A Developmental Island in a Predatory Sea: 
The Ministry of Labor in the Dominican Republic

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I. Introduction.
Labor ministries in “developmental states” (Johnson 1982; Evans 1995; Woo-Cumings 1999) are neither prestigious nor powerful. They have at best played second fiddle to fiscal ministries like trade, finance, and planning (Kang 1995, p. 575; Gough 2001, p. 178; Shin and Shaw 2003, p. 335; Underhill and Zhang 2005, p. 10) and at worst done their repressive bidding. Thus the Japanese labor ministry ranked “near the bottom” (Johnson 1982, p. 60) of the public sector status hierarchy described by Chalmers Johnson in his classic account of policymaking during the so-called miracle years. The Koreans effectively outsourced industrial relations from their labor ministry to their intelligence services throughout the high growth era (Kohli 2004, p. 99; Lee 2006, p. 732). And Taiwan simply lacks a “nationally integrated administrative structure for labor matters” (Deyo 1989, p. 116; see also Lee 2006).

The Dominican Republic is the virtual mirror image of a traditional developmental state. On the one hand, the island nation is bedeviled by patronage politics (Hartlyn 1998; Keefer and Vlaicu 2008). Parties and politicians trade jobs for votes as a matter of course, and policymakers are therefore unwilling to insulate their “core economic agencies” (Evans and Rauch 1995, p. 754) from partisan competition. On the other hand, the Ministry of Labor (Secretaría de Estado de Trabajo, or SET) provides a well-known “exception to the rule” (Iacoviello and Rodríguez-Gusta 2006, p. 452). Policymakers in the United States condition preferential access to their domestic market on evidence that the beneficiaries of their largesse are enforcing their domestic labor laws, and policymakers in the Dominican Republic therefore treat a professional labor ministry as the price to be paid for guaranteed market access (Frundt 1998; Jessup and Gordon 2000; Douglas et al. 2004; Murillo and Schrank 2005; Schrank 2009).

Is a powerful labor ministry populated by skilled professionals more likely to jumpstart a “joint public-private project” (Evans 1997, p. 66) designed to mitigate risk and animate innovation or to impose “labor market rigidities that impede flexibility and distort the signals to individuals and enterprises affecting skills development” (World Bank 2002, p. 22; see also Botero et al. 2004; Caballero et al. 2004; Calderon et al. 2007)? I address the question by examining the inspectors responsible for the enforcement of Dominican labor law and conclude that they foster both worker protection and economic adjustment by: (i) discouraging “low road” strategies like the union-busting, informality, and the exploitation of immigrant and child labor; (ii) fostering “high road” alternatives that link firms and families, on the one hand, to educational, training, and financial institutions, on the other; and (iii) imposing employment-related “performance standards” (Amsden 1989) on subsidy recipients.

The point is less to exaggerate the country’s admittedly fragile achievements than to underscore their incompatibility with both a neoclassical perspective that portrays the imposition of labor standards as a threat to growth and adjustment (Bhagwati 2004; Wolf 2004; Panagariya 2006) and a critical alternative that bemoans the relegation of employment policy to “social agencies” like labor, health and welfare on the grounds that they “have always had less power and prestige than agencies dealing with ‘economic development’” (Tendler 2005, p. 122). After all, the Dominican labor ministry has not only been transformed by “the most successful application of trade-based labor sanctions” (Frundt 1998, p. 227) on record but has consequently made an indispensable contribution to Latin America’s most recent “growth miracle” (Velasco 2002, p. 45; see also Lozada 2003; IDB 2007), and the Dominican experience therefore suggests that developing country policymakers who respond to foreign pressures by transforming their social agencies into development agencies can foster beneficial outcomes for (almost) all concerned.

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1 Consequently, the DR falls near the bottom of the leading rankings of civil service capacity in Latin America (Iacoviello and Zuvanic 2005, p. 29) and the developing world more generally (Evans and Rauch 1999, p. 763).
I have divided the remainder of the paper into four principal sections. First, I provide empirical and theoretical context by placing the rationalization of the Dominican labor ministry against the backdrop of the broader literature on globalization and worker protection in the developing world. Second, I introduce qualitative data drawn from interviews with more than 15 ministry officials—as well as representatives of the private sector, the labor movement, and the donor community—in the Dominican Republic and find that skilled labor inspectors not only block the proverbial low road by deterring repression and mistreatment but pave a potentially higher road by actively facilitating investment, education, and training. Third, I analyze quantitative data collected by the World Bank and find that the depth of human resource development is indeed a function of the intensity of the enforcement effort in a sample of more than 200 Dominican and foreign enterprises. And, finally, I place my findings in comparative context and discuss their implications for the future of the developmental state and for development policymaking more generally. Ultimately, I hold that regulatory officials who are able not only to impose “beneficial constraints” (Streeck 2004) but to simultaneously shower conditional benefits on private actors are particularly well placed to forge “developmental social policies” (Mkandawire 2007, p. 14) in the twenty-first century.

**Intellectual context**

A substantial body of literature documents the revival of labor law enforcement in contemporary Latin America. Left-leaning governments have added substantial enforcement capacity in Brazil and the Southern Cone (Cabrera 2006; Stang 2006; Pires 2009; Rosado 2010). US trade conditions have fostered similar outcomes in the Andes and Central America (Schrank and Piore 2007; Murillo et al. 2009). And Mexico and Panama have responded to a series of industrial accidents by bolstering enforcement capacity as well (Bensusán 2008, p. 107; Cortez 2009).

Observers part company, however, over the likely consequences of Latin America’s “regulatory renaissance” (Piore and Schrank 2008, p. 1). While mainstream economists portray low cost labor as the region’s principal competitive advantage, and therefore anticipate divestment, trade diversion, and job loss (Golub 1997; Bhagwati 2004; Panagariya 2006), their “neo-institutional” (Kochan and Nordlund 1989) critics portray low wages—and unfettered labor markets more generally (Piore 1990; Miller 2003)—as impediments to industrial upgrading, and therefore anticipate more salutary outcomes. For example, Joseph Stiglitz derides the international donor community’s “low road” approach to industrial relations on economic as well as moral grounds (Stiglitz 2000, p. 15). Peter Evans champions a “high road” alternative (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).

Where does the high road start? The neo-institutionalists have identified two distinct on-ramps. First, they maintain that entrepreneurs tend to respond to regulation by adopting compensatory productivity improvements that redound to the benefit of their stakeholders in the long run. In fact, Wolfgang Streeck goes so far as to say that “the same long-term upgrading of the economic and organizational capabilities of firms that is caused by competitive product markets may also and in basically the same way be caused by social and political regulation” (Streeck 2004, p. 432). Second, they hold that labor inspectors actively facilitate compliance by giving employers advice that fosters “better management and consequently productivity” (Albracht 2006, p. 72). Thus, Wolfgang Von Richthofen notes that Scandinavia labor inspectors have been known to facilitate compliance with occupational safety regulations by exploiting synergies between safety and profitability (Von Richthofen 2002, p. 126), and that “training programmes that combine elements of business management and basic labour protection issues” are increasingly central to labor inspection more generally (p. 48).
In short, the neo-institutionalists maintain: (i) that the practices that threaten worker protection are products of “business strategies” (Piore 1990, p. 35; Streeck 2004, p. 431) that are inimical—rather than conducive—to the long term health of the firm; and (ii) that regulations that foster worker protection simultaneously animate upgrading by blocking the low road of repression and exploitation and paving a higher road marked by skill formation and productivity improvement. Some add that Latin American labor ministries and their administrés are particularly amenable to “pedagogical” (Tokman 2001; Piore and Schrank 2008; Rosado 2010) approaches that exploit the alleged synergies between worker protection and competitiveness for at least three reasons. First, the region inherited a Franco-Iberian enforcement model “that encompasses both advice and sanctions in contrast to the Anglo-Saxon model, in which labour inspection is, strictu sensu, supervisory in nature” (Vega Ruiz 2009, p. 15). Latin American labor inspectors therefore have more discretion than their North American counterparts and “can decide whether to impose sanctions, give advice or request remedial action” (Vega Ruiz 2009, p. 15) as the case demands. Second, Latin American labor inspectors are responsible for the enforcement of the entire labor code—as opposed to individual laws and standards—and are therefore able to assess the overall “burden the regulations impose on the enterprise, and where this is excessive, or threatens the enterprise’s very solvency, to balance particular regulations against each other and against the broader role of the enterprise in providing employment” (Piore and Schrank 2006, p. 11). By way of contrast, North American labor inspectors are specialists (e.g., occupational safety, wages and hours, immigration) who lack a holistic view of the firm and therefore have little choice but to pursue a punitive approach. And, third, Latin American employers are desperately in need of tutelage. They are frequently unable—and not simply unwilling—to meet their legal obligations (Tokman 2001, p. 74) and are therefore more likely to respond to a pedagogical approach that promises to augment their survival prospects than to a punitive approach that is likely to put their solvency at risk.

Latin American labor ministries are works in progress, however, and their ability to exploit the pedagogical approach is by no means obvious. While experts portray pedagogical inspections as a critical component of the region’s campaign for better wages and working conditions (Tokman 2001; Piore and Schrank 2006, 2008; Rosado 2010), they tend to base their conclusions on case studies and pilot projects that have been undertaken in particularly favorable environments, and in so doing ignore questions about their scope, selection, and scalability. How prevalent are pedagogical inspections? Can they really reconcile worker protection and adjustment? And, if so, what are their institutional preconditions?

The Dominican Republic’s effort to abandon sugarcane and sweatshops for more sophisticated exports and enterprises (Lozada 2003; Rodrik 2007; Schrank 2008; UNCTAD 2009) offers an unparalleled opportunity to answer these questions, for the “most likely alternative theory” (Stinchcombe 1968, p. 25) of Dominican upgrading—i.e., that the island nation has always been inclined toward the high road—is all but ruled out by: (i) the country’s “predatory-repressive” (Itzigsohn 2000a, p. 22) regulatory history; and (ii) the fact that when the Dominicans finally abandoned labor repression they did so not of their own accord but at the behest of the United States. On the one hand, the Dominican government tolerated—or perhaps abetted—gross violations of labor rights for the better part of the twentieth century. Powerful sugar growers exploited semi-servile immigrants from Haiti (Grasmuck 1982; Martínez 1999). Family farmers employed their children as a matter of course (ILO 2004). Sex tourists preyed upon adolescents and prostitutes in resort towns (French 1992; Brennan 2004). Apparel and footwear exporters mistreated their workers and undermined their unions (Safa 1997; Frundt 1998). And allegations of “corruption and influence peddling” (Frundt 1998, p. 219) tainted the enforcement of labor law more generally (Alburquerque 1992, p. 343). On the other hand, the US had both influence over Dominican policymakers and an incentive to demand reform. North

America’s Watch and the US labor movement therefore began to put pressure on the Dominican Republic during the first Bush administration by asking the United States Trade Representative to investigate allegations of mistreatment and abuse on the country’s sugar estates and export processing zones (EPZs). President Joaquín Balaguer responded to the US inquiry—and the corresponding threat to his country’s trade preferences—by appointing three of the country’s best known lawyers to draft a new labor code and placing the leading member of the triumvirate, Rafael Alburquerque, in charge of the labor ministry (Méndez 1992; Frundt 1998; Murillo and Schrank 2005). And Alburquerque and his colleagues not only expanded but also rationalized the ministry’s enforcement division by recruiting more than 100 new inspectors, verifying their credentials, and guaranteeing their employment, income, and autonomy with novel civil service protections (Schrank 2009). By the year 2000, therefore, more than half of the 203 inspectors found in the labor ministry’s 36 regional offices had graduated from law school; more than a third had been recruited by means of a competitive exam; more than three-quarters had been incorporated into the civil service; and their salaries had been multiplied by a factor of 3.5 (SET 2000a; Jatobá 2002, p. 34).

What were the long term consequences? While Balaguer left office in 1996, his successors have done nothing to diminish his reforms, and the Dominican labor ministry therefore plays host to a functional career ladder today. Lawyers not only occupy more than two-thirds of the positions in the inspectorate as a whole but are approximately 10 times more likely to assume positions of authority than their non-credentialed predecessors (Schrank 2008, p. 95), and the ministry has therefore earned a reputation for “professionalism” among social scientists at home (Oviedo et al. 2007, p. 39), garnered praise from observers overseas (Gopalakrishnan 2007; OIT 2009; Vega Ruiz 2009), and been asked to advise reformers in neighboring countries like Costa Rica, Mexico, and Panama (see, e.g., FUNPADEM 2006; Alburquerque 2008).

Table 1 underscores the development of Dominican regulatory capacity between 1991, when the DR first came under US pressure, and 2007, when the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA) came into effect, and suggests that the Dominicans have pursued a textbook model of Weberian administrative reform (Heredia and Schneider 2003; Evans 2005).

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<th>Table 1: Labor law enforcement resources in the Dominican Republic</th>
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Data: SET (2000b); Banco Central (2003); OAS (2008); unpublished data provided by SET. Credentials and recruitment criteria apply to new inspectors (i.e., approximately 80% of the total in 2008 [Cepeda 2008a]).
By offering qualified public servants relatively high salaries, secure tenure, and opportunities for advancement, they hoped not only to augment the labor ministry’s human resource base and *esprit de corps* but to raise the costs and risks of misconduct—and to thereby break the vicious circle of mistrust and malfeasance that tends to characterize inspection regimes in patrimonial societies (World Bank 2004; Coolidge 2006). After all, the returns to inspector malfeasance are a known function of bribes and payoffs. The costs of inspector malfeasance are an unknown function of expected lifetime earnings multiplied by the risk of discovery and dismissal. And inspectors who are well paid and confident in their career prospects are therefore less likely to be tempted by corruption than inspectors who are poorly paid and insecure.

In short, the Dominicans have responded to United State pressure by turning their traditionally predatory labor ministry into a “pocket of efficiency” (Evans 1995, p. 61) in an overarching fabric of government failure. The contrast with the East Asian developmental states is striking. While Asian labor ministries tolerated pork and patronage, and therefore ranked near the bottom of their public sector status hierarchies, the Dominican labor ministry adheres to strict Weberian norms, and therefore promises to provide incomparable insight into the prospects for building a high road development strategy around a social—rather than a fiscal—ministry (Cortázar et al. 1997, p. 36).

I try to capture the insight by exploiting two different sources of data: First, I employ qualitative data drawn from interviews with 15 inspectors in eight of the labor ministry’s regional offices as well as their superiors in the capital of Santo Domingo, former Secretary of Labor—and current Vice President—Alburquerque, high ranking personnel in the ministry’s training office, directors of two of the country’s principal union federations, private labor lawyers, and representatives of foreign governments and donor agencies. The interviews took place in each of the DR’s major cities and distinct agricultural zones in the late spring and summer of 2004, 2005, and 2008; lasted anywhere from an hour to half a day; included return visits to a number of particularly informative sources; and occurred against the backdrop of interviews with approximately three dozen exporters of nondurable consumer goods—as well as a number of their import-competing counterparts—that I have been carrying out since 1998 (see, e.g., Schrank 2004, 2008). Second, I analyze quantitative data drawn from a survey of 225 manufacturing enterprises carried out by the World Bank in the DR’s two largest cities in 2005. The sample includes foreign as well as locally owned firms in six different consolidated sectors. While the interviews underscore the potential synergies between labor law enforcement and labor force upgrading, the survey speaks to their generality.

**Labor Market Regulation and Development: Capsule Case Studies**

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

The Dominican inspectors I interviewed therefore bear a striking resemblance to their French predecessors and role models. They are responsible for the enforcement of the entire labor code including provisions covering wages and hours, severance payments, child labor, immigration, social security, and safety and health (Alburquerque 1998, p. 24). They describe their primary mission as the “orientation” of workers and employers and prefer persuasion to punishment (Reid 1994, p. 297). 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” (Alburquerque 2003, p. 157).

In other words, the inspectors are trained to bring firms into compliance without driving their owners out of business. After all, the DR 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 reconcile compliance and competitiveness by encouraging employers to take advantage of publicly sponsored human resource development programs and industry 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 (Schrank 2008, pp. 101-2). Capsule case studies from three different sectors—commercial agriculture, light manufacturing, and heavy industry—serve to illustrate my point.

Child labor and education 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; Faizunissa 2005). While impoverished families need material resources in the short run, and therefore compel their children to abandon school for work, they need human capital in the medium to long run, and therefore tend to reproduce their poverty over time. A large 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, however, for many children are employed by their impoverished parents and sanctions are likely to aggravate—rather than ameliorate—their circumstances. In fact, the DR entered the twenty first century with a juvenile labor force of 436,000 participants (ILO-SET 2004, p. 31), many of whom worked for their parents, and a serious effort to fine or imprison their employers would therefore have been impractical at best and irresponsible at worst.

The problem was particularly acute in the rural sector, where child labor was more important to family survival strategies, culturally acceptable, and prevalent than in the cities (OIT-IPEC 2004), and the labor inspectors therefore pursued an alternative approach that simultaneously alerted the public to the costs of child labor and brokered relationships between farm families and: (i) schools that not only educated their children but provided free meals and certified their eligibility for conditional cash transfers; (ii) civil society organizations that donated uniforms, textbooks, and accessories; and (iii) government agencies that offered farm families the low cost credit and technical support they would need to compensate for the loss of child and adolescent labor by developing alternative sources of production and income (OIT-IPEC 2006a, p. 46; OIT-IPEC 2008, pp. 26-9; Santos 2006, p. 133; CONANI 2007, p. 37). The relevant agencies would include not only microlending institutions that foster the growth of small businesses (CONANI 2007, p. 37; Cedeño de Fernández 2009, p. 5) but the Agrarian Bank of the Dominican Republic (Banco Agrícola, or BAGRICOLA), a public facility that is responsible for almost half of all the credit extended in the agricultural sector (Acevedo and Delgado 2002, p. 10) and recently agreed not only to support alternative production arrangements (Santos 2006; Polanco 2009) but to deny loans to borrowers who make use of child labor (OIT-IPEC 2006a, p. 46; OIT-IPEC 2006b, p. 17).

The results include the proliferation of cooperative greenhouses designed to mitigate the income losses attendant upon the withdrawal of child labor by facilitating the growth of nontraditional
agricultural exports (OIT-IPEC 2006a, p. 80; Santos 2006, p. 133). According to the Dominican Secretary of Agriculture (Secretaría de Estado de Agricultura), the country currently plays host to 1,075 greenhouses that include 2.9 million square meters of interior space—a tenfold increase in little more than five years (Listín Diario 2009). They are being financed by BAGRICOLA and allied institutions (Polanco 2009). They are being built and maintained by graduates of training programs sponsored by the parastatal Institute for Technical and Professional Training (Instituto de Formación Técnica y Profesional, or INFOTEP; see, e.g., Santana 2010). They have engendered 25,000 jobs and tens of millions of dollars worth of exports (Listín Diario 2009). And they have been widely portrayed as the key to the country’s “agricultural future” (de la Rosa 2009).

In other words, the labor inspectors tried to alter the values and incentives of their interlocutors simultaneously by building and placing themselves at the center of networks that could lower the opportunity as well as the direct costs, raise the short-term as well as long-term benefits, and underscore the importance of education (OIT-IPEC 2006b, p. 39; OIT-IPEC 2008, p. 27). The point is not that they abandoned sanctions ex ante, however, but that they recognized that child labor is a product of poverty and is therefore best addressed by building the income generating capacities of children, over the long run, and their parents, in the short run (Cepeda 2008).

Nor is the strategy circumscribed to the countryside. Labor inspectors have pursued a broadly similar approach in the cities as well, and have thereby made remarkable inroads against the scourge of child labor nationwide—cutting the overall rate of juvenile force participation by two-thirds—from 18 to 5.8 percent—and bringing the absolute size of the juvenile workforce down to 155,000 in less than ten years (López 2009).

**Human resource upgrading in light manufacturing**
The US campaign for improved labor standards in the DR could not have come at a worse time for the 400 employers of approximately 150,000 workers in the country’s export processing zones. After all, the EPZs already confronted a number of challenges including macroeconomic volatility, regulatory uncertainty, growing competition from a newly pacified Central America, and the North American Free Trade Agreement (NAFTA) and associated risk of trade diversion to Mexico (Schrank 2003). The new labor code and accompanying enforcement provisions were portrayed as the final straw—an existential threat the free zones and their many employees (see, e.g., Méndez 1993). And Alburquerque’s demonstrated willingness to revoke the export licenses of particularly recalcitrant employers gave the new code particularly sharp teeth (Frundt 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 new firms, well over 50,000 new jobs, and hundreds of millions of dollars in new investments (Schrank 2005). Unions had taken tentative steps toward the organization the zone workforce. And the Dominican Republic had nonetheless been christened a “miracle” economy by foreign observers (Oppenheimer 1999; Lozada 2003). While the zones would pay an admittedly high price for their dependence on the US market after the dot-com bust, and would suffer again in the wake of China’s accession to the World Trade Organization, they would also begin to diversify their wares from low end textiles, apparel, and footwear to more durable consumer goods and services. “Not a single job has been lost in a firm outside the textile sector,” noted one government official in 2007 (Corcino 2007). And overall exports continued to grow until the onset of the current global downturn.

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 purportedly
threatened their survival suggest that human resource upgrading played a vital part in the story (Schrank 2008). The free zone owners who struggled relentlessly against the new labor code simultaneously struggled to devise a new training system. While they were legally obligated to deliver 1 percent of their gross payroll expenditures to INFOTEP in exchange for access to the agency's services, they rarely used the services in question—which they considered 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 of the INFOTEP-EPZ program were almost immediately apparent. Public-private cooperation took effect and the rate of 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 2008), the more dynamic Dominican apparel enterprises positioned themselves not only to survive but to expand after the dawn of NAFTA. Second, they facilitated the apparel industry’s vertical integration—backward into textile and fabric production, dying, and cutting; and forward into packaging and design—in the late 1990s and early 2000s. While modular manufacturing and vertical integration are at best palliatives in the relentlessly mobile apparel industry (Schrank 2004), they bought the free zones and their more ambitious tenants the time they would need to adjust to the post-NAFTA (and post-China) world. And, finally, they facilitated diversification out of the needle trades and into more sophisticated products and activities including consumer electronics, information technology (IT), and a variety of tradable services. For example, the DR hopes to position itself as a leading source of “nearshore” IT and IT-enabled services like call centers, medical tourism, and business process outsourcing (BPO), and INFOTEP is therefore offering computer literacy and programming classes at more than a dozen training centers (Hewitt 2005; Calderon 2008).

The labor ministry’s contributions to the upgrading of the free zones have until recently been ad hoc and indirect, but they have been no less important for their informality. Labor inspectors not only foreclosed the most repressive alternatives—if by no means all of the repression—in the EPZs but have simultaneously introduced owners and managers to INFOTEP's various offerings and disseminated information about best practices more generally. While scofflaw employers frequently assert that they are unable to comply with the law, professional inspectors respond—at least occasionally—by pointing to their compliant neighbors and asking, “What are they doing right?” They’re training their personnel. They’re using modular manufacturing. They’re taking advantage of INFOTEP. They’re pursuing vertical integration. And they’re diversifying out of the needle trades 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.

The links between inspection and upgrading have been more or less formalized, however, by two programs designed to help the free zones adjust to the end of the Multifiber Arrangement: the Continuous Improvement in the Central American Workplace (CIMCAW) initiative inaugurated by the United States Agency for International Development (USAID) in 2004; and the Fund for
the Preservation and Creation of Employment (Fondo de Preservación y Creación del Empleo) established by President Leonel Fernández in 2007. CIMCAW is designed to mitigate violations of labor standards in the free zones by training inspectors not only to identify their “root causes” but to offer their perpetrators technical assistance. “By doing this,” writes USAID consultant Samira Salem, “the project helps improve working conditions for workers and helps factories improve compliance with national legislation and the International Labor Organization’s Core Labor Standards, increase worker morale and productivity, and provide a tool to assist manufacturers to increase their competitive position” (Salem 2008, pp. 77). While Salem’s prognosis may well be premature, her Dominican interlocutors are optimistic. For instance, the director of INFOTEP has agreed to disseminate the CIMCAW methodology to the free zones and beyond (Salem 2008, p. 33).

While the CIMCAW approach is designed to foster “social dialogue,” and to thereby formalize the brokerage and advisory roles that are already pursued by many Dominican labor inspectors, the Fund for the Preservation and Creation of Employment conditions direct subsidies to free zone firms on the sizes of their respective payrolls, and thereby gives the inspectors who are responsible for the verification of their payrolls a new weapon in the fight against informality and noncompliance (Paniagua 2007). The point is less to imply that informality is the principal problem in the free zones, however, than to note that the Dominicans are pioneering a new form of performance standard. After all, the Asian developmental states conditioned their subsidies on export performance, and thereby empowered their trade ministries (Amsden 1989; Rodrik 1998). The Dominicans are conditioning their subsidies on employment performance, however, and are thereby empowering their labor ministry. The results are anything but clear, of course, but the model’s importance cannot be underestimated, for in their efforts to condition public support on private job creation and preservation, the Dominicans are bringing employment policy back into the heart of development policy—where it rightfully belongs (see, e.g., Tendler 2005).²

Training and technology transfer 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 (Alburquerque 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 unwarranted. After all, the foreign investors who take advantage of the DR’s low cost labor force frequently bring their own middle managers with them—and thereby inhibit the very technology transfer and learning that foreign firms are expected to provide.

Take, for example, the case of Domicem—an Italian-owned cement factory established 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 and technology transfer as well. The World Bank’s financing arm therefore approved the project to great fanfare in late 2003.

² The point is most certainly not to portray free zone jobs as uniformly “good” jobs let alone unionized jobs. An optimistic or charitable observer of the labor ministry would portray the growth of more than one hundred unions in the free zones since the 1990s as progress (see, e.g., FIAS 2008, p. 40); a less charitable observer would call the optimist’s interpretation into question by noting that very few free zone unions have been able to negotiate and bargain collective contracts (Zabalo and Martínez 2005, pp. 211-2); and an agnostic would note that workers in the free zones are by and large hostile to organized labor—a lamentable fact that nonetheless calls the extent of the labor ministry’s culpability for the disorganization of the free zone sector into question. (Survey results available from the author upon request).
By the summer of 2004, however, several labor inspectors had discovered approximately 250 undocumented Chinese immigrants working at the plant and the bloom had come off the rose. While Domicem’s Italian parent company asserted a paucity of qualified Dominican labor, and thereby justified their boldfaced violation of the labor code’s migration provisions, the Secretary of Labor and his director of enforcement backed up their inspectors and demanded action. The Italians ultimately agreed to train Dominicans to take over the jobs and gradually deported the immigrants (Diario Libre 2004; Hoy 2004a, 2004b). The Dominican workers organized a labor union (González 2007). And by 2007 the firm had assumed a prominent position among the top 50 Dominican exporters (Fernández 2008, p. 89)—thereby confirming the labor ministry’s belief in the capacities of the Dominican workforce and making good on the project’s promise of “technology transfer, job creation and foreign exchange generation” (IFC 2005).

Labor Market Regulation and Development: Quantitative Analysis
The capsule case studies are products of my interviews. The inspectors and informants to whom I spoke described their efforts to reconcile protection and production and I attempted to confirm their accounts by triangulating among the various respondents and the secondary literature. A quantitative exploration of the relationship between inspection and upgrading in a larger sample of enterprises would nonetheless constitute a more demanding test of my argument.

Fortunately, the data for a preliminary quantitative test are available. The World Bank surveyed 225 manufacturing enterprises in the DR in the summer of 2005 and asked whether they had (i) been inspected by the labor ministry and (ii) made use of INFOTEPE’s services in the previous year. Answers to latter question serve as a suitable proxy for upgrading in the current context. After all, INFOTEPE not only meets about half the demand for training in the DR as a whole but offers a good deal of in-service training designed to help existing firms adjust to open markets by upgrading their human resources in particular (World Bank 2005a, p. 93). Furthermore, INFOTEPE is a publicly supported agency, an obvious target of brokerage by the labor inspectors, and a central player in two of the three capsule case studies.

Labor inspectors are expected to increase demand for INFOTEPE’s services by giving employers: (i) an incentive to train their workers; (ii) knowledge of the agency’s training programs; and (iii) access to INFOTEPE—since inspection raises the likelihood that employers will have paid their training tax and thus be eligible to call upon the agency’s consultants in the first place. The first mechanism underscores the beneficial constraints that regulations sometimes impose on private actors (Streeck 2004). The second mechanism speaks to the possibility of “brokerage” (Gould and Fernandez 1989) across public and private divides. And the third mechanism constitutes a conditional benefit—that is, a benefit made available exclusively to firms that agree to fulfill their obligations to their stakeholders and society at large.3

Bivariate analysis
Is the utilization of INFOTEPE’s services associated with labor inspection? Figure 1 disaggregates firms by their respective training and inspection patterns and offers an unambiguous affirmative answer. Inspected firms are almost twice as likely to take advantage of INFOTEPE’s services (43 percent v. 24 percent for uninspected firms; p < .005).

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3 I would argue that the subsidies distributed through the Fund for the Preservation and Creation of Employment and loans offered by BAGRICOLO are also conditional benefits. In all three cases the benefit is available only to firms that are in compliance with at least some of their legal obligations to labor.
Fig. 1: Labor inspection and training in the Dominican Republic

<table>
<thead>
<tr>
<th>No inspection</th>
<th>Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>Training</td>
</tr>
</tbody>
</table>

Notes: $X^2 (1) = 8.63; p < .004$; data from the World Bank (2005b).

**Multivariate analysis**

One cannot discount the possibility of a spurious correlation, however, and I therefore put the relationship between inspection and training to a more demanding multivariate test by treating the probability that a firm makes use of INFOTEP’s services as a function of inspection and a series of control variables in a logistic regression framework. The explanandum (i.e., training) is an indicator variable that assumes a value of 1 for firms that have used INFOTEP’s services in the year prior to the survey. The explanans (i.e., inspection) is an indicator that assumes a value of 1 for firms that have been visited by inspectors from the labor ministry in the year prior to the survey. And I add the following theoretically motivated controls:

- **Enterprise size.** Large firms are expected to train their workers at a higher frequency than their smaller counterparts (LaBelle 2000, p. 29) and I therefore include the logarithm of the size of the permanent workforce.\(^4\)

- **Exporter.** Exporters are expected to respond to foreign pressure by upgrading their human resources (Ducci 1997) and I therefore include an indicator variable that assumes the value of 1 for firms that directly or indirectly export part of their output.

\(^4\) 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.
• Trade association member. Trade associations frequently broker collective solutions to the coordination dilemmas that inhere in training (i.e., the risk that employers will “poach” skilled labor from firms that train their workers rather than pay for training themselves; see Mkandawire 2007), and I therefore include an indicator variable that assumes the value of 1 for members of trade associations.

• Unionization. Unions that sponsor training offer another solution to the free rider problem (Mkandawire 2007) and I therefore include an indicator variable that assumes the value of 1 for unionized firms.

• Sector. The demand for training is likely to vary by sector, and I therefore include dummy variables for five consolidated sectors: food products, sewn products, chemicals, metals and machinery, and nonmetallic products. Other firms fall into the omitted category.

• Santo Domingo. Finally, I include a dummy variable for firms located in the capital of Santo Domingo on the grounds that their training needs may be exceptional.

Do labor inspectors facilitate access to INFOTEP on a systematic—rather than simply sporadic—basis? While the World Bank data are cross-sectional rather than longitudinal in nature, and are therefore better suited to the identification of “provocative associations” (Berk 2003, p. 210) than to causal analysis per se, they are consistent with the synergy hypothesis. After all, Table 2 includes the regression results and suggests that inspection and size are the only statistically significant predictors of training patterns at conventional levels. In fact, the results are broadly consistent with the bivariate findings and suggest that the probability of training is a positive function of inspection net of other factors.

Table 2: INFOTEP training as a function of inspection and controls

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds ratio</th>
<th>P value</th>
<th>Lower bound</th>
<th>Upper bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (log FTEs)</td>
<td>4.72</td>
<td>.001</td>
<td>1.91</td>
<td>11.65</td>
</tr>
<tr>
<td>Exporter (1 = yes)</td>
<td>1.15</td>
<td>.768</td>
<td>0.45</td>
<td>2.99</td>
</tr>
<tr>
<td>Trade association (1 = yes)</td>
<td>1.87</td>
<td>.232</td>
<td>0.67</td>
<td>5.22</td>
</tr>
<tr>
<td>Union (1 = yes)</td>
<td>0.36</td>
<td>.171</td>
<td>0.09</td>
<td>1.55</td>
</tr>
<tr>
<td>Inspection (1 = yes)</td>
<td>2.20</td>
<td>.038</td>
<td>1.05</td>
<td>4.62</td>
</tr>
<tr>
<td>Food products (1 = yes)</td>
<td>1.71</td>
<td>.428</td>
<td>0.45</td>
<td>6.42</td>
</tr>
<tr>
<td>Sewn products (1 = yes)</td>
<td>2.05</td>
<td>.295</td>
<td>0.54</td>
<td>7.84</td>
</tr>
<tr>
<td>Chemicals (1 = yes)</td>
<td>1.82</td>
<td>.438</td>
<td>0.40</td>
<td>8.19</td>
</tr>
<tr>
<td>Metals and machinery (1 = yes)</td>
<td>3.12</td>
<td>.088</td>
<td>0.84</td>
<td>11.83</td>
</tr>
<tr>
<td>Nonmetallic products (1 = yes)</td>
<td>0.94</td>
<td>.942</td>
<td>0.20</td>
<td>4.52</td>
</tr>
<tr>
<td>Santo Domingo (1 = yes)</td>
<td>0.64</td>
<td>.234</td>
<td>0.31</td>
<td>1.33</td>
</tr>
</tbody>
</table>

N = 225; Wald $X^2$(11) = 53.81 (p <.000); Log pseudo-likelihood = -101.79; World Bank (2005b)

Figure 2 plots the predicted probability of training by size for inspected and uninspected firms—with the other variables held to their means—and thereby illustrates the substantive size of the effect.
Inspectors would appear have their biggest effect on demand for INFOTEP’s services among mid-sized manufacturers. Small firms are unlikely to train in any circumstance; and large firms train with or without inspection; but mid-sized manufacturers who are under the watchful eye of the labor ministry are decidedly more likely to take advantage of INFOTEP’s offerings than their unobserved counterparts. A hypothetical manufacturer with 50 workers has about a 33 percent probability of training in the absence of inspection and a 52 percent probability of training in the presence of inspection. The results are particularly striking in light of James Tybout’s assertion that the size distribution of developing country manufacturing firms “exhibits a ‘missing middle’ because it never pays to be just large enough to attract enforcement” (Tybout 2000, pp. 16-17). While the Dominican data are right skewed, they are not bimodal, and mid-sized manufacturers who are subject to enforcement appear to compensate—at least in part—by turning to INFOTEP for support.

Is the effect due to the nonrandom nature of the inspection process? While the inspectors might be selectively investigating firms that are more likely to train in any event, thereby inducing a pattern of selection bias in the data, the possibility seems remote in light of what we know about target selection. After all, the labor ministry carries out two types of inspections: “regular” or ex officio inspections of particularly problematic firms and sectors (e.g., sugar plantations, tomato farms, urban establishments that are prone to informality, etc.); and “special” inspections in response to complaints from workers, managers, and employers (Schrank 2009). The former are responsible for approximately three-fourths of all inspections; the latter are responsible for the remainder; and neither would seem to be targeted at firms that are predisposed toward training and human resource development.

The limited nature of the sample presents a larger concern. After all, the World Bank data are restricted to manufacturing firms and therefore tell us nothing about the agricultural and service
sectors that employ approximately 75 percent of the Dominican labor force. The costs of the oversight should not be exaggerated, however, for the statistical results are consistent with the case study materials from other sectors (e.g., agriculture) and manufacturing has traditionally constituted the backbone of late development in any event (see, e.g., Amsden 1989).

A final concern involves the mechanism underlying the correlation. Do inspectors spur training by imposing beneficial constraints on their administrés, disseminating information to firms and families, or facilitating access to INFOTEP's services? While the survey data fail to address the question, the case studies illuminate a combination of redundant and reinforcing mechanisms in an overarching competitive ‘ecology’ that links regulation to productive restructuring.

Discussion: Social Protection and Development in Comparative Perspective
A substantial and growing body of development scholarship bemoans the growing importance of social ministries, in general, and labor ministries, in particular. While mainstream economists worry that labor ministries are inveterately hostile to comparative advantage (Freeman 2006, p. 21), and therefore anticipate misallocation, trade diversion, and job loss, their critics portray social agencies as rental havens (Tendler 2005, p. 122), and therefore anticipate waste, fraud, and inefficiency. By way of contrast, however, I found that labor inspectors in the DR reconciled protection with production by: (i) imposing beneficial constraints on firms and families; (ii) disseminating (or facilitating the dissemination of) productive knowledge to the beneficiaries in question; and (iii) imposing employment-related performance standards on subsidy recipients. Lest there be any doubt about their contributions to worker protection, the inspectors have not only removed tens of thousands of children from the labor force but have formalized thousands of firms (Hoy 2009), registered dozens of unions in the formerly union-free EPZs (SET 2007), and gained ground vis-à-vis the fiscal ministries by assuming responsibility for the verification of social security payments over the objections of employers (Plasencia 2008). A ‘weak’ critique of the existing literature would therefore recognize that the rationalization of the labor ministry and the diversification of the economy occurred simultaneously, and that the former is unlikely to have compromised the latter. A stronger critique would go further, however, by underscoring the positive relationship between regulation and upgrading and their potential to push and pull the economy to a more fruitful equilibrium.

Proponents of the strong view not only maintain that protection and production are potentially complementary—rather than competing—goals but that regulatory officials are particularly well-positioned to turn the potential into reality. While public regulators are able to block the low road by imposing beneficial constraints on private actors, they are also able to pave a high road by disseminating information and conditional benefits like INFOTEP’s training and consulting services, BAGRICOLA’s loans, and the Fund for the Preservation and Creation of Employment’s subsidies. The result is not only a surprising “degree of coherence” between social policy and economic policy in the DR but an opportunity to “generate such coherence by ex ante design” (Mkandawire 2007, p. 26) down the road.

One might object to my effort to draw general lessons from the admittedly singular Dominican case. After all, the Dominicans transformed their labor ministry in response to massive foreign pressure and with an abundance of foreign support. But the combination of foreign pressure and support is more rule than exception in the current era of globalization, and Vice President Alburquerque and his colleagues are by no means the only policy entrepreneurs to exploit the opportunities thereby created. Brazilian labor administrators have addressed domestic as well

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5 For instance, the ILO helped the Dominicans rewrite their labor code and rethink enforcement. The Interamerican Development Bank advised and financed much of the restructuring of the ministry. And aid agencies from the United States and Spain have been involved as well.
as foreign critics with similar measures (Pires 2008). And one finds comparable outcomes on a smaller scale elsewhere in Latin America (see, e.g., Piore and Schrank 2008). For instance, Susana Aparicio and her colleagues note that lemon growers in Argentina responded to a combination of pressures engendered by quality and safety standards abroad and unions and regulatory officials at home by collaborating with agricultural extension agencies to adopt new technologies and management practices that not only “served to highlight the transaction costs of cheap labor policies” but simultaneously encouraged producers to recruit and reward “more experienced and responsible workers” (Aparicio et al. 2008, p. 168).

The potential synergies between foreign pressures and developmental social policies are not the exclusive province of labor ministries, however, but are being developed by resourceful actors in social ministries throughout Latin America. For instance, Ken Shadlen holds that the Brazilian Ministry of Health (Ministério de Saúde) responded to the pressures introduced by the World Trade Organization’s intellectual property (IP) agreement by developing a “health-oriented” IP regime that gives political and economic pride of place to local manufacturers. While Brazil’s efforts to ensure widespread access to essential medicines are by now well known, their roots in the ministry’s effort “to build a coalition in support of IP reform” (Shadlen 2009, p. 42) are less so, but Shadlen notes that the entire arrangement is underpinned by a “virtuous circle” (Shadlen 2009, p. 50) that links public investment in the local pharmaceutical industry to the industry’s continued support for government health policy.

Shadlen is not a voluntarist, and his point is not that all roads are open to all countries. On the contrary, he notes that the Mexicans couldn’t replicate Brazil’s success if they wanted to, for a combination of radical trade liberalization and the early introduction of pharmaceutical patents has conspired to deprive the Mexican Secretary of Health (Secretaría de Salud) of local allies. “Industrial transformation and denationalization have political as well as policy consequences,” he concludes, and in Mexico’s case they have been anything but salutary (Shadlen 2009, p. 55).

By the same token, however, Mexican health officials have been remarkably innovative in other areas. For instance, they have responded to import restrictions abroad and lead poisoning at home by working with the National Fund for the Promotion of Artisans (Fondo Nacional para el Fomento de las Artesanías) to develop a glaze that’s cheap enough to be used by the country’s potters and safe enough to meet US health standards (Samford 2010). The consequences include export growth, cost savings, and markedly improved life chances among thousands of Mexican artisans.

My point in rehearsing these examples is not to exaggerate the prevalence of developmentalist social policies but to highlight their existence and viability. While much of the existing literature bemoans the relegation of employment and poverty policy to the social ministries, I view it as an opportunity—albeit one that demands careful exploitation. Social agencies may well have “less power and prestige than agencies dealing with ‘economic development’” (Tendler 2004, p. 122), as Judith Tendler has argued. And one might therefore push employment creation and poverty reduction back to the economic ministries, as some might prefer. But the economic ministries evince less interest in employment and poverty reduction than the social ministries evince in the economy, and it may therefore make more sense to try to exploit synergies between protection and production on the social side—where they should in theory be no less at home.
References
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.
Cedeño de Fernández, Margarita. 2009. “Palabras de la Primera Dama de la República, Dra. Margarita Cedeño de Fernández, durante el Lanzamiento de la Hoja de Ruta para hacer de República Dominicana un país libre de trabajo infantil.”


Jatobá, Vera. 2002. Labour Inspection within a Modernized Labour Administration. Lima: ILO.


 Méndez, Mario. 1993. *Reformas y lucha de intereses.* Santo Domingo:


