits brief commentary. First, they underscore the important but for the most part overlooked distinction between "professionalization" and "bureaucratization" (Ritzer 1975). While

the Dominican Republic's labor inspectors are recruited through meritocratic and credential-based procedures, and have therefore been professionalized, they are encouraged to defend and exploit their discretion, and have therefore resisted bureaucratization—that is, their transformation into “machine-like” automatons who simultaneously build and reside in an “iron cage” (Weber 1904-11 [1968], 1946).¹¹ Thus, the Dominican reforms underscore the oft-overlooked distinction between two distinct—albeit not necessarily incompatible (Ritzer 1975)—paths to administrative rationalization: bureaucratization and professionalization. Second, they suggest that the “legal origins” (Glaeser and Shleifer 2002) of regulatory traditions are decidedly more complicated than their contemporary interrogators would have us believe. While Dominican inspectors have all manner of discretion to selectively enforce an unmanageably large labor code, and are encouraged to do precisely that, they would appear to use their discretion to promote rather than inhibit social welfare, and their activities therefore gainsay Edward Glaeser and Andre Shleifer's blanket condemnation of the French legal and regulatory tradition (Glaeser and Shleifer 2002). In fact, the adversarial and inflexible Anglo-American approach to labor law enforcement—implicitly endorsed by defenders of the common law tradition—would in all likelihood have proven incompatible with many of the SET's most innovative but discretion-dependent programs. And, finally, they suggest that the vital linkage between production politics and state politics underscored by Michael Burawoy almost a quarter of a century ago is alive and well in the developing world (Burawoy 1985). While Marx treated the

¹¹ For instance, Evans and Rauch construct an invaluable index of bureaucratic “Weberianess” which nonetheless tends to conflate professionalization and bureaucratization (Evans and Rauch 1990). See Parsons (1947, 58-60) for the classic exposition of Weber's inadequate theorization of the differences between the two concepts as well as Nass (1986) for additional commentary.

British Factory Acts and their enforcement agents as data points (rather than mere sources of data), and thereby developed a more sophisticated approach to the capitalist state than his more native critics would have us believe, Burawoy endorsed and extended Marx's analysis of the "autonomy of factory inspectors, who valiantly fought to enforce the new codes against resistance from employers, the judiciary, and even the operatives," in a self-conscious effort to refine and fortify Marxist political sociology (Burawoy 1982, p. S13). Many contemporary sociologists have all but abandoned the notion of relative state autonomy in the era of mobile capital—especially in small, dependent, underdeveloped countries like the Dominican Republic. But the SET's recent experience would appear to suggest that globalization complicates without necessarily compromising relative state autonomy and it is therefore time to re-open the debate.

References

- Albuquerque, Rafael. 1998. "El control de las normas del trabajo." Pp. 9-22 in R. Albuquerque et al., *Procedimiento penal laboral*. Santo Domingo: FINJUS.
- Albuquerque, Rafael. 2003. *Derecho del trabajo: Tomo I: Introducción: Los Sujetos del Derecho del Trabajo*. Santo Domingo: EJTP.
- Albuquerque, Rafael. 2005. "La supervisión administrativa de las normas de trabajo." Paper prepared for conference on "Labor Inspection and Labor Market Regulation." MIT/Industrial Performance Center. January 21.
- Amargos, Oscar. 1998. *La formación para el desarrollo y la capacitación en la República Dominicana: estudio sobre relaciones entre el sector público y privado*. Montevideo: OIT/CINTERFOR.
- Amsden, Alice. 2001. *The Rise of 'The Rest': Challenges to the West from Late-Industrializing Economies*. Oxford: Oxford University Press.
- Anderson, D. 1965. "Geographic and Demographic Factors and the Development of Educational Systems in Western Europe." *Comparative Education Review*. 9 (2): 147-54.
- Anner, Mark, and Peter Evans. 2004. "Building bridges across a double divide: alliances between US and Latin American Labour and NGOs." *Development in Practice*. 14 (1-2): 34-47.
- Baum, Christopher, et al. 2003. "Instrumental Variables and GMM: Estimation and Testing." Working Paper No. 545. Department of Economics. Boston College.
- Brennan, Denise. 2004. *What's Love Got to Do With It? Transnational Desires and Sex Tourism in the Dominican Republic*. Duke: Duke University Press.

- Burawoy, Michael. 1982. "Introduction: The Resurgence of Marxism in American Sociology." *American Journal of Sociology*. S1-S30.
- Burawoy, Michael. 1985. *The Politics of Production*. London: Verso.
- Casilla Benzant, Juan. 1999. "La descentralización de la formación profesional: La experiencia de INFOTEP." *Boletín CINTERFOR*. 147: 53-60.
- Chang, Dean. 1996. "Sweat & Tears." *Daily News*. June 9.
- Compa, Lance. 1987. "So We Have More Jobs—Low-Paid, Part-Time Ones." *Washington Post*. March 15.
- Compa, Lance. 2001. "NAFTA's Labor Side Agreement and International Labor Solidarity." *Antipode*. 33 (3): 451-67.
- Compa, Lance, and Vogt, Jeffrey. 2001. "Labor Rights in the Generalized System of Preferences: A 20 Year Review." *Comparative Labor Law and Policy Journal*. 22 (2-3): 199-238.
- Cook, Maria Lorena. 2004. "Internacional Labor Standards and Domestic Labor Advocates: The Role of Unions in Promoting Workers' Rights in Latin America." Unpublished manuscript. Cornell University/School of Industrial and Labor Relations.
- Carden, Terry, and Penny Holloway. 1997. "The Unregulated Labour Market: Then and Now." *IBAR/Irish Journal of Management*. 18: 63-78.
- Der-chin Horng, Andrew. 2003. "The Human Rights Clause in the European Union's External Trade and Development Agreements." *European Law Journal*. 9 (5): 677-701

- Deyo, Frederic. 1997. "Labor and post-Fordist industrial restructuring in East and Southeast Asia." *Work & Occupations*. 24 (1): 97-119.
- DiCaprio, Alisa. 2005. "Are Labor Provisions Protectionist?: Evidence from Nine Labor-Augmented U.S. Trade Arrangements." *Comparative Labor Law and Policy Journal*. 26 (1): 1-34.
- Dore, Ronald. 1969. "The Modernizer as a Special Case: Japanese Factory Legislation, 1882-1911." *Comparative Studies in Society and History*. 2 (4): 433-50.
- Economist. 1994. "Labour and trade." April 30.
- Economist. 2005. "Nothing's free in this world." August 6.
- Evans, Peter. 2000. "Fighting Marginalization with Transnational Networks: Counter-Hegemonic Globalization." *Contemporary Sociology*. 29 (1): 230-41.
- French, Howard. 1992. "Santo Domingo Journal." *New York Times*. April 20.
- French, Howard. 1990. "Consuelito Journal." *New York Times*. April 27.
- Friedman, Thomas. 2000. "Knight is Right." *New York Times*. June 20.
- Fruendt, Henry. 1998. *Trade Agreements and Labor Rights: U.S. Initiatives, Dominican and Central American Responses*. Gainesville: University Press of Florida.
- Garmendia Arigón, Mario. 2000. *Legislación comparada sobre formación profesional: Una vision desde los convenios de la OIT*. Montevideo: CINTEFOR.
- General Accounting Office (GAO). 1998. *Worker Rights: Progress Made, but Enforcement Issues Remain*. Washington: GPO.
- General Accounting Office (GAO). 2001. *North American Free Trade Agreement: U.S. Experience With Environment, Labor, and Dispute Settlement Cases*. Washington: GAO.

- Gereffi, Gary, et al. 2001. "The NGO-Industrial Complex." *Foreign Policy*. 125 (July-August): 125-35.
- Glaeser, Edward I. and Andrei Shleifer. 2002. "Legal Origins." *Quarterly Journal of Economics*. 107 (4): 1193-1229.
- Golub, Stephen. 1997. "Are International labor Standards Needed to Prevent Social Dumping?" *Finance and Development*. December.
- Grasmuck, Sherri. 1982. "Migration within the Periphery: Haitian Labor in the Dominican Sugar and Coffee Industries." *International Migration Review*. 16 (2): 365-7.
- Hartlyn, Jonathan. 1998. *The Struggle for Democratic Politics in the Dominican Republic*. Chapel Hill: UNC Press.
- Hewitt, John. 2005. *Analysis of the Export Potential of ICT and ICT Enabled Products and Services in the Dominican Republic*. Washington: Chemonics International.
- Hoy. 2004. Trabajo defiende sometimiento de empresa. 29 julio.
- Hoy. 2004. Embajador de Taiwán cuestiona cementera emplee chinos. 13 agosto.
- Hoy. 2004. Emplean chinos en empresa produciría cemento. 23 agosto.
- Instituto Nacional de Formación Técnico Profesional (INFOTEP). 2003. Unpublished data on graduates by province.
- Interamerican Development Bank (IDB). 2005. *The Labor Dimension in Central America and the Dominican Republic: Building on Progress: Strengthening Compliance and Enhancing Capacity*. Working Group of the Vice Ministers Responsible for Trade and Labor in the Countries of Central America and the Dominican Republic. Washington: IDB.

- International Labour Organization (ILO). 1947. *Convention concerning Labour Inspection in Industry and Commerce*. Geneva: ILO
- International Labour Organization (ILO). 2002. *Combating the worst forms of child labor in the Dominican Republic*. Geneva: ILO.
- International Labour Organization (ILO). 2002. *ILO Activities in the Americas, 1999-2002*. Fifteenth Annual Regional Meeting. Lima: OIT.
- Itzigsohn, José. 2000. "Immigration and the Boundaries of Citizenship: The Institutions of Immigrants' Political Transnationalism." *International Migration Review*. 34 (4): 1126-54.
- Jatobá, Vera. 2002. *Labour Inspection within a Modernized Labour Administration*. Lima: ILO.
- Jessup, David, and Michael Gordon. 2000. "Organizing in Export Processing Zones: The Bibong Experience in the Dominican Republic." Pp. 179-201 in Michael Gordon and Lowell Turner (eds), *Transnational Cooperation among Labor Unions*. Ithaca: Cornell University Press/ILR Press.
- Jimenez, Emmanuel, and Bernardo Kugler. 1987. "The Earnings Impact of Training Duration in a Developing Country: An Ordered Probit Selection Model of Colombia's Servicio Nacional de Aprendizaje (SENA)." *Journal of Human Resources*. 22 (2): 228-47.
- Krueger, Alan. 1996. "Observations on International Labor Standards and Trade." NBER Working Paper No. 5632. Cambridge: NBER.

- Kuruvilla, Sarosh. 1996. "Linkages between Industrialization Strategies and Industrial Relations/Human Resource Policies: Singapore, Malaysia, the Philippines, and India." *Industrial and Labor Relations Review*. 49 (4): 635-57.
- LaBelle, Thomas. 2000. "The Changing Nature of Non-Formal Education in Latin America." *Comparative Education*. 36 (1): 21-36.
- Lozada, Carlos. 2003. "Think Again: Latin America." *Foreign Policy*. 134: 18-26.
- Marshall, Ray. 2005. "Labor Standards, Human Capital, and Economic Development." EPI Working Paper No. 271. Washington: EPI.
- Martínez, Desirée. 2005. Las exigencias para llenar vacantes se multiplicand. *Listín Diario*. 3 abril.
- Martínez, Samuel. 1999. "From Hidden Hand to Heavy Hand:: Sugar, the State, and Migrant Labor in Haiti and the Dominican Republic." *Latin American Research Review*. 34 (1): 57-84.
- Maskus, K. (1997). "Should Core Labor Standards Be Imposed Through International Trade Policy?" World Bank Policy Reserch Working Paper 1817. Washington: World Bank.
- Méndez, Mario. 1993. *Reformas y lucha de intereses*. Santo Domingo:
- Mertens, Leonard. 2004. *Training, productivity, and labour competencies in organizations: Concepts, methodologies, and experiences*. Montevideo: OIT/CINTERFOR.
- Michael, Marie. 2001. "The Dominican Republic: Latin America's Latest Economic Miracle." *Dollars & Sense*. March/April.

- Miller, John. 2003. "Why Economists Are Wrong About Sweatshops and the Anti-Sweatshop Movement." *Challenge*. 46 (1): 96-122.
- Mindlin, Alex. 2005. "An Island Rift, Repaired A World Away." *New York Times*. November 27.
- Montero, Gregorio. 2003. "El servicio civil de carrera en Centroamérica y el Caribe: caso República Dominicana." Paper presented at the VIII Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública. Panamá. October 28-31.
- Morris, Paul. 1996. "Asia's Four Little Tigers: a comparison of the role of education in their development." *Comparative Education*. 32 (1): 95-109.
- Murillo, M. Victoria, and Andrew Schrank. 2005. "With a Little Help from My Friends: Partisan Politics, Transnational Alliances, and Labor Rights in Latin America." *Comparative Political Studies* 38 (8): 971-99.
- Myerson, Allen. 1997. "In principle, a case for more sweatshops." *New York Times*. June 22.
- Nass, Clifford. 1986. "Bureaucracy, Technical Expertise, and Professionals: A Weberian Approach." *Sociological Theory*. 4 (1): 61-70.
- Noble, Barbara Presley. 1992. "At Work: Mapping Offshore Migration of Jobs." *New York Times*. October 18.
- Oficina Nacional Estadístico. 1998. *Boletín Industrial*. Santo Domingo: ONE.
- Oficina Nacional Estadístico. 2003. *Censo nacional 2002*.
- Oficina Nacional de Planificación (ONAPLAN). 2002. *Political social del gobierno dominicana. Volumen I*. Santo Domingo: ONAPLAN.

- Oppenheimer, Andrés. 1999. "Dominican Republic Seen as Role Model." *Miami Herald*. November 28.
- Organización Internacional del Trabajo. 2003. *El Mercado de Trabajo en República Dominicana: Problemas y desafíos para una política de empleo y trabajo decente*. San José: OIT.
- Parsons, Talcott. 1947. "Introduction." Pp. in M. Weber, *Theory of Social and Economic Organization*, T. Parsons and A. Henderson, trans. Glencoe: Free Press.
- Passell, Peter. 1997. "Loading the trade agenda with divisive issues could backfire." *New York Times*. October 9.
- Payne, Douglas. 1993. "Dominican Labor and the GSP." *Journal of Commerce*. September 9.
- Piore, Michael. 1980. "Dualism as a response to flux and uncertainty." Pp. 23-54 in Suzanne Berger and Michael Piore, eds., *Dualism and Discontinuity in Industrial Societies*. Cambridge: Cambridge University Press.
- Piore, Michael. 1997. "The Economics of the Sweatshop." Pp. in Andrew Ross, ed., *No Sweat: Fashion, Free Trade, and the Rights of Garment Workers*. New York: Verso.
- Piore, Michael. 2004. "Industrial Upgrading and the Administration of Labor Standards: An Approach to Formality, Informality, and poverty in an Open Economy." Unpublished paper presented at workshop on *El Reto de la Informalidad y Pobreza Moderada*. FLACSO, Mexico City.

- Piore, Michael. 2004. "Rethinking Mexico's Labor Standards in a Global Economy."
Unpublished paper. Department of Economics. Massachusetts Institute of
Technology. Cambridge, MA.
- Plasencia, Aleida. 2005. Capacitarán 20 mil jóvenes. *Hoy*. 7 febrero.
- Polaski, Sandra. 2004. "Protecting Labor Rights through Trade Agreements: An
Analytical Guide." *Journal of International Law and Policy*. 10: 301-13.
- Puryear, Jeffrey. 1979. "Vocational Training and Earnings in Colombia: Does a SENA
Effect Exist?" *Comparative Education Review*. 23 (2): 283-92.
- Quiroz, Fernando. 2005. "Esquina joven." *Hoy*. 22 febrero.
- Reid, Donald. 1986. "Putting Social Reform into Practice: Labor Inspectors in France,
1892-1914." *Journal of Social History*
- Reid, Donald. 1994. "'Les Jeunes Inspecteurs': Ideology and Activism among Labour
Inspectors in France after May 1968." *French History*. 8 (3): 296-315.
- Ritzer, George. 1975. "Professionalization, Bureaucratization, and Rationalization: The
Views of Max Weber." *Social Forces*. 53 (4): 627-34.
- Rodríguez-Garavito, César. 2005. "Global Governance and labor Rights: Codes of
Conduct and Anti-Sweatshop Struggles in Global Apparel Factories in Mexico and
Guatemala." *Politics & Society*. 33 (2): 203-33.
- Safa, Helen. 1997. "Where the big fish eat the little fish." *NACLA Report on the
Americas*. 30 (5): 31-7.
- Safa, Helen. 2002. "Questioning Globalization: Gender and Export Processing in the
Dominican Republic." *Journal of Developing Societies*. 18 (2/3): 11-31.

- Schrank, Andrew. 2003. "Luring, Learning, and Lobbying: The Limits to Capital Mobility in the Dominican Republic." *Studies in Comparative International Development*. 37 (4): 89-116.
- Schrank, Andrew. 2004. "Ready to Wear Development? Foreign Investment, Learning-by-Watching, and the Apparel Industry in the Americas." *Social Forces*. 83 (1): 123-56.
- Schrank, Andrew. 2005. "Professionalization and Probity in the Patrimonial State: Labor Law Enforcement in the Dominican Republic." Paper presented at the Institute for Work and Employment Research, Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA. February 8.
- Schrank, Andrew. 2006. "Homeward Bound: Interest, Identity, and Investor Behavior in a Third World Export Platform." Unpublished paper. Department of Sociology. University of New Mexico. Albuquerque, NM.
- Secretaría de Estado de Trabajo (SET). 2000. Boletín Estadístico. No. 5.
- Secretaría de Estado de Trabajo (SET). 2000. *Proceso de Reforma y Modernización de la Administración del Trabajo en República Dominicana: Memoria de una Gestión, 1991-2000*. Santo Domingo: SET.
- Seidman, Gay. 2005. "'Stateless' Regulation and Consumer Pressure: Historical Experiences of Transnational Corporate Monitoring." Pp. 175-210 in F. Buttel and P. McMichael, eds., *New Directions in the Sociology of Global Development*. Amsterdam: Elsevier.
- Senser, Robert. 1994. "Whither international worker rights?" *Freedom Review*. 26 (1): 69-74.

- Shadlen, Ken. 2005. "China and the Search for Better-than-MFN Access to the US: The Global Politics of Regional Integration in the Americas." DESTIN Working Paper Series. No. 05-62. London School of Economics.
- Shaheed, Zafar. 1994. "Minimum wages and low pay: An ILO perspective." *International Journal of Manpower*. 15 (22/3): 49-54.
- Shaiken, Harley. 2003. "Work, Development, and Globalization." Paper presented at the Universidade Federal d Rio de Janeiro, Instituto de Economi, Ciclo de Seminários Brasil em Desenvolvimento. October 20.
- Stark, David. 1980. "Class Struggle and the Transformation of the Labor Process: A Relational Approach." *Theory & Society*. 9 (1): 89-130.
- Stiglitz, Joseph. 2000. "Democratic Development as the Fruits of Labor." Keynote Address, Industrial Relations Research Association, American Economic Association Meetings, January, 2000, Boston.
- Stillerman, Joel. 2003. "Transnational Activist Networks and the Emergence of Labor Internationalism in the NAFTA Countries." *Social Science History*. 27 (4): 577-601.
- Swepston, Lee. 1994. "The Future of ILO Standards." *Monthly Labor Review*. 117 (9): 16-24.
- Tang, Yao. 1997. "School Effectiveness in Taiwanese Vocational Education: A Multi-Level Analysis." *Education Economics*. 5 (1): 3-27.
- Trubek, David, et al. 2000. "Transnationalism in the Regulation of Labor Relations: International Regimes and Transnational Advocacy Networks." *Law and Social Inquiry*. 25 (4): 1187-2012.

- United Nations Educational, Social, and Cultural Organization (UNESCO). 2003. *Toward a State of the Art of Adult and Youth Education in Latin America and the Caribbean*. Bangkok: UNESCO.
- United States Trade Representative (USTR). 2005. *U.S. Generalized System of Preferences: Guidebook*. Washington: USTR.
- Vargas, Lauterio. 2003. "Juventud y empleo: Una luz de esperanza para los jóvenes Dominicanos." *Ahora*. 25 noviembre.
- Weber, Max. 1904-11 [1968]. *Economy and Society*. Edited by Guenter Roth and Claus Wittich. New York: Bedminster.
- Weber, Max. 1946. "Bureaucracy." Pp. 196-224 in H. Gerth and C. W. Mills, eds., *For Max Weber*. New York: Oxford University Press.
- Weiner, Myron. 1991. *The Child and the State in India: Child Labor and Education Policy in Comparative Perspective*. Princeton: Princeton University Press.
- Wiarda, Howard. 1978. "Corporative Origins of the Iberian and Latin American Labor Relations Systems." *Studies in Comparative International Development*. 13 (Spring): 3-37.
- Wilson, James. 1968. *Varieties of Police Behavior: The Management of Law and Order in Eight Communities*. Cambridge: Harvard University Press.
- World Bank. 2003. "From Exploitation to Education for the Children Left Behind: The Role of the International Community in Achieving Education for All." A panel discussion. New Delhi, India. November.
- World Bank. 2005. *Global Economic Prospects 2005: Trade, Regionalism, and Development*. Washington: World Bank.

World Bank. 2005. *A Time to Choose: Caribbean Development in the 21st Century*.

Washington: World Bank.

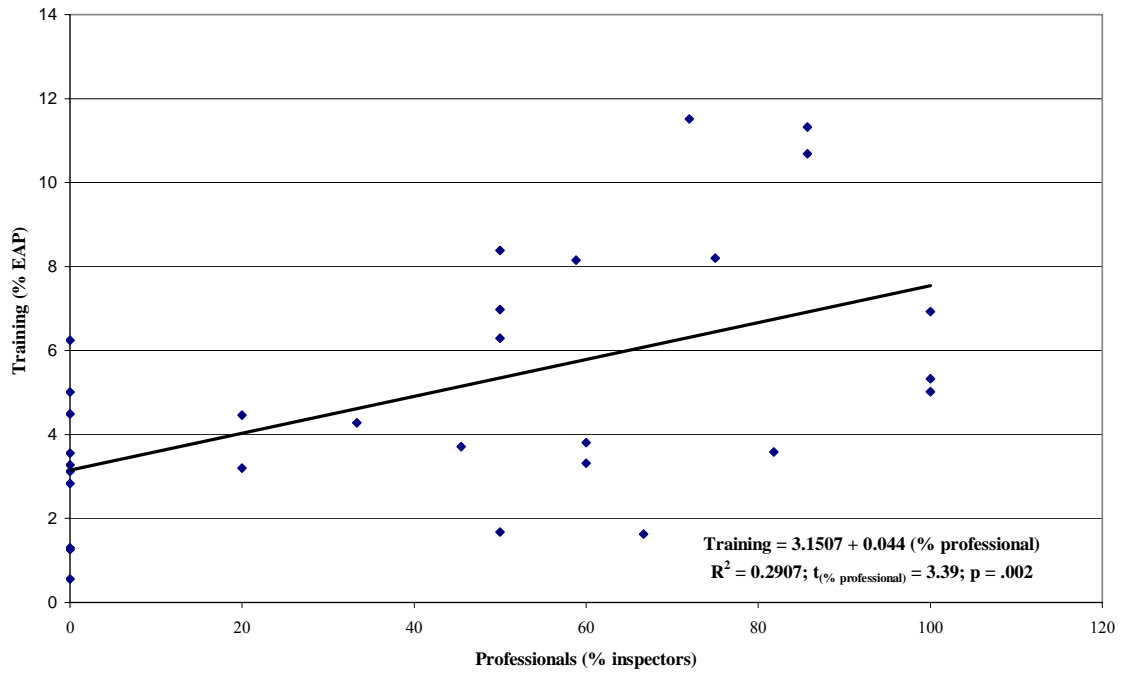
World Bank. 2005. *Dominican Republic: Review of Trade and Labor Competitiveness*.

Washington: World Bank.

World Trade Organization (WTO). 2004. *International Trade Statistics 2004*. Geneva:

WTO.

Fig. 1: Human resource upgrading = f(professionalization)



Data: SET (2000); ONE (2003); INFOTEP (2005).

Table 1: Regression results: training = f(professionalization and control variables)

Variable	Model 1 (OLS)	Model 2 (OLS)	Model 3 (2SLS)
Average years of schooling	-0.860 (.685)	-0.874 (.705)	-1.111 (.766)
Population density	0.003** (.001)	0.003 ** (.001)	0.003*** (.001)
Average size of firm	0.023** (.009)	0.021** (.010)	0.021** (.008)
Professionalization	0.034*** (.011)	0.030** (.012)	0.054** (.025)
Percent urban		0.023 (.040)	
Constant	6.326* (3.167)	5.464 (3.412)	6.848** (3.259)
R ²	.516	.523	

* $p \leq .10$; ** $p \leq .05$; *** $p \leq .01$; $n = 30$; Model 3 is estimated with small sample corrections and appears to meet the standard diagnostic tests for 2SLS including Hansen's J statistic (.033; $p = .86$); Shea's partial R^2 ($R^{2*} = .306$; $F = 5.30$; $p = .012$); and the F test from the first stage regression ($F = 11.60$; $p = .0000$).