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Labor Standards and Trade: A Review of Recent Empirical Evidence

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Authors: Samira Salem and Faina Rozental¹

Abstract

Over the last two decades, labor standards have become a major issue in international trade. Three developments mark the rise of this issue: first, an international consensus was reached on a set of core labor standards established by the International Labour Organization (ILO); second, bilateral and regional trade agreements have increasingly included more labor standards provisions; and third, consumers have increasingly demanded products produced under better labor conditions. This study evaluates research on the effects of labor standards commitments on labor conditions; the influence of trade openness on labor conditions; and the impact of compliance with labor standards on trade performance.

The research suggests that the ratification of ILO conventions does not result in improved labor conditions. On the other hand, research appears to show that agreements, when reinforced by factors such as enforcement mechanisms, positive incentives, and market forces, may improve compliance with labor standards, bringing about better labor conditions. Another line of research suggests that trade openness may improve rather than degrade labor conditions. Finally, the research finds no clear evidence that

¹ The views expressed in this paper are those of the authors alone. They do not necessarily reflect the views of the U.S. International Trade Commission or any of its individual Commissioners. The authors would like to thank Jennifer Baumert Powell for her insightful comments.

countries can improve their trade performance by maintaining poor labor conditions, contrary to the "race to the bottom" point of view.

Labour union lobbies and their political friends have decided that the ideal defence against competition from the poor countries is to raise their costs of production by forcing their standards up, claiming that competition with countries with lower standards is "unfair." "Free but fair trade" becomes an exercise in insidious protectionism that few recognise as such.

—Jagdish Bhagwati, "Obama and Trade: An Alarm Sounds," Financial Times, January 9, 2009.

As long as poor labor standards exist in one country, workers everywhere will be hurt. Governments that neglect or oppress their laborers make the choice to strip their own citizens of their rights as human beings. Not only this, but they create unfair pressure in the global economy. If one country offers oppressively cheap labor, other countries become compelled to do the same to merely remain competitive. This global "race to the bottom" creates poor conditions and loss of freedom in the global South, and causes workers in the global North to lose their jobs to cheap outsourced labor.

——International Labor Rights Foundation, "Changing Global Trade Rules" (accessed February 15, 2012).

http://www.laborrights.org/creating-a-sweatfree-world/changing-global-trade-rules.

Introduction

For a long time critics and advocates have debated the merits of linking labor standards and trade. Critics of moves to include labor standards provisions in trade agreements argue that protectionist motives underlie what masquerades as a welfare-improving agenda. They argue that developing countries that raise standards for their workers risk losing their comparative advantage and suffering a decline in export performance, which may lead to dwindling per capita income. On the other hand, advocates of trade-linked labor standards aim to halt a "race to the bottom" in which national labor conditions are degraded in an attempt to lower production costs in the face of expanding international trade and competition. These advocates maintain that the labor standards provided in trade agreements level the playing field because they require countries to meet an acceptable level of labor conditions and eliminate a source of "unfair" economic advantage.² News exposés of poor labor conditions in the supply chains of multinational corporations bolster the advocates' case and fuel popular concern. However, empirical research adds another twist to the protectionism versus "race to the bottom" debate by suggesting that low labor standards actually erode competitiveness by reducing incentives to invest in human capital.³ Furthermore, some advocates argue that adherence to labor standards can actually improve competitiveness, as higher labor standards motivate firms to invest in such things as productivity-enhancing training to justify the expense of adopting the standards.⁴ This paper examines recent empirical evidence aimed at clarifying the links between labor standards, trade openness, and trade performance.

Although labor standards are not part of the World Trade Organization (WTO) agenda due to opposition from many developing countries, the inclusion of such standards in bilateral and regional trade agreements is becoming more common.⁵ The United States and the European Union (EU) have used bilateral and regional free trade agreements (FTAs) in addition to unilateral trade preference programs to link labor standards to market access, imposing trade sanctions on countries that do not enforce international standards. Indeed, since 1993, all FTAs with the United States have included labor standards provisions, with varying degrees of enforceability.⁶

⁶ Bolle, "Overview of Labor Enforcement Issues," 2008.

 $^{^2\,}$ Most developing countries reject the linking of labor standards to trade, while industrialized countries tend to support this linkage.

³ Luinstra, "Labor Standards and Trade," 2004.

⁴ Ibid.; Brown, Deardorff, and Stern, "International Labor Standards and Trade," 1996; Kochan and Nordland, "Reconciling Labor Standards and Economic Goals," 1989.

⁵ Brown and Stern, "What are the Issues in Using Trade Agreements?" 2008. The heated debate about the linking of trade and labor standards continues. Indeed, the Washington Trade Daily (2011) reports that as recently as the 2011 ILO Ministerial Conference, industrialized countries pushed for the establishment of a "social protection floor," which they argued is "essential for addressing the rights of the workers in a post-crisis economic world" (WTD, "Labor and Trade—Again," June 2011). Luinstra (2004) points out that most stakeholders from industrialized and developing countries agree on the importance of having minimum standards (Luinstra, "Labor Standards and Trade," 2004). However, when it comes to labor conditions, many developing countries reject the proposal to link trade and labor standards. One trade minister commented that, "Since the Seattle trade ministerial conference in 1999, we have consistently maintained that there cannot be any linkage between trade and labor standards. We fear that these standards would be used as a protectionist tool." WTD, "Labor and Trade—Again," June 2011.

Problems with the measurement of labor standards compliance and a lack of comparable cross-country data have historically hampered efforts to analyze the trade-labor standards relationship. However, more extensive and better data have accompanied the growing presence of labor standards in trade agreements, allowing for more sophisticated analysis. There is also a growing acknowledgement of endogeneity problems (discussed below), and empirical approaches are being developed to address the resulting biases. Disentangling the links between labor standards, trade openness, and trade flows remains a challenge.

In this paper, we evaluate research that looks at the effects of labor standards commitments on labor conditions, the effects of trade openness on labor conditions, and the impact of labor conditions on trade performance.⁷ The literature examining the relationship between labor commitments and labor conditions is limited, but available evidence indicates that the ratification of labor clauses does not influence labor conditions. However, the research suggests that when commitments are accompanied by enforcement mechanisms, positive incentives, and/ or certain market factors, such as increasing consumer and corporate buyer demands for products produced under better labor conditions, they may have a positive effect on labor conditions. Another line of empirical research on labor standards responds to critics that suggest that openness to trade leads to a degradation in labor conditions. This research finds that trade openness is actually associated with improved labor conditions. And finally, studies examining labor conditions and trade performance have not found clear evidence that countries can improve their trade performance through poor labor conditions.

The first section of this paper defines labor standards and discusses its emergence as a trade issue in the 20th century. The second section considers labor standards enforcement mechanisms and the challenges surrounding their application. The second section also reviews recent literature that examines the impact of labor standards provisions in trade agreements and International Labour Organization (ILO) convention ratifications on labor conditions.⁸

⁷ Given that we are interested in evaluating the relationship between trade and labor standards, we do not evaluate literature that focuses exclusively on trade and wages. This is because there is a separate and well-developed literature on trade and wages. For a discussion of the trade and wages literature, see the report by the OECD, ILO, World Bank, and WTO, Seizing the Benefits of Trade, 2010. In addition, there are important mechanisms such as international migration, capital flows, and economic growth that influence labor conditions that are not explicitly considered here. For an examination of these issues, see Flanagan, Globalization and Labor Conditions, 2006.

⁸ For a survey of earlier literature examining labor standards and trade, see Brown, "International Trade and Core Labour Standards," 2000.

The third section of the paper presents empirical evidence on the relationship between a country's level of openness to trade and its labor conditions, while the fourth considers research on the impact of labor conditions on export performance. A summary follows with suggestions for further research.

International Trade and Labor Standards

Defining National and International Labor Standards

According to the Organisation for Economic Co-operation and Development (OECD) (1996) labor standards are "norms and rules that govern working conditions and industrial relations."⁹ They cover a wide range of issues, from those considered fundamental human rights—such as freedom from forced labor, freedom of association, and the elimination of exploitative child labor—to others issues that, according to Portes (1994), fall into categories such as civic rights (e.g., collective bargaining) and security rights (i.e., rights that capture the characteristics of a labor contract, such as protection against arbitrary dismissal).¹⁰

The literature divides labor standards according to whether they cover (1) working conditions (e.g., minimum wage and hours, occupational health and safety, and social security); or (2) labor rights (e.g., nondiscrimination, freedom of association, and elimination of child labor).¹¹ Throughout this paper the term "labor standards" is defined as a set of norms and rules, following the OECD definition, while the term "labor standards compliance" is used as an indicator of "labor conditions." In turn, "labor conditions" refers to on-the-ground conditions (i.e., working conditions and/ or labor rights).

Formal labor standards are established at the national level through national labor laws and regulations and at the international level through global institutions such

⁹ OECD, Trade, Employment, and Labour Standards: A Study of Core Workers' Rights and International Trade, 1996, 25.

¹⁰ Portes, "When More Can Be Less," 1994.

¹¹ The literature also refers to working conditions as "cash standards" because they directly impact labor costs and labor rights as "noncash standards."

as the ILO and regional institutions.¹² National governments are responsible for statutory regulation and enforcement of national labor standards, which are typically mandatory and which include sanctions for noncompliance.¹³ Many governments, especially those of low-income countries, have neither established nor enforced labor standards effectively.¹⁴ By contrast, high-income countries tend to have an enabling environment (i.e., better institutions and a stronger rule of law) that makes it easier to establish and enforce labor standards. It is therefore not surprising that higher national income is correlated with compliance with core labor standards.¹⁵ Indeed, Flanagan (2006) finds a positive relationship between a country's level of economic development and its labor conditions.¹⁶

ILO labor standards can take the form of either conventions or recommendations. The former represent international treaties that are legally binding on states that ratify them, while the latter are nonbinding guidelines. The ILO, created in 1919 as part of the Treaty of Versailles that followed World War I, became the first specialized UN agency in 1946. According to its mandate, the ILO "seeks the promotion of social justice and internationally recognized human and labour rights."¹⁷ Among its four strategic objectives is to "promote and realize standards and fundamental principles and rights at work." The ILO comprises representatives of governments, employers, and workers who work together to achieve the organization's strategic objectives. ILO conventions and recommendations articulate international labor standards, which include freedom of association, the right to organize, collective bargaining, the abolition of forced labor, equality of opportunity and treatment, and other standards that address work-related conditions.¹⁸

¹² In addition, informal labor standards and a myriad of private voluntary standards exist. The former are established through norms embedded in institutions and communities (DFID, Labour Standards and Poverty Reduction, 2004). The latter have emerged as a response to market pressures. These are typically defined and enforced at the firm level by private sector actors. Private voluntary standards will be discussed further in the next subsection.

¹³ Luinstra, "Labor Standards and Trade," 2004.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Flanagan, Globalization and Labor Conditions, 2006.

¹⁷ ILO, "ILO Mandate," 2000.

¹⁸ Ibid. In addition, the ILO provides technical assistance in a variety of labor-related fields, including occupational health and safety, workforce development, labor justice, and social safety nets. It also promotes the development of independent employers' and workers' organizations and provides training and advisory services to those organizations.

Member states that ratify an ILO convention must incorporate its principles into national labor law, and they are required to submit reports to the ILO on their compliance with the convention. However, compliance with reporting requirements is low. The ILO is empowered to investigate noncompliance complaints through Article 26, and it may, following an investigation and report, recommend that a country change its laws and practices. On the other hand, the ILO has no meaningful enforcement tools, such as sanctions for noncomplying countries. Instead, it has "soft" enforcement mechanisms, which include a supervisory system that reinforces compliance through information distribution and transparency.¹⁹

By 1997, the ILO had adopted 181 conventions relating to a wide range of labor standards.²⁰ The international community recognized that this maze of standards coupled with low ratification rates was a problem.²¹ In response, the ILO created a hierarchy of ILO conventions through its *Declaration on Fundamental Principles and Rights at Work* (ILO Declaration) (1998). According to the ILO, the core labor standards established by the ILO Declaration represent a global consensus on the minimum standards to apply universally to the treatment of labor.²²

The ILO Declaration establishes basic human rights in the workplace, focusing on worker rights rather than direct economic outcomes.²³ It obligates all member states, regardless of their level of development, to promote four fundamental labor principles even if they have not ratified the corresponding conventions. These principles, referred to as the ILO's core labor standards, are defined with reference to eight ILO conventions.

These are:

- 1. Freedom of association and effective recognition of the right to collective bargaining (Conventions 87 and 98);
- 2. Elimination of all forms of forced or compulsory labor (Conventions 29 and 105);

¹⁹ Flanagan, "Labor Standards and International Advantage," 2003.

 $^{^{\}rm 20}\,$ ILO, "Official Titles of the Conventions," 2011. As of 2011, the number of ILO conventions had increased to 189.

²¹ DFID, Labour Standards and Poverty Reduction, 2004, 9.

²² ILO, A Fair Globalization, 2004, 92.

²³ OECD, International Trade and Core Labor Standards, 2000 and Flanagan, "Labor Standards and International Competitive Advantage," 2003.

- 3. Effective abolition of child labor (Conventions 138 and 182); and
- 4. Elimination of discrimination in respect of employment and occupation (Conventions 100 and 111).

The core labor standards enjoy a special status because the ILO Declaration refers to them as "enabling rights." This means that they are meant to enable people to claim (on the basis of equality of opportunity) fair compensation and to fully achieve their potential as human beings.²⁴ A variety of international institutions consistently refer to core labor standards in their work on labor issues.²⁵ The standards are incorporated into the United Nations' Global Compact, the OECD Guidelines for Multinational Enterprises, and the International Covenant on Economic, Social, and Cultural Rights. Some of these standards are also included in other international instruments, such as the Universal Declaration on Human Rights.²⁶

The nature of the obligation that member states have vis-à-vis the ILO's core labor standards is ambiguous. This ambiguity is due to the fact that all member states automatically ratify the ILO Declaration by virtue of their accession to the ILO, but not all choose to ratify the ILO core conventions. Cabin (2009) maintains that the ILO Declaration promotes open-ended principles that encourage the proliferation of divergent international labor standards.²⁷ In seeking to clarify the meaning of labor standards provisions in trade agreements, it is important to recognize how inconsistently countries apply them.²⁸

In addition, there is some question about what ratification means. The OECD maintains that there is a big difference between the act of ratifying conventions on

²⁴ Luinstra (2004) clarifies that core labor standards "are distinct from 'cash standards'... which mandate particular outcomes and may directly affect labor costs" (Luinstra, "Labor Standards and Trade," 2004, 3).

²⁵ Doumbia-Henry and Gravel, "Free Trade Agreements and Labour Rights," 2006.

²⁶ DFID, Labour Standards and Poverty Reduction, 2004.

²⁷ Cabin, "Labor Rights in the Peru Agreement," 2009.

²⁸ Ibid.

paper and actually enforcing the conventions on the ground.29 Does the ratification of ILO conventions imply that a country aims to improve its labor standards? Or do countries ratify conventions because they have already achieved the standard in question? As will be discussed later, Flanagan (2003) finds that the adoption of international labor standards is typically a symbolic act that does not impact labor rights or working conditions.³⁰ Discussions of this issue tend to evoke methodological questions, as will be discussed in more detail below.

Linking International Trade and Labor Standards

Labor rights protection manifested itself as a trade issue in a brief article of the Havana Charter in 1948. Arguing that unfair labor conditions in the export sector could distort international trade flows, the article pressed governments to work closely with the ILO and to address labor rights in subsequent conventions and trade agreements.³¹ The General Agreement on Tariffs and Trade (GATT) and the WTO succeeded the failed Havana Charter; however, the protection of labor rights was excluded from both.

Following the establishment of the WTO, a number of developed countries again raised the issue of "unfair economic advantage" stemming from weak enforcement systems and low labor standards. They also voiced concern about the potential for a race to the bottom, as countries might feel pressure to degrade their labor standards to maintain their competitiveness.

The developed countries pressed the WTO to incorporate labor standards into its mandate, but developing countries opposed these efforts. The WTO 1996 Singapore Ministerial Conference represents a consensus position in this tug-of-war between developed and developing countries on labor standards (box 1). At the conference, WTO members repeated their rejection of labor standards as a WTO issue, but affirmed their support for the ILO's role as the body responsible for labor standards,

²⁹ OECD, International Trade and Core Labor Standards, 2000, 30.

³⁰ Flanagan, "Labor Standards and International Competitive Advantage," 2003

³¹ Interim Commission for the International Trade Organization, "Havana Charter," 1948.

and their commitment to respect internationally recognized fundamental labor standards as long as these standards are not used for protectionism.³²

Bilateral and regional free trade agreements (FTAs) have made more progress than

multilateral accords in linking labor standards provisions to trade. Since 1993, the United States has negotiated 13 FTAs that include varying levels of labor commitments and enforceability.33 Increasingly, FTAs include labor provisions in the main body of the agreement rather than in a side agreement. For example, although the North American Free Trade Agreement (NAFTA) included a side agreement on labor (the North American Agreement on Labor Cooperation), U.S. FTAs signed with Jordan; Chile; Singapore; Australia; Morocco; Bahrain; Oman; the Dominican the Republic and Central American countries of Guatemala, Salvador, Honduras, El and

Box 1. 1996 WTO Singapore Declaration

"We renew our commitment to the observance of internationally recognized core labour standards. The International Labour Organization (ILO) is the competent body to set and deal with these standards, and we affirm our support for its work in promoting them. We believe that economic growth and development fostered by increased trade and further trade liberalization contribute to the promotion of these standards. We reject the use of labour standards for protectionist purposes, and agree that the comparative advantage of countries, particularly low-wage developing countries, must in no way be put into question. In this regard, we note that the WTO and ILO Secretariats will continue their existing collaboration."

http://www.wto.org/english/thewto_e/whatis_e/tif_e/bey5_e.htm

³² WTO, "Labour Standards: Consensus, Coherence, and Controversy," online report at http://www.wto.org/english/thewto_e/whatis_e/tif_e/bey5_e.htm.

³³ Bolle, "Overview of Labor Enforcement Issues," 2008. In addition to FTAs, the United States has established unilateral trade preference programs such as the Generalized System of Preferences (GSP), the Caribbean Basin Initiative (CBI), the African Growth and Opportunity Act (AGOA), and the Andean Trade Preferences Act (ATPA) with developing countries, which link eligibility to respect for labor rights (Polaski, "Protecting Labor Rights through Trade Agreements," 2003). With respect to GSP, the office of the U.S. Trade Representative (USTR) adopted regulations and procedural guidelines for filing petitions to challenge GSP status based on noncompliance with labor commitments (Compa and Vogt, "Labor Rights in the Generalized System of Preferences," 2001). Further, the U.S. recently released the 2012 model Bilateral Investment Treaty (BIT), which includes expanded labor obligations such as an obligation not to "waive or derogate" from domestic laws; an obligation to "effectively enforce" domestic laws; a provision whereby parties reaffirm their commitments under the ILO Declaration; and stronger consultation procedures than those found in the 2004 BIT. USTR, "Model Bilateral Investment Treaty," 2012.

Nicaragua (CAFTA-DR); Peru; Colombia; Panama; and Korea all include labor provisions in the bodies of the agreements.

Increasing consumer, investor, and multinational company demands for products produced under decent labor conditions are also shaping the rules of international trade. Starting in the 1990s, a consumer backlash against sweatshop labor grew alongside trade liberalization, adding another dimension to the trade-labor standards linkage. The anti-sweatshop campaigns were damaging to the reputations of a number of multinational companies. As a result, the firms most averse to risking their reputations among this group developed voluntary workplace codes of conduct and made compliance a factor in their sourcing decisions.³⁴ In addition, socially responsible investment (SRI) strategies that consider financial, environmental, and social performance—including labor standards compliance are another channel through which market forces are influencing the international trade agenda.³⁵ Together, these developments have contributed to the emergence of labor standards as a major trade issue, prompting academics to examine the relationship between labor commitments, market openness, and labor conditions.

Labor Standards Commitments and Labor Conditions

Do the labor standards commitments of various countries—as represented by labor provisions in trade agreements or the ratification of ILO conventions or both—have any impact on labor conditions? Despite the growing inclusion of labor provisions in trade agreements, there is little research that examines how these commitments affect labor conditions. Current research suggests that ratification is endogenous—that is, countries that already have high standards tend to ratify conventions because the cost is low. Additionally, the research has found no evidence that ratification improves labor conditions. A second strand of the literature has found, however, that certain factors may influence how trade agreements affect adherence to labor standards. Overall, given the paucity of research so far, more work is needed to confirm these results.

We begin this section by surveying the labor commitments and enforcement mechanisms included in recent trade agreements. We next present empirical findings about the relationship between ILO convention ratification and labor conditions,

³⁴ Salem, "CIMCAW, Final Report," 2008.

³⁵ ILO, A Fair Globalization, 2004, 95.

and then we discuss research examining factors (such as enforcement mechanisms) that influence the impact of trade agreements on labor standards compliance at the regional, national, and factory levels.

Labor Commitments and Enforcement Mechanisms

Labor provisions in U.S. FTAs generally cover the majority of the ILO core labor standards: freedom of association, the right to form unions and bargain collectively, limitations on child labor, and the elimination of forced labor. ^{36, 37} In addition, some of these agreements include cash standards on minimum wages, hours, and occupational health and safety. All U.S. FTAs require parties to enforce their national laws; however, with the exception of the last four FTAs (with Peru, Colombia, Panama, and Korea), they do not require that parties' national laws conform to ILO core labor standards.³⁸ ILO core labor standards are mentioned in many agreements, but they generally represent aspirations rather than enforceable commitments.³⁹By contrast, the EU GSP/GSP+⁴⁰ offer additional market access to countries enforcing the ILO core labor standards.⁴¹

³⁸ Elliott and Freeman, *Can Labor Standards Improve under Globalization?* 2003; Bolle, "Overview of Labor Enforcement Issues," 2008.

⁴⁰ First introduced in 1971, the Generalised Scheme of Tariff Preferences (GSP) is an autonomous trade agreement through which the EU provides preferential market access to approximately 176 developing countries and territories. EU GSP covers around 6,350 products, provides duty-free access to non-import-sensitive products, and a 3.5 percent reduction in most favored nation (MFN) tariff levels for import-sensitive products. The Special Incentive Arrangement for Sustainable Development and Good Governance (EU GSP+), introduced in 2006, incentivizes especially vulnerable developing countries to ratify and implement 27 international conventions in the fields of human rights, core labor standards, sustainable development, and good governance. The incentives include an expanded number of covered products (6,421) and the elimination of duties on all covered products. UNCTAD provides an overview of the EU GSP preference scheme at *http://unctad.org/en/docs/itcdtsbmisc25rev3_en.pdf*.

⁴¹ Doumbia-Henry and Gravel, "Free Trade Agreements and Labour Rights," 2006; Bakhshi and Kerr, "Labour Standards as a Justification for Trade Barriers," 2010.

³⁶ Polaski, *Protecting Labor Rights through Trade Agreements*, 2003. Note that nondiscrimination rights are not part of the U.S. labor-trade provisions. In addition, the North American Agreement on Labor Cooperation (NAALC) is unique in that it goes beyond the ILO core labor standards by including protection for migrant workers' rights and workers' compensation for injury or illness, among others (see *http://www.dol.gov/ilab/media/reports/nao/naalcgd.htm#Obligations*).

³⁷ U.S. unilateral trade preference programs require that the recipient countries comply with "U.S. internationally recognized worker rights," as defined by the U.S. Trade Act of 1974. The standards are similar to the ILO core labor standards; however, they exclude the standard on the elimination of all forms of discrimination. In its place, the U.S. substitutes labor standards on minimum wages, maximum hours, and occupational health and safety. Bolle, "Overview of Labor Enforcement Issues," 2008.

³⁹ Polaski, "Protecting Labor Rights through Trade Agreements," 2003.

The U.S. FTAs recently concluded with Peru, Colombia, Panama, and Korea incorporate a bipartisan agreement on labor enshrined in the 2007 Bipartisan Agreement on Trade Policy.⁴² In contrast to earlier FTAs, the policy establishes a fully enforceable commitment requiring FTA countries to adopt, maintain, and enforce the ILO core labor standards in their laws and practices; refrain from lowering their standards; apply the same enforcement provisions for labor and commercial disputes; and refrain from defending their inability to enforce core labor standards on the basis of limited resources.⁴³

Polaski (2003) suggests that the legal framework for enforcement may influence the degree of compliance with labor standards on the ground.⁴⁴ She outlines a continuum of enforceability, with fully enforceable labor obligations that carry the same status as commercial obligations at one end, and hortatory commitments that are not enforceable through the trade agreement at the other end. For example, under the North American Agreement on Labor Cooperation (NAALC)-the NAFTA side agreement—only a party's systematic failure to enforce its own occupational safety and health, child labor, or minimum wage standards is enforceable, under certain circumstances, with sanctions. Meanwhile, all commercial provisions are enforceable under the NAFTA.⁴⁵ By contrast, the last four U.S. FTAs have included identical enforcement provisions for commercial and labor disputes.⁴⁶ Under some agreements, a country's labor commitments may be subject to supranational review by a neutral, international dispute settlement panel, which might include binding dispute settlement procedures and penalties, (e.g., fines and sanctions) if a party fails to carry out its commitments.⁴⁷ The NAALC, the U.S.-Chile FTA, and the U.S.-Singapore FTA dispute settlement panels can impose fines used to fund programs that improve labor conditions.48

⁴² Bolle, "Overview of Labor Enforcement Issues," 2008. A summary of the agreement is available at http://www.ustr.gov/sites/default/files/uploads/factsheets/2007/asset_upload_file127_11319.pdf.

⁴³ Ibid., 3.

⁴⁴ Polaski, "Protecting Labor Rights through Trade Agreements," 2003.

⁴⁵ Bolle, Overview of Labor Enforcement Issues, 2008. See also *http://new.naalc.org/naalc/naalc-full-text/part_five_resolution.htm*.

⁴⁶ Ibid.

⁴⁷ Polaski, "Protecting Labor Rights through Trade Agreements," 2003.

⁴⁸ The NAALC and the Canada-Colombia Agreement on Labor Conditions (CCALC) have a two-tiered system in which not all labor rights violations are subject to sanctions (ibid.).

Although the agreements' dispute settlement mechanisms have the potential to improve the effectiveness of FTA labor provisions, settlement panels may find resolution of disputes challenging because the obligations are unclear. Cabin (2009) argues that the nature of the obligations under the U.S.-Peru Free Trade Agreement is ambiguous because neither party has ratified all eight of the underlying ILO Declaration conventions.⁴⁹ Bolle (2010) finds a similar discrepancy in the Colombia Free Trade Agreement (CFTA), under which the four ILO core labor standards, but not explicitly the ILO conventions behind them, are enforceable through the same dispute settlement mechanism that applies to all other provisions in the agreement.⁵⁰ She adds that even those agreements that call for fully enforceable labor provisions include language suggesting that trading partners are obligated to uphold the principles in the ILO Declaration and not the details of the conventions.⁵¹ Bolle (2008) points out that because the principles in the ILO Declaration are less detailed than the commercial obligations, labor disputes may be more difficult to resolve.⁵²

Clearly, there are challenges to ensuring that enforcement mechanisms elicit compliance. Some critics argue that the traditional enforcement mechanisms, which provide negative incentives to comply, are insufficient. Indeed, Doumbia-Henry and Gravel (2006) claim that some developing countries lack capacity, resources, and/ or the political will to enforce labor standards. They, along with Berik and van der Meulen (2010) and Polaski (2003), suggest that it might be possible for positive incentives to elicit compliance.⁵³ Polaski (2003) also maintains that faster and sustained improvement in labor conditions can be obtained if capacity building and technical assistance accompany economically meaningful enforcement mechanisms.⁵⁴ Doumbia-Henry and Gravel (2006), Berik and van der Meulen Rodgers (2010), and

⁵² Ibid.

⁴⁹ Cabin, "Labor Rights in the Peru Agreement," 2009. Doumbia-Henry and Gravel (2006) add that when a country ratifies an ILO convention on a specific principle, the ILO has an effective supervisory system in place to determine compliance. However, when the relevant convention is not ratified, there is no mechanism to rigorously assess compliance. In such a case, it is difficult to evaluate whether national laws conform to ILO standards due to a lack of impartial criteria for assessing the compliance of all FTA signatories. Doumbia-Henry and Gravel, "Free Trade Agreements and Labour Rights," 2006.

⁵⁰ Bolle, Proposed U.S.-Colombia Free Trade Agreement, 2010.

⁵¹ Bolle, Overview of Labor Enforcement Issues, 2008.

⁵³ Doumbia-Henry and Gravel, "Free Trade Agreements and Labour Rights," 2006; Berik and van der Meulen Rodgers, "Options for Enforcing Labour Standards," 2010; Polaski, "Protecting Labor Rights through Trade Agreements," 2003.

⁵⁴ Polaski, "Protecting Labor Rights through Trade Agreements," 2003.

Polaski (2003) identify the 1999 U.S.-Cambodia Textile Agreement as an example of how capacity building and positive incentives can support compliance with labor standards.⁵⁵ The agreement provided for a factory-monitoring and capacity-building program administered by the ILO. Polaski (2006) and Doumbia-Henry and Gravel (2006) report progress on wages and labor conditions in Cambodia's apparel sector between 1999 and 2004. This was achieved without jeopardizing export or job growth. However, Berik and van der Meulen Rodgers (2010) point out that there is some dispute as to the extent of the improvements over this period.⁵⁶ There is also evidence that the improvements in labor conditions occurred alongside continued violations of freedom of association and collective bargaining rights. Polaski (2006), Doumbia-Henry and Gravel (2006) and Berik and van der Meulen Rodgers (2010) suggest that the positive incentives and capacity building were important factors in bringing about the improvements in compliance with labor standards that occurred.⁵⁷

Empirical Evidence

As previously discussed, there is limited empirical evidence on the impact of ILO conventions and trade agreements' labor provisions on labor conditions. This is due, in part, to measurement problems and the scarcity of reliable data. Although measurement methods have become more sophisticated with the creation of new indicators and subindicators, as well as new methods for weighting and aggregating indicators (Barenberg 2011), there is no consensus on how to evaluate labor conditions.⁵⁸ Cross-country comparisons are particularly risky because data are produced by national statistical offices that may not use common definitions for the indicators.⁵⁹ In addition, endogeneity issues surround the relationship between the ratification of conventions and labor conditions. However, it is important to consider that there are countries such as the United States that have achieved many if not all of the standards, but have not ratified all of the ILO conventions because, in part, of technical inconsistencies between their national legislation and the ILO conventions. Resolving these inconsistencies could prove costly.⁶⁰

⁶⁰ Elliott, "Labor Standards and the Free Trade Area of the Americas," 2003.

⁵⁵ The agreement, in force between 1999 and the end of 2004, raised quotas for textile and apparel exports from Cambodia to the United States in exchange for Cambodia achieving 'substantial compliance' with its national labor laws and the ILO's core labor standards.

⁵⁶ Berik and van der Meulen Rodgers, "Options for Enforcing Labour Standards," 2010.

⁵⁷ Ibid.

⁵⁸ Barenberg, "Formulating and Aggregating Indicators of Labor Rights Compliance," 2011.

⁵⁹ Flanagan, Globalization and Labor Conditions, 2006.

Flanagan's results (2003) support this point.⁶¹ Flanagan attempts to understand whether the adoption of ILO labor standards improves labor conditions, particularly with regard to child labor, civil liberties, and the health of the workforce ("exogenous ratification"), or whether labor conditions influence a country's ratification of labor standards ("endogenous ratification"). In order to map the direction of influence, Flanagan estimates a simultaneous equation model using a three-stage least squares (3SLS) estimation strategy, which corrects the endogeneity problem by instrumenting for the ratification variables. His analysis—which incorporates 1980 and 1990 data for 100 countries—reveals that ratification does not improve labor conditions; rather, ratification is determined by a country's current labor conditions, which are generally linked to the country's level of economic development.

The remaining studies we evaluate examine such factors as enforcement mechanisms, positive incentives, and market forces that may influence the impact of trade agreements on labor conditions. The first of these studies is by the Washington Office on Latin America (WOLA).⁶² WOLA conducted a qualitative study examining the effectiveness of U.S.-funded projects aimed at strengthening labor rights in countries party to the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR) for the period 2006 to 2009. The study finds that projects aimed at improving Central American countries' ability to comply with their labor-related commitments did not result in better labor conditions in the areas of gender discrimination, child labor, or freedom of association. It also, however, finds that weak enforcement mechanisms decrease the effectiveness of labor obligations. In particular, it asserts that one of greatest barriers to improving labor conditions.

Somewhat different results were obtained from an examination of labor conditions in Bangladesh and Cambodia. In a 2010 study, Berik and van der Meulen Rodgers use data from surveys, focus groups, and inspections to examine the paths countries take in response to pressure to improve price competitiveness in one key export sector: textiles and apparel.⁶³ Both countries are among the poorest Asian economies, have some of the lowest labor costs in the world, and have a history of poor labor conditions.⁶⁴ However, while Bangladesh's labor conditions have not improved over a period of two decades, labor conditions in Cambodia have improved modestly over

⁶¹ Flanagan, "Labor Standards and International Competitive Advantage," 2003.

⁶² WOLA, "DR-CAFTA and Worker's Rights: Moving From Paper to Practice," April 2009.

⁶³ Berik and van der Meulen Rodgers, "Options for Enforcing Labour Standards," 2010.

⁶⁴ Ibid.

the last decade. The authors find that the primary explanation for the divergence in outcomes is the ILO "Better Factories Cambodia" (BFC) program (initially the ILO Garment Sector Working Conditions Improvement Project), which was set up as part of the 1999 U.S.-Cambodia trade agreement on textiles and apparel. Under the agreement, an expansion of Cambodia's export quota is conditional on the country's compliance with its own labor laws and ILO conventions. The BFC program was set up to assess and improve labor conditions by monitoring factories, providing technical assistance, and sponsoring capacity-building programs.

Oka (2011) also analyzes the Cambodian garment sector, using firm-level data for 400 firms participating in the BFC program to gauge compliance with labor standards during the years 2006–10.⁶⁵ The author finds the highest compliance rates among firms producing for specialty retailers and reputation-sensitive mass merchandisers. In addition, like Berik and van der Meulen Rodgers (2010), ⁶⁶ Oka finds that the ILO BFC, which has multinational brand partners, played a role in driving improvements in factory compliance.

Finally, Elliott and Freeman (2003) evaluate the effectiveness of petitions under the U.S. Generalized System of Preferences (U.S. GSP) and the threat of sanctions in improving labor conditions.⁶⁷ Between 1984 and 1998, the U.S. Trade Policy Staff Committee accepted 47 petitions for review, mainly from union organizations and human rights groups. Thirty-two of these petitions involved a trade threat or changes unrelated to U.S. GSP conditionality requirements. Of these 32, conditions improved in 15 cases (47 percent success rate) and failed to improve in 17 cases. The authors also point out that 13 countries out of the 47 reviewed had their U.S. GSP eligibility either terminated or suspended. Using qualitative methods, the authors find that successful petitions were associated with a higher degree of democracy in a country, involvement of human rights groups in the petition, more trade, less politically sensitive labor standards (i.e., standards aimed at issues other than forced and child labor, which are rooted in political, institutional, and social conditions that are difficult to change), and enough resources in target countries to carry out promised changes. Overall, they conclude that the threat of trade sanctions is not always an effective means of enforcement. This is especially the case when countries with weak labor systems promise improvements, but are unable to deliver because of insufficient capacity and

⁶⁵ Oka, "Does Better Labor Standard Compliance Pay?" 2011

⁶⁶ Berik and van der Meulen Rodgers, "Options for Enforcing Labor Standards," 2010.

⁶⁷ Elliott and Freeman, "Can Labor Standards Improve under Globalization?" 2003.

resources. In such cases, the authors suggest that the threat of sanctions would be most effective if accompanied by technical and financial help in making the needed changes.

Trade and Labor Standards

Does trade impact labor conditions? Proponents of linking labor standards and trade policy fear that increased trade and deeper integration of global supply chains may lead firms to move production to low-cost and low-standards locations; depress wages in countries that maintain and enforce high labor standards; and motivate governments to weaken or remove costly standards in an effort to improve or preserve their countries' competitive position.⁶⁸This section considers research that investigates the effects of trade openness on labor conditions. The evidence suggests that increased trade may enhance, rather than degrade, labor conditions, since export growth may raise employee incomes, expand opportunities for workers to move from unprotected informal sector jobs to relatively better protected export-oriented sectors, and fuel stronger international pressure and activism aimed at compliance.

The literature suggests several channels through which trade might affect labor conditions. According to Luinstra (2004), the increased allocation of capital and labor to the sector with national comparative advantage will improve or worsen overall labor conditions, depending on the relative level of labor conditions in the expanding sector.⁶⁹ For example, if a labor-intensive, export-oriented sector with relatively poor labor conditions expands, then on balance, labor conditions in the country will deteriorate. However, if a labor-intensive, export-oriented sector with relatively good labor conditions expands, then labor conditions in the country will, on balance, improve.⁷⁰

Using plant-level data, Harrison and Scorse (2003) assess the impact of globalization on compliance with minimum wage legislation in Indonesia in the 1990s.⁷¹

⁶⁸ Brown, Deardorff, and Stern, "International Labor Standards and Trade: A Theoretical Analysis," 1996.

⁶⁹ Luinstra, "Labor Standards and Trade," 2004.

⁷⁰ Ibid., 8–9.

 $^{^{71}\,}$ Harrison and Scorse, "The Impact of Globalization on Compliance with Labor Standards," 2003.

They find that multinational and exporting firms are more likely to comply with minimum wage legislation than inward-oriented domestic firms. When they include controls for capital intensity and technical change, the authors find that exporters were less likely to comply with minimum wage laws for most of the 1990s, but by the end of the 1990s exporting sectors were significantly more likely to adhere to the minimum wage. The authors suggest that the improved compliance was linked to both internal pressure resulting from the establishment of independent unions and external pressure from the U.S. government (in the form of GSP provisions) and human rights activists.

These results are supported by a series of case studies published in a 2009 World Bank report.⁷² The case studies, which rely on a mix of qualitative and quantitative evidence, contribute to the literature by developing a micro-based framework for analyzing the effects of globalization on working conditions and systematically applying this framework to five country case studies. The report gives particular attention to the influence of foreign direct investment (FDI) on labor conditions. It finds that for countries like Cambodia, El Salvador, and Indonesia, workers in an FDI-intensive exporting industry (apparel) enjoy higher wages and better working conditions than those in an import-competing industry with little FDI (agriculture).^{73, 74} As employment in apparel manufacturing increased and employment in agriculture fell, following an influx of export-oriented FDI, overall wage premiums increased, and working conditions improved in these countries.⁷⁵ The report claims that the positive correlation between wages and working conditions supports the theories of efficiency wages and rent sharing rather than that of compensating differentials.⁷⁶

⁷² Robertson et al., Globalization, Wages and the Quality of Jobs, 2009.

⁷³ Nonetheless, anecdotal and qualitative evidence suggests that even though conditions might be better in exporting sectors than nontradable sectors, this does not mean that there is full compliance with established labor standards or that the level of working conditions are acceptable by international standards. See, for example, Salem, CIMCAW: Final Report, 2008; Record, "Labor Practices and Productivity in the Lao Garment Sector," 2011; Rossi, "Workers and Social Upgrading," 2011.

⁷⁴ The report also points out that better working conditions and wages may have represented quota rents from the Multi-Fiber Arrangement or the Agreement on Textiles and Clothing, which have since expired.

⁷⁵ Robertson et al., Globalization, Wages and the Quality of Jobs, 2009, 9. These results correspond to the 1995 to 2005 time period in El Salvador and 1996 to 2005 for Cambodia. In the case of Indonesia, the period spanning 1991 to 2004 was considered.

⁷⁶ The efficiency wage hypothesis suggests that one way to increase workers' productivity and/or efficiency is to pay them more than the market-clearing wage dictated by supply and demand. Models of rent sharing suggest that firms share their profits with workers. Finally, the theory of compensating differentials, attributed to Adam Smith, suggests that workers who experience poor (nonwage) working conditions are compensated with higher wages. Robertson et al., Globalization, Wages and the Quality of Jobs, 2009.

The studies reinforce the theory that globalization is correlated with improvements in working conditions in the outward-oriented sectors.

Another theory assumes a Heckscher-Ohlin model by which, as a result of endowmentbased trade, the wages of low-skill workers in countries where low-skill labor is abundant increase.⁷⁷ This theory, known as "the income theory," suggests that low-skill workers in such countries will demand high labor standards because they will want to protect their increasing income against dismissal and injury.

Edmonds and Pavcnik (2006) use data from 1995 for 113 developed and developing countries to demonstrate that use of child labor is lower on average in countries in which trade accounts for a relatively high share of gross domestic product (GDP), even when they control for the endogeneity with trade based on geography.⁷⁸ However, this relationship between trade and child labor is primarily a consequence of a positive relationship between trade and income. When the authors controlled for income differences across countries, the association between trade and child labor was no longer significant. Their results suggest that on average, countries that trade more because of their advantageous location report higher income levels, which correspond to lower levels of child labor. They argue that the lack of evidence supporting a direct effect of trade on child labor does not rule out the possibility that circumstances or types of trade exist whereby trade might lead to an increase in child labor.⁷⁹ For example, trade might affect the propensity to employ child labor because it alters the relative return to unskilled labor. Nevertheless, and contrary to the assertions of some critics of globalization, the authors find no evidence that trade is a significant factor perpetuating the high levels of child labor found in low-income countries.

Without explicitly considering the specific channels through which trade openness might impact a country's labor conditions, Flanagan (2003) examines the general question of the relationship between trade openness and labor conditions, which he defines to include child labor, civil liberties, and life expectancy.⁸⁰ The author uses

⁷⁷ Luinstra, "Labor Standards and Trade," 2004.

⁷⁸ Edmonds and Pavcnik, "International Trade and Child Labor: Cross-Country Evidence," 2006. Edmonds and Pavcnik's measure of trade based on geography considers bilateral trade openness based on the distance between countries, their population, the commodities produced by the countries, whether the countries considered share a common language or border, and whether a country is landlocked.

⁷⁹ Ibid., 136.

⁸⁰ Flanagan, "Labor Standards and International Competitive Advantage," 2003.

three measures for trade openness—the ratio of exports to GDP, trade volume as a share of GDP, and whether a country has an open trade policy⁸¹—and data from the years 1980 and 1990. His results suggest that countries with an open trade policy or a large trade sector tend to have superior labor conditions and rights, given their stage of economic development (as defined by GDP per capita).⁸² It should be noted that, with the exception of child labor, the author's measures for labor standards are fairly blunt and likely capture other drivers. Flanagan claims that the period covered by his study is one in which labor "regulation was more form than substance." However, it is important to point out that in subsequent years there was an increase in both the substance of labor regulations and the emphasis on them in international circles (e.g., the promotion of the ILO core labor standards and the inclusion of enforceable labor provisions in trade agreements). These trends suggest that more robust results might be obtained from a study that incorporates more recent years.

In a subsequent analysis, Flanagan (2006) evaluates cross-sectional and panel data to determine the effects of liberalized trade (as measured by open trade policies and by trade as a share of GDP) on two important sets of factors: working conditions (compensation, work hours, fatal accidents, and life expectancy) and labor rights (civil liberties, freedom of association and collective bargaining, nondiscrimination in employment, child labor, forced labor, and slavery).⁸³ He uses instrumental variables to control for the possibility that working conditions and labor rights might be jointly determined with some measures of openness, and he includes a number of control variables throughout the specifications. The author finds that with the exception of nondiscrimination in employment, there is no evidence that countries with liberalized trade are more likely to have inferior working conditions or inadequate labor rights than countries with restricted trade. Moreover, his results suggest that countries that adopt liberalized trade policies do not experience a subsequent decline in labor conditions. His results suggest that free trade improves working conditions principally by raising per capita income, and that open trade policies have a direct and positive impact on job safety. Flanagan's analysis of the relationship between trade volume and labor rights yields mixed results, but where the relationship is significant, he finds a positive correlation.

⁸¹ Flanagan uses a dummy variable to capture whether a country is open or closed. He defines a country as closed if any of the following are true: nontariff barriers cover at least 40 percent of trade; the average tariff rate is at least 40 percent; the "black market premium" is at least 20 percent; the economy is characterized by a socialist economic system; or major exports are dominated by a state monopoly (Flanagan 2003, 22).

⁸² Ibid., 16.

⁸³ Flanagan, Globalization and Labor Conditions, 2006.

Labor Conditions and Trade Performance

Increased trade among countries with varying levels of worker protection has long raised questions as to whether low-standards countries have an unfair comparative advantage over countries with higher standards, and whether this generates competitive pressure to reduce standards in a race to the bottom. As previously discussed, these concerns have led the United States and the EU to link preferential market access to compliance with labor standards. In this section, we discuss research on the channels through which labor conditions influence comparative advantage and, ultimately, trade. We then present recent empirical research that evaluates the effects of labor standards compliance on trade performance. Overall, we find no compelling evidence that countries can enhance their trade performance through poor labor conditions.

Labor Conditions and Trade: Conceptual Considerations and Empirical Evidence

How do labor conditions influence a country's trade performance? Neoclassical trade theory teaches that comparative advantage is determined by relative endowments of land, labor, and capital (factor endowments). The impact of labor conditions on comparative advantage is contingent on (1) how a particular type of labor standard affects factor endowments, and (2) the environment in which the standards are applied.⁸⁴ The elasticity of demand for a country's products with respect to changes in costs may also have implications for trade performance.⁸⁵ Proponents of the "race to the bottom" position assume that compliance with labor standards is costly, and thus that countries with better labor conditions are at a disadvantage in international markets.⁸⁶ However, the literature suggests that the relationship between labor standards and labor costs is less straightforward. The application of some labor standards might entail capital expenditures, while adherence to other labor standards might enhance productivity or increase a country's labor supply. For example, although some improvements in health and safety standards may entail costs, these same improvements may improve worker health and reduce accidents, resulting in higher worker productivity.⁸⁷ Some research suggests that reducing hours at work raises labor costs by diminishing the amount of

⁸⁴ Bakhshi and Kerr, "Labour Standards as a Justification for Trade Barriers," 2010; Elliott, "Labor Standards, Development and CAFTA," 2004.

⁸⁵ Freeman, "International Labor Standards and World Trade," 1997.

⁸⁶ Flanagan, "Labor Standards and International Competitive Advantage," 2003.

⁸⁷ Brown, Deardorff, and Stern, "International Labor Standards and Trade," 1996.

available labor, but that reducing discrimination increases labor supply and reduces the cost of labor, thereby improving comparative advantage. Elliott (2004) points out that in many developing countries reducing gender discrimination could have the opposite effect, raising the cost of labor used to produce exports and reducing comparative advantage if, for example, reduced discrimination against female workers facilitates their move out of the export sector and into sectors oriented toward domestic markets, which have historically discriminated against women.⁸⁸ Further, Bakhshi and Kerr (2010) suggest that a ban on child labor might reduce a country's unskilled labor supply in the short run, but might increase skilled labor supply and productivity in the long run if children who were previously part of the workforce are enrolled in school.⁸⁹

Looking at the period 1980-1999, Flanagan (2003) uses cross-country panel data for the manufacturing sector to test whether a relationship exists between labor standards and labor costs and to examine whether differences in labor productivity among countries worldwide (cross-country productivity differentials) influence international labor costs (total compensation).⁹⁰ The econometric evidence suggests that nearly 90 percent of the disparity in real labor costs across countries is associated with crosscountry labor productivity differentials. Further, his results do not find a significant relationship between the ratification of labor standards and labor costs, when holding the influence of productivity constant. It is important to note that Flanagan uses data for a period that preceded the establishment of the ILO core labor standards and in which there was less emphasis on labor standards in international circles. Different results might be obtained from a study that considers more recent years.

The remaining studies move away from a consideration of how labor standards ratification influence trade to an examination of how labor standards compliance influences trade performance. In the literature, the ratification of ILO conventions is widely used as an indicator of labor standards and, in some cases, labor conditions. However, several analysts consider this tendency problematic because, as previously discussed, ratification of a convention does not necessarily imply compliance⁹¹ and because the indicator suffers from endogeneity.⁹² Further, the failure to ratify does

⁸⁸ Elliott, "Labor Standards, Development and CAFTA," 2004.

⁸⁹ Bakhshi and Kerr, "Labour Standards as a Justification for Trade Barriers," 2010

⁹⁰ Flanagan, "Labor Standards and International Competitive Advantage," 2003. The panel includes five-year averages for 84 countries over 1980–84 and for 51 countries over 1995–99.

⁹¹ Samy and Dehejia, "Trade and Labor Standards: New Empirical Evidence," 2009; Flanagan, "Labor Standards and International Competitive Advantage," 2003.

⁹² Flanagan, "Labor Standards and International Competitive Advantage," 2003; Flanagan, Globalization and Labor Conditions, 2006; Bonnal, "Trade Performance and Labor Standards," 2008.

not necessarily imply poor labor conditions, as evidenced by the fact that the United States—a high-standards country—has ratified only two of the eight conventions that constitute the ILO core labor standards.⁹³ Indeed, in some cases a country that meets or exceeds a particular standard may not ratify an associated convention because of, for example, technical inconsistencies between the convention and national laws. Research is also challenged by the endogeneity of labor standards, whereby a country's level of worker protection is typically a function of its level of social, political, and economic development.⁹⁴ Proxy indicators such as number of strikes and lockouts, worker injuries, union density, and degree of civil liberties⁹⁵ are increasingly used in the literature to work around endogeneity issues.

Despite these limitations, a growing body of literature has examined the relationship between labor standards compliance and trade, and is advancing analysis in the field through the use of increasingly sophisticated methodologies. The literature has yielded mixed results, but contrary to the "race to the bottom" position, it does not produce clear evidence that countries can improve their trade through poor labor conditions.

Using a standard Heckscher-Ohlin model and 2003 data for 48 developing countries, Bakhshi and Kerr (2010) examine whether developing countries can enhance their comparative advantage—especially in industries producing unskilled-labor-intensive goods—by suppressing labor standards and labor conditions.⁹⁶ In addition to using control variables, the model incorporates an indicator for the number of ILO conventions ratified and measures for four core labor standards (child labor, forced labor, gender discrimination, and the level of union rights). The article's econometric evidence suggests that developing countries could increase their exports by lowering labor standards compliance related to forced labor and union rights, but the effect would be very small. However, their findings indicate that reducing labor standards compliance related to child labor and gender discrimination would not affect comparative advantage.

 $^{^{\}rm 93}\,$ The United States has ratified ILO Conventions 105 on forced labor and 182 on the worst forms of child labor.

⁹⁴ Bonnal, "Trade Performance and Labor Standards," 2008.

⁹⁵ This data typically comes from surveys conducted by Freedom House, which include questions on freedom of association and collective bargaining.

⁹⁶ Bakhshi and Kerr, "Labour Standards as a Justification for Trade Barriers," 2010.

Flanagan (2003) considers the question of whether low labor standards are associated with superior export performance (as measured by the ratio of exports to GDP) or higher inbound FDI or both.⁹⁷ Relying on cross-section data for 80 countries for 1980–84, he finds no significant relationship between the number of ILO conventions a country ratifies and its export performance. Using cross-section data for 70 countries for 1980–85 and 1986–91, Flanagan finds no evidence that labor standards ratification reduces FDI.

Using qualitative methods, a widely cited 1996 OECD study also finds no evidence that countries with low labor standards compliance (in terms of freedom of association and collective bargaining rights) post better export performance than countries with high levels of labor standards compliance.⁹⁸ Based on the report's findings, the OECD suggested that developing countries' concerns about the impact of labor standards on their economic performance are unfounded.⁹⁹ Some suggest that the OECD conclusion is not definitive because its findings are based on a comparison of outcomes that only minimally control for potentially confounding factors.¹⁰⁰

Kucera and Sarna (2006) use a gravity model to evaluate the effect of trade union rights and democracy on exports in four classifications of manufacturing industries characterized by differing levels of labor intensity—labor-intensive manufacturing trade, capital-intensive manufacturing trade, in-between manufacturing trade, and total manufacturing trade.¹⁰¹ The model uses data for 192 countries for the 1990–93 period and eight indicators of trade union rights and democracy, including unionization rate, Freedom House indexes on civil liberties and political rights, OECD indexes of freedom of association and collective bargaining (FACB), FACB indexes constructed by Kucera and Sarna and indexes of FACB in export processing zones, among others. A robust result emerges, indicating that generally stronger FACB rights are associated with higher total manufacturing exports, and that higher levels of democracy are associated with higher overall and total manufacturing sector exports. The authors admit that this result may be surprising, given the export success of countries with relatively weak democracies and FACB rights. They suggest that these experiences, while high profile, may not be representative. In addition to this result, Kucera and

⁹⁷ Flanagan, "Labor Standards and International Competitive Advantage," 2003.

 $^{^{98}\,}$ The 2000 OECD report supported these results. OECD, International Trade and Core Labor Standards, 2000.

⁹⁹ Ibid., 7.

¹⁰⁰ Freeman, "International Labor Standards and World Trade," 1997.

¹⁰¹ Kucera and Sarna, "Trade Union Rights, Democracy, and Exports," 2006.

Sarna find that five of the eight indicators—the unionization rate, their two FACB indices, and the two OECD FACB indices— yield statistically significant results of the opposite sign, depending on the classification of labor-intensive industries and the model specification. They conclude that none of the coefficient estimates for these five indicators are robust when it comes to labor-intensive trade.

Dehejia and Samy (2004) evaluate cross-sectional developed- and developing-country data for 1995 and Canadian time-series data for 1950-98 to find the effects of labor standards on export performance (defined as the ratio of the manufacturing sector exports over GDP).¹⁰² Dehejia and Samy formulate indexes for labor rights based on the ratification of ILO conventions, the number of hours worked, the number of days of paid annual leave, the rate of occupational injuries, and the degree of unionization. They also advance the literature by including control variables, which were not systematically used in earlier research efforts. In general, the analysis does not find a clear relationship between labor standards and a country's comparative advantage. Specifically, the authors find that when both developed and developing countries are considered in the estimation, only one of the variables-the rate of injuries-is significant and positively correlated with export performance. However, when only developing countries are considered, ratified conventions and the number of days of paid annual leave also emerge as significant and are negatively correlated with export performance. Their analysis of the Canadian data alone generated mixed results. The authors conclude that there is weak evidence to suggest that countries that maintain poor labor conditions have a comparative advantage in trade.¹⁰³

Although most studies use cross-sectional or time-series data to evaluate the effects of labor standards compliance on trade performance, Bonnal (2010) advances the literature by introducing a dynamic panel data framework covering a large number of countries (112) over a significant period of time (1980 to 2004).¹⁰⁴ His model corrects for endogeneity and potential biases by using two factors—work injuries, and strikes and lockouts—as proxies for core labor standards. He also explicitly considers the role of institutions in promoting more robust trade. Specifically, he uses three measures to estimate the quality of institutions: the number of years a country's chief executive is in office, the concentration of a country's legislature as

2004.

¹⁰² Dehejia and Samy, "Trade and Labor Standards: Theory and New Empirical Evidence,"

¹⁰³ Ibid., 191.

¹⁰⁴ Bonnal, "Export Performance, Labor Standards, and Institutions," 2010.

measured by the Herfindahl-Hirschman Index,¹⁰⁵ and whether the legislature is controlled by a party representing a special interest. Bonnal finds that improved labor conditions support countries' export performance.¹⁰⁶ In particular, a one-standard-deviation increase in the rate of work injuries is associated with a reduction in the export/GDP ratio of 1.01 percentage points, and a one-standard-deviation increase in the rate of strikes and lockouts is associated with an increase in the export/GDP ratio of 0.47 percentage points. Although this result may seem counterintuitive, Bonnal argues that one interpretation is that economies where core labor standards are upheld are well-functioning economies. He cites research finding that higher labor standards may lead to a higher rate of effect on export performance.

Conclusion

Labor standards have become a major trade issue, as labor standards provisions are increasingly given equal importance to commercial obligations in trade agreements. Methodological challenges (such as the endogeneity issues) and the lack of reliable data on compliance have hampered research examining the relationship between labor standards and trade. Nevertheless, the literature that examines this relationship is growing and advancing through the use of increasingly sophisticated approaches. This research indicates that diverse factors, such as enforcement mechanisms, positive incentives, and market forces, influence the impact of trade agreements on labor standards compliance; that trade openness may enhance labor standards compliance; and that there is no clear evidence that poor labor conditions are associated with improved trade performance.

A more nuanced understanding of the relationship between labor standards and trade requires the consideration of a broader yet still reliable set of indicators. Recently, there have been efforts to improve measurement of labor standards compliance.¹⁰⁷ However, in the absence of more robust data across a larger set of indicators, research

¹⁰⁵ The Herfindahl-Hirschman Index, used to measure the level of concentration of a country's legislature, increases with a decrease in the number of parties in the government and an increase in the disparity in size between the parties increases. Bonnal, "Export Performance, Labor Standards, and Institutions," 2010.

¹⁰⁶ Ibid., 62.

¹⁰⁷ Barenberg, "Formulating and Aggregating Indicators of Labor Rights Compliance," 2011.

will continue to focus on indicators such as child labor, freedom of association, and collective bargaining rights for which data is more readily available.

A number of issues would benefit from further research. For example, research examining the impact of the costs and benefits of compliance on firm behavior could lead to a better understanding of how policy might encourage compliance. More qualitative and quantitative research into the effects of trade agreements on labor standards compliance would also be useful, especially if it could identify the most effective mix of enforcement mechanisms and positive incentives for eliciting compliance. The example of the U.S.-Cambodia textile agreement, which improved labor standards compliance in the Cambodian garment export sector through positive incentives are more effective than regulation and sanctions, and future research should rigorously evaluate this question.

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