

Globalization and the Right to Free Association and Collective Bargaining: An Empirical Analysis

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Summary. — Economies that are more open to trade and foreign direct investment (FDI) face greater competitive pressure than closed ones. Globalization critics are concerned that this pressure induces countries to lower labor standards in order to remain competitive and retain or attract foreign investment. Defenders of globalization counter that countries that are more closely integrated into global markets are likely to have higher rather than lower standards. This article tests the effect of globalization on a specific labor right, which forms part of what are commonly regarded as core or fundamental labor standards. Employing a new measure of free association and collective bargaining rights, we find that countries that are more open to trade have fewer rights violations than more closed ones. This effect holds in a global sample as well as in a developing country sub-sample and holds also when potential feedback effects are controlled via instrumental variable regression. The extent of an economy's "penetration" by FDI has no statistically significant impact. Globalization might not be beneficial for outcome-related labor standards, but it is likely to promote the process-related standard of a right to free association and collective bargaining.

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1. INTRODUCTION

The effects of globalization on labor standards, that is, the "norms and rules that govern working conditions and industrial relations" (OECD, 1996, p. 25), as well as on wages and unemployment are of immense political, social, and scholarly interest (Kapstein, 2000; Reich, 1992; Rodrik, 1997). Critics of globalization are concerned that "unfair" competition from (developing) countries with low labor standards is responsible for wage losses in the United States and causes unemployment of unskilled workers in Europe due to more rigid wage bargaining.¹ Globalization is also blamed for increasing competitive pressure that would make countries "race to the bottom" to attract footloose capital. As these arguments suggest, countries would lower labor standards in order to stay competitive in the face of cut-throat competition from

abroad and sacrifice labor rights in order to placate capital so as to retain so-called "runaway plants." Countries are like prisoners caught in the prisoners' dilemma where they are driven to choose options they know will leave all countries worse off. Bill Jordan, the International Confederation of Free Trade Union's former General Secretary is quoted by Chan and Ross (2003, p. 1023) as stating that "intense competition between countries to attract foreign investment is under-mining respect for the labor standards."

Clearly then, the concern is that globalization not only leads to wage losses and unemployment of unskilled workers in developed

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countries, but even more odiously to downward pressure on general labor standards across the world. Not surprisingly, the call is to impose restrictions on trade and capital mobility in order to counter the downward pressure. In the words of Marshall (1994, p. 72), former US Secretary of Labor, “we cede the right to set our own standards if we fail to regulate the goods coming into a country because a basic principle of highly competitive markets is that bad standards tend to drive out the good.”

Anti-globalization critics are concerned about the effect of trade liberalization and increased capital mobility on both workers’ wages and labor standards such as working hours, security of employment, and unemployment benefits. However, it would be absurd to expect workers in very poor countries to enjoy the same wages and labor standards as their fellow workers in rich countries (Golub, 1997; Lawrence, 1994). Critics of globalization know this of course and their greatest concern is therefore the fate of core or fundamental labor standards under conditions of globalization. These core or fundamental standards are sometimes regarded as inviolable human rights of workers in all countries no matter what their level of economic development is (Langille, 1997; Marshall, 1994). Because they supposedly represent human rights, efficiency or any other economic or political consideration may not be employed to justify their violation.² While there is some dispute about which standards should be counted as core, or fundamental (OECD, 1996), the ILO has declared four labor rights to fall into this category. The “ILO Declaration on Fundamental Principles and Rights at Work” commits all ILO members, not just parties to the ILO conventions, to promote and to realize

- (a) freedom of association and the effective recognition of the right to collective bargaining (enshrined in ILO Conventions 87 and 98);
- (b) the elimination of all forms of forced or compulsory labor (ILO Conventions 29 and 105);
- (c) the effective abolition of child labor (ILO Conventions 138 and 182); and
- (d) the elimination of discrimination in respect of employment and occupation (ILO Conventions 100 and 111).

Most countries have now endorsed these core rights rather than the call for complete harmonization of all labor standards, which the devel-

oping countries have vehemently opposed (Golub, 1997).

In Neumayer and De Soysa (2005), the present authors have addressed the effect of globalization on the incidence of child labor. We demonstrate that countries that are more open to trade and are more strongly penetrated by FDI have a lower incidence of child labor. This result is robust to a range of different dependent variables capturing various aspects of the child labor problem, different model specifications, and the results uphold in instrumental variable regression. In this article, we push the analysis further and examine the effects of globalization on freedom of association and collective bargaining (FACB) rights. These rights are explicitly mentioned in the ILO constitution and the 1944 Declaration of Philadelphia and have a special supervision mechanism where domestic or international organizations of employees and employers can file a complaint even if the country in question has not ratified the above-mentioned ILO Conventions 87 and 98. Unlike the issue of child labor, which affects particular sectors and is possibly related to long-term effects of poverty, culture, etc., FACB rights are particularly salient because they reflect a government’s immediate response to supposed pressures of globalization. Also, FACB rights are distinct even from some other core or fundamental labor standards, because they refer to the process of determining labor outcomes rather than specifying those outcomes, that is, they constitute what is known as rights to a process rather than rights to a substantive outcome (Langille, 1997). The distinction is important as it is possible that globalization is good for FACB rights, but not necessarily for outcome-related labor standards—a point, to which we will come back in the concluding section.

This article proceeds as follows: We review the relevant empirical literature in the next section, followed by a discussion of potential determinants of the right to free association and collective bargaining. We describe the research design, present results, and discuss the implications of our findings in the final concluding section.

2. LITERATURE REVIEW

We begin by reviewing studies on the effects of labor standards in general, and labor rights in the form of FACB rights in particular, on

trade performance and the location of FDI, even though this is not our primary focus. Such a review is useful, however, to establish whether or not the stringency of labor standards has a statistically significant impact on exports and on countries' attractiveness as hosts for FDI. Somewhat surprisingly, empirical studies have failed to find a clear confirmation. Van Beers (1998) finds that strict labor standards (referring to working time, employment contracts, minimum wages, and employees' representation rights) tend to reduce exports of labor- and capital-intensive goods produced with skilled labor. These results are somewhat counter-intuitive given that higher labor standards should reduce foremost the amount of export of goods produced with unskilled labor. Also, Van Beers' (1998) analysis is restricted to OECD countries, and it is therefore highly questionable whether his results generally hold at the global level.

For a more representative global sample, Rodrik (1996a) fails to find any effect of the stringency of labor standards on comparative advantage in labor-intensive goods as measured by the fraction of textiles and clothing exports in total exports (without fuels).³ Rodrik bases his measure of labor standards on the total number of ILO conventions ratified, the number of ratified ILO conventions pertaining to core worker rights, a democracy measure from Freedom House, and an index of child labor, derived from coding textual ILO sources and information from the US State Department's *Country Reports on Human Rights Practices*. He also includes statutory work hours, annual leave regulations, and the trade unionization rate. All three of these measures severely reduce the sample size, however. Kucera and Sarna (2004) find that stronger FACB rights are associated with higher total manufacturing exports and that there is essentially no relationship between these rights and labor-intensive exports. They use the same measure as is employed in this study. The insignificance of these rights is confirmed by a more qualitative study by the OECD (1996), which looks at trade performance defined as the share of a country's export in world trade. In contrast to these studies, however, Busse (2002) finds that a higher incidence of forced labor and a lower unionization rate increase comparative advantage in unskilled labor-intensive manufactured goods, measured as the ratio of exports of such goods to total exports of goods. The number of ratifications of the eight

ILO conventions on core labor standards is insignificant, however.

With respect to FDI, the qualitative study by the OECD (1996) mentioned above finds no evidence that suppression of FACB rights attracts more FDI. Aggarwal (1995) notes that US FDI is not concentrated in countries, or industries with low labor standards. Similarly, but using econometric analysis, Rodrik (1996a) finds no evidence that countries with low standards receive more FDI from US investors. In fact, in the past decade, there is no indication that US FDI flows tend to locate in poorer countries (Graham, 2000). Cooke and Noble (1998) even find that more FDI from the United States goes to countries, which have ratified a higher total number of ILO conventions and in which work councils exist. Similarly, Kucera (2002) finds no evidence that foreign investors favor countries with low labor standards. Indeed, with respect to FACB rights, he finds that countries with stronger rights receive more rather than less FDI inflows. Busse (2003) also finds no evidence that a higher incidence of violations of core labor standards attracts FDI. If anything, the opposite seems to hold since "on average, transnational corporations prefer to invest in countries where basic human and workers' rights are higher" (p. 52). However, Javorcik and Spatareanu (2004), using firm-level data, find that firms in Eastern European countries with lower labor standards in terms of flexibility of individual and collective dismissals, the length of the notice period, and the required severance payment, received more FDI from Western Europe than firms in other countries in the region with higher standards on these dimensions.

Turning to the effects of globalization on labor standards in general and FACB rights in particular, few studies to date have examined the links. Das, DeLoach, and Conley (2004) find that richer and more powerful countries have ratified a higher number of ILO conventions, where power is measured as the number of military personnel, population size, and GDP. The economic growth rate does not matter, but countries with a higher index of economic freedom as measured by the Canadian Fraser Institute (Gwartney & Lawson, 2003) are estimated to have ratified a lower number of conventions. There are strong regional effects as African, Middle East, and South-East Asian countries have ratified less conventions, all other things being equal. Chau and Kanbur

(2002), instead of analyzing the determinants of the total number of ratifications, look at the ratification *delay* of four ILO conventions pertaining to core labor standards. Neither economic variables, such as per capita income, or trade openness, nor political variables such as democracy are statistically significant. Legal system dummies are important predictors instead. [Chau and Kanbur \(2002\)](#) claim to find that peer effects with respect to export structure, income group, and regional classification are also important. However, the significance of these variables is likely to be spurious, picking up time effects instead ([Harrison, 2002](#)).

In looking qualitatively at individual countries, an [OECD \(1996\)](#) study concluded that in some countries trade liberalization precedes an improvement in FACB rights and in most countries both occurred simultaneously. Crucially, there was “no case where the trade reforms were followed by a worsening of association rights” ([OECD, 1996, p. 112](#)). [Busse \(2004\)](#) employs several measures in his analysis, namely, the civil rights measure from Freedom House as a proxy for forced labor and union rights, an aggregate measure of the ratios of female to male labor force participation, of secondary school enrolment rates and of life expectancy as a proxy for discriminatory work practices, and the percentage of 10- to 14-year-old working children as a proxy for child labor. He finds that per capita income and educational attainment are positively associated with labor standards. The same is true for trade openness, but not if labor standards are measured by the civil rights measure, in which case trade openness is negatively associated with labor rights. The main focus in [Botero, Djankov, La Porta, Lopez-de-Silanes, and Shleifer \(2003\)](#) is not on labor standards, but on the regulation of labor via public law. They find that such labor markets are more regulated in poorer countries and countries with a Socialist or French civil law tradition as well as in countries in which left-wing governments have traditionally dominated the political system.

In a recent contribution, [Mosley and Uno \(2005\)](#) use the same template, criteria, and sources that [Kucera \(2002\)](#) used for his time-invariant measure of FACB rights, which we employ below, but they construct their own measure for about 90 countries over the period 1985–2002. They find no consistent effect of globalization on their measure of FACB rights. In their main estimation, higher FDI inflows are associated with better FACB rights,

whereas the opposite is the case for greater trade openness. The stock of FDI does not matter. Once the industrial sector employment share is added to the model, which reduces sample size substantially, the FDI stock is then associated with lower FACB rights.

Existing studies on the effect of globalization on labor standards suffer from a number of shortcomings that our study attempts to improve on. The main problem of those studies, which look at the number of ILO conventions, whether core or not, that a country has ratified or which look at ratification delay as the measure of labor standards is that it does not tell us anything on whether and how these standards are observed in actual reality. Ratification is cheap since the ILO lacks both comprehensive mechanisms for monitoring and binding enforcement measures. [Botero et al. \(2003\)](#) provide an improvement since they look at actual domestic laws, whereas ILO conventions can be ratified, but never translated into domestic law. However, contrary to [Botero et al. \(2003\)](#), the measure we employ looks at both *de jure* and *de facto* violations of FACB rights, with an emphasis on the latter, which is important since it is actual reality that matters, not what is said in legal regulations, which are all too often ignored or violated in reality. [Busse's \(2004\)](#) analysis is problematic as the dependent variables, with the exception of the child labor measures, are far removed from the underlying aspect of labor rights. For example, the Freedom House's civil rights measure is dominated by many items that have nothing at all to do with labor and sex differentials in labor force participation. Secondary school enrolment rates and life expectancy do not necessarily represent discrimination with respect to employment and occupation. The [OECD \(1996\)](#) study has the advantage of directly addressing FACB rights, but the measure used is crude and limited to a much smaller sample than is the case here (see below) and the OECD analysis is entirely qualitative, from which no general conclusions can be drawn.

The enormous effort [Mosley and Uno \(2005\)](#) have expended in creating their own time-varying measure of FACB rights is admirable despite the fact that it is available for far fewer countries than [Kucera's \(2002\)](#) time-invariant measure. Unfortunately, they do not report a bivariate correlation coefficient between theirs and Kucera's measure or report period averages for countries, which makes an evaluation of their competing measure somewhat difficult.

Our main concerns with their analysis are threefold: First, they do not include year-specific time dummies or at least a year trend to account for global changes in either FACB rights or reporting on FACB rights violations. Their FACB measure and the variables of globalization are trending over time and are possibly non-stationary, which means that the results can be spurious. Year-specific time dummies would not have solved, but at least mitigated the problem. Second, unlike our analysis, they do not tackle potential reverse causality with the help of instrumental variable regression analysis. Third, having access to a time-varying measure would have allowed them to tackle a serious potential problem that also afflicts our own analysis, namely, country-specific unobserved heterogeneity, but since no fixed effects analysis is undertaken, this represents an opportunity not taken.

3. DETERMINANTS OF THE RIGHT TO FREE ASSOCIATION AND COLLECTIVE BARGAINING

It is easy to see why globalization might hurt labor standards. Indeed, the “received wisdom” of globalization critics is intuitively plausible and understandable by lay people. Surely, higher labor standards raise the costs of labor, rendering the country less competitive and less attractive to foreign investors. In order to remain competitive and retain or attract FDI, labor standards need to be relaxed. Hence, globalization should be associated with downward pressure on labor standards.

This seemingly persuasive argumentation is less convincing on closer inspection, however, particularly when it comes to labor rights such as FACB rights that relate to the process of determining outcomes. Even with respect to outcome-related labor standards, globalization need not lead to a lowering of such standards. To start with, in perfectly competitive markets, workers will be remunerated with their marginal product. If higher labor standards raise the costs to employers, then some other aspect of the remuneration package needs to be lowered, for example, in the form of lower take-away wages, leaving the overall labor cost approximately the same (Freeman, 1994). Of course, markets in general and labor markets in particular rarely concur with the textbook ideal of perfectly competitive markets. But there are other reasons as to why higher labor

standards need not increase labor costs. One is the idea that higher labor standards might raise the productivity of the work force (Martin & Maskus, 2001). Similar to the idea of “efficiency wages,” higher labor standards and the feeling of empowerment that comes with it can induce employees to be more motivated and productive workers who are more willing to invest in work-relevant human capital.

Such arguments are supported by qualitative evidence. Wages and labor standards tend to be higher in more export-oriented sectors in developing countries (Maskus, 1997). Within an export-oriented sector, labor conditions tend to be better in firms more involved in export, at least in the case of the US top 10 importing developing countries (Aggarwal, 1995). In a review of the state of labor standards in East Asia, Manning (1998, p. 138) comes to the conclusion that “wages and working conditions have tended to be better in most larger, foreign firms in electronics, chemical, and metals/machinery, than they have been elsewhere in the economy.” This conclusion is supported more widely by the available qualitative evidence reviewed by Brown, Deardorff, and Stern (2003).⁴ Surely, this is not because export-oriented or foreign-owned companies are run by a more altruistic management. Rather, the higher labor standards in these companies are likely to be seen as necessary to produce products efficiently and at sustained levels of high quality. Export-oriented and foreign-owned firms also often exist in more advanced and more skill-intensive sectors of the economy (Maskus, 2003). In addition, foreign-owned firms might also employ superior technologies compared to their domestically owned counterparts. This raises the marginal product of labor allowing companies to grant higher labor standards.

Countries with economies more closely integrated into global markets can be more vulnerable to economic shocks stemming from external risks. Many argue and provide supporting evidence that more open economies have higher government consumption expenditures in order to shield the population at large and the workforce in particular from such risks (Garrett, 1998; Rodrik, 1996b). Extending this line of argument, it is possible that governments grant higher FACB rights in order to compensate the labor factor for its increased vulnerability to external economic shocks.

Another way in which trade openness and FDI can improve labor standards is via an

income effect (Casella, 1996). This presupposes that trade liberalization and increased FDI lead to an increase in income and that labor standards are a normal good (income elasticity above zero). Contrary to policy makers' strong belief in the income-enhancing effect of trade liberalization, the empirical record is not so clear (Rodríguez & Rodrik, 2000; Rose, 2002). Even in the case of FDI, the evidence is often disputed (Borenstein, DeGregorio, & Lee, 1998; De Soysa & Oneal, 1999).

The second assumption (labor standards as a normal good) is intuitively plausible. It is generally accepted that labor standards tend to be higher in richer than in poorer countries. However, as mentioned already, such a presumption does not necessarily hold for core or fundamental labor standards. Indeed, it holds even less for FACB rights, for which it is hard to see how a country's level of economic development can serve as an excuse for not granting it. This makes them different to the effective abolition of child labor, which might be intrinsically linked to poverty so that governmental bans, even if sincere, might not make much actual difference (Neumayer & De Soysa, 2005). Freeman (1994, p. 89) distinguishes between "standards that specify processes for determining labor outcomes (freedom of association, use of slave or convict labor) and standards that specify those outcomes (minimum wages, occupational health, and safety)," stating that many "process-related standards can be met without high levels of income and thus might best be viewed as fundamental social rights."

Globalization might have a positive impact on labor standards also via institutional and norm convergence. Sachs and Warner (1995) argue that globalization is about more than just market integration and induces integrated countries to harmonize institutional and other regulatory arrangements. Given that developed countries dominate the international economic system and generally have high labor standards, one can expect that their higher standards provide the role model to which countries with lower standards are moving toward. Such policy contagion dynamics working via communication, learning, imitation, and altered reputation payoffs are well established in the literature on the diffusion of economic policies in globalized markets (Simmons & Elkins, 2004). With respect to reputation effects, for example, export-oriented countries with production dominated by foreign investors might find it more difficult to suppress labor stan-

dards as they are under higher scrutiny by the media, consumers, human rights, and other activist non-governmental organizations (NGOs). Since the consumers of the goods produced by foreign investors in many lower standards countries are located in richer countries, companies are increasingly sensitive to how people perceive their brand name (Fung, O'Rourke, & Sabel, 2001). Bernstein (2001) reports that producers in these countries are starting to subscribe to voluntary codes of conduct of good practice with respect to labor standards.

Can the ratification of relevant ILO conventions be expected to have an effect on the extent of respect for labor rights? Do countries sign and ratify international treaties and then enact relevant legislative measures to comply with the treaties' requirements? From a realist international relations perspective, ratification of a convention on paper does not mean anything in actual reality unless there are stringent compliance and enforcement mechanisms in place and powerful countries take an interest in enforcing the rules. The lack of a strong enforcement and sanctioning mechanism for breach of ILO conventions and the resulting reliance on voluntary compliance is widely noted (Block, Roberts, Ozeki, & Roomkin, 2001). It is therefore highly dubious that the ratification of ILO conventions will have any substantive consequence. Indonesia, Syria, and Zimbabwe, for example, have ratified all eight ILO conventions pertaining to core labor standards, but this does not mean that their effective labor standards are high.

In a fully democratic society, statutory labor standards will reflect the preferences of the median voter. However, many countries around the world are less than democratic. Where democracy is lacking or incomplete, capital owners are generally presumed to have a higher impact on the legislative process (Acemoglu & Robinson, 2003). One would therefore expect that FACB rights tend to be suppressed in non-democratic countries (Mas-kus, 2003; Sapir, 1995). Political economy arguments further suggest partisan effects on the legislation of labor standards. The general idea is that political outcomes benefit the political elites and their allies. Given that left-wing governments traditionally have closer links to trade unions and other labor groups than right-wing governments do, one would expect labor standards to be higher in countries governed by left-wing governments (Botero *et al.*, 2003).

Finally, legal theories contend that differences in labor regulation and therefore possibly also in FACB rights are largely shaped by the legal traditions of countries (Botero *et al.*, 2003). Countries with a socialist law tradition can be expected to have very high labor standards—on paper, but not necessarily in reality, at least when it comes to FACB rights as the history of labor relations in socialist countries demonstrates. In countries with a civil law tradition, the state and its governing body is the source of the law. The effect on labor standards is unclear, however, depending on how friendly those in power are toward workers and their rights (see the discussion of partisan effects above). In common law countries, protection of private rights and contracts typically plays a prominent role. One might therefore expect that such countries do not have very stringent labor standards, which interfere with the economic freedom of private individuals. However, there is no reason to expect common law countries to protect FACB rights any less since these rights do not substantively intervene in the rights of employers, but merely establish the rights of free association and collective bargaining for the opposite party, namely labor. The effect of legal systems on FACB rights is therefore unclear in theory.

4. RESEARCH DESIGN

(a) *Dependent variable*

Our dependent variable is a novel and original measure of violations of FACB rights constructed by Kucera (2002), a Senior Research Officer at the ILO's International Institute for Labor Studies. The measure of FACB violation is based on 37 criteria referring both to *de jure* and *de facto* problems with FACB, but emphasizing *de facto* problems. The evaluation criteria are listed in Appendix A. They are mainly based on rights contained in the ILO Conventions No. 87 (Freedom of Association and Protection of the Right to Organize) from 1948 and No. 98 (Collective Bargaining) from 1949 as well as related ILO documents. The criteria were used to evaluate problems and violations of FACB rights from around the mid-1990s described in the International Confederation of Free Trade Unions' (ICFTU) *Annual Survey of Violations of Trade Union Rights*, the US State Department's *Country Reports on Human Rights Practices* and the

ILO's *Reports of the Committee on Freedom of Association*. These three sources are described as "comprehensive descriptive labor rights reports" in a 2004 report to the US National Research Council (quoted in Kucera, 2004, p. 2). Problems identified in any of the evaluation criteria are weighted by 1, 1.25, 1.5, 1.75 or 2 according to their severity and are summed across all criteria for each country. The resulting raw score is rescaled to run from 0 (best) to 10 (worst), with 10 equal to the maximum observed raw score. Note that there is an unweighted version of the index as well, the use of which generates very similar results if employed in our regression analyses (detailed results available upon request). For more detailed information about the FACB measure, see Kucera (2004).

There is of course likely to be measurement error in the dependent variable. Where this measurement error is random, it merely lowers the precision of the estimation via raising standard errors. More problematic, however, is if the dependent variable is non-random. For example, in the ILO reports, complaints from Latin American countries make up a large part since there is a tradition of Latin American trade unions to file complaints with the ILO's Committee on Freedom of Association (Kucera, 2004, p. 10). There is also a clear bias in that the textual sources tend to focus on the formal sector where trade unions are more prevalent, particularly in manufacturing and the industrial sector (Kucera, 2004, p. 9). In the empirical analysis below we will try to mitigate these problems by employing regional dummy variables and two variables that try to capture the share of economic output and employment from manufacturing and industry, respectively. There is also the possibility that some countries are subject to particular scrutiny by the textual sources such that the index might erroneously suggest more violations of FACB rights, whereas there is simply more awareness of such violations. Note that more globalized countries are likely to be under greater scrutiny so that any positive effect globalization might have on such rights is likely to be attenuated in the measure used here.

One way of checking the validity of a measure is comparing it with other available measures. Unfortunately, there are few alternative measures of FACB rights available. The best known is perhaps one provided by the OECD (1996, 2000). It is a rather crude measure, running only from 1 to 4 and is only available for up to 72 countries as opposed to 160 countries

for the measure used here (note that we lose some observations in our regression analysis due to lack of data for the explanatory variables). Interestingly, the bivariate correlation between the two measures is quite high with $r = 0.71$. The regional average scores of FACB rights violations of countries in the sample also seem to be consistent with intuition. Western Europe has the best record (average score of 0.99), followed by Northern America (3.31), Eastern Europe and Central Asia (3.67), Sub-Saharan Africa (4.60), Latin America (5.11), East Asia and the Pacific (5.82) and, in last place, the region of Northern Africa and the Middle East (6.50). In the estimations below, we will take Western Europe as the reference category. Note, however, that the regional dummy variables in the estimations capture regional differences conditional on the presence of the other explanatory variables and therefore need not be consistent with the unconditional regional differences reported above.

(b) *Explanatory variables*

Our indicator of the extent of trade openness is the ratio of the sum of exports and imports to GDP (*TRADE/GDP*). This measure is sometimes criticized for combining the effects of “natural” openness and trade policy (Berg & Krueger, 2003, p. 11). However, in our context, this is less problematic since we are interested in establishing the effect of actual trade openness, whatever its determinants, rather than the effect of liberal trade policy on FACB rights. Also, in additional estimations, we use an index of economic freedom (see below), which heavily draws on liberal policies. As our measure of penetration by FDI we use the accumulated stock of FDI relative to GDP as this measure reflects the lasting impact of such investment accumulated over time rather than the more volatile short-term inward investment flows (*FDISTOCK/GDP*). Accumulated stock to GDP, rather than flow, also reflects the power of the MNCs over domestic actors for shaping the political agendas of governments (Bornschier & Chase-Dunn, 1985).

Critics of globalization argue that globalization is about more than actual trade openness and penetration of the economy with FDI. They argue that globalization imposes a particular set of neo-liberal policies on countries (Mander & Goldsmith, 1996; Mazur, 2000).⁵ To capture this idea, we also include an index of economic entrepreneurial freedom (*ECON-*

FREE), taken from the Canadian Fraser Institute (Gwartney & Lawson, 2003). Due to lack of data on all countries in the sample, this variable is only added as a supplement to our main estimations. The index captures economic policies ranging from government expenditures, taxes and public enterprises, the security of property rights, monetary policy, restrictions on the freedom to exchange with foreigners to governmental regulation of markets, giving higher values to free-market neo-liberal policies. Contrary to trade openness and FDI penetration, this variable is therefore more focused on policies rather than outcomes.

Two important control variables are the share of the labor force employed in the industrial sector (*%INDUSTRYEMPL.*) and the percentage of value added by the manufacturing sector (*%MANUFACT.*), with data taken from World Bank (2003).⁶ The violation of FACB rights is difficult to detect in economies dominated by the rural or urban informal sector. With a larger formal sector, for which the manufacturing share in value added and the industry share in employment are proxy variables, violations of FACB rights are more easily monitored and detected. Per capita income (*GDPPC*) is included to establish whether FACB rights represent a normal good with positive income elasticity (data taken from Heston, Summers, & Aten, 2002). To test whether ratification of relevant ILO conventions has an impact, we include dummy variables of whether a country had ratified the ILO Conventions 87 and 98 by 1994 (*CONVRAT87* and *CONVRAT98*). This information is provided by the ILO's Database of International Labor Standards (www.ilo.org/ilolex/english/). Data on political rights from Freedom House (2004) are taken as our measure of *DEMOCRACY*.⁷ This index is based on expert judgment on the freeness and competitiveness of the electoral process, political participation, and political pluralism. The World Bank's (2002) Database of Political Institutions provides the source for our measure of *GOVLEFT*, the share of years, during the period 1990–94, in which the chief executive's party was of left-wing political orientation (mainly communist, socialist, and social democratic parties). Unless otherwise specified, the variables are averages over the years 1990–94. The average is taken to reduce the impact of single years and increase sample size and the end year is 1994 since the dependent variable captures FACB rights from the mid-1990s.

Table 1. *Descriptive variable information and bivariate correlation matrix*

Variable	Obs	Mean	Std. dev.	Min	Max
FACB rights violation	139	4.20	2.87	0	10
<i>TRADE/GDP</i>	139	75.95	45.83	16.28	359.76
<i>FDISTOCK/GDP</i>	139	14.70	15.87	0.09	90.92
<i>ECONFREE</i>	115	5.60	1.70	2.30	8.80
<i>ln GDPPC</i>	139	8.41	1.13	5.74	10.47
<i>%MANUFACT</i>	139	18.83	10.56	4.01	60
<i>%INDUSTRYEMPL</i>	139	23.10	11.60	0.90	54.74
<i>DEMOCRACY</i>	139	4.55	2.14	1	7
<i>GOVLEFT</i>	139	0.30	0.41	0	1
<i>CONV87RAT</i>	139	0.67	0.47	0	1
<i>CONV98RAT</i>	139	0.72	0.43	0	1
Western Europe	139	0.14	0.35	0	1
Northern America	139	0.01	0.12	0	1
East Europe and Central Asia	139	0.14	0.35	0	1
East Asia and Pacific	139	0.12	0.32	0	1
South Asia	139	0.04	0.20	0	1
Middle East and Northern Africa	139	0.10	0.30	0	1
Sub-Saharan Africa	139	0.28	0.45	0	1
Latin America and Caribbean	139	0.16	0.37	0	1
<i>FRENCHCIVILLAW</i>	139	0.45	0.50	0	1
<i>GERMANCIVILLAW</i>	139	0.04	0.19	0	1
<i>SCANDCIVILLAW</i>	139	0.04	0.19	0	1
<i>SOCIALISTLAW</i>	139	0.18	0.39	0	1
<i>COMMONLAW</i>	139	0.29	0.46	0	1

	FACB rights violation	<i>TRADE</i>	<i>FDISTOCK/GDP</i>	<i>ECONFREE</i>	<i>ln GDPPC</i>	<i>%MANUFACT</i>	<i>%INDUS TRYEMP</i>	<i>DEMOCRACY</i>	<i>GOVLEFT</i>	<i>CONV87RAT</i>
<i>TRADE/GDP</i>	-0.32									
<i>FDISTOCK/GDP</i>	-0.14	0.52								
<i>ECONFREE</i>	-0.58	0.21	0.09							
<i>ln GDPPC</i>	-0.38	0.28	0.11	0.78						
<i>%MANUFACT</i>	0.06	0.12	-0.18	0.15	0.36					
<i>%INDUSTRYEMPL</i>	-0.16	0.27	-0.01	0.41	0.60	0.31				
<i>DEMOCRACY</i>	-0.53	0.08	0.01	0.62	0.57	-0.04	0.32			
<i>GOVLEFT</i>	-0.09	-0.13	0.00	-0.06	-0.17	-0.10	-0.13	0.03		
<i>CONV87RAT</i>	-0.19	-0.07	-0.14	0.13	0.19	0.04	0.12	0.26	0.08	
<i>CONV98RAT</i>	-0.03	0.02	-0.01	-0.06	-0.05	-0.06	-0.02	0.04	-0.00	0.42

As further control variables, we include regional dummies following [World Bank \(2003\)](#) classification for Western Europe, Sub-Saharan Africa, Northern Africa and the Middle East, Eastern Europe and Central Asia, South Asia, East Asia and the Pacific, and Northern America in order to capture some crude cultural, historical differences and differences in labor force skills. Western Europe represents the omitted category. Finally, we also include legal system dummy variables, distinguishing common law, Socialist, French civil, German civil, and Scandinavian civil legal systems ([La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999](#)). Common law countries represent the omitted category. [Appendix B](#) lists the countries included in the study together with their regional classification as well as their score on [FACB](#) rights violation. [Table 1](#) provides summary descriptive variable information and a bivariate correlation matrix of the main explanatory variables. Note that per capita income is logged in order to reduce the skewness of its distributions. The results reported below are practically identical if it is not logged, however. Variance inflation analysis did not suggest a reason for concern with multicollinearity problems.

(c) *Estimation technique*

Clearly, it is possible that trade openness and the extent of a country's penetration by FDI as well as per capita income are endogenous to labor rights (see the literature review above). For this reason, in addition to ordinary least squares (OLS), we also use instrumental variable (IV) regression where we instrument for trade, FDI, and per capita income. In principle, the index of economic freedom, which is used in additional estimations, is also subject to endogeneity, but without good instruments, we assume it to be exogenous. For instruments to be valid, they must be known not to affect labor rights directly other than through the instrumented variables or be affected by it and known to affect trade openness and FDI, but not be affected by it. Valid instruments are typically hard to come by. In our choice, we were inspired by the so-called gravity model of international trade, by the literature on the determinants of FDI location and by geographical explanations of variation in per capita income. The literature on the determinants of FDI is much less specific and consistent, however, than the gravity model is for

the determinants of trade openness or the geographical explanations for variation in per capita income. As instruments we use population size, size of land area, a country's minimum distance to either New York, Rotterdam, or Tokyo, all in natural logs, a dummy variable, which is set to one if a country shares a common language with one of the countries of the Organization of Economic Co-operation and Development, a dummy variable for countries that are landlocked, the sum of bilateral investment treaties (BITs) signed by a country, the share of population that is Protestant or Catholic as well as a dummy variable for predominantly Muslim countries. We see little reason why the demographic and spatial instruments should affect labor rights other than through the instrumented variables, and they are clearly not affected by these rights, nor by the instrumented variables. At the same time, they affect per capita income, trade openness, and, if less so, FDI. In other words, they are good candidates for IV regression. Slightly problematic is the total number of BITs signed, which is included since countries with a higher number of BITs can be expected to attract more FDI ([Neumayer & Spess, 2005](#)). Exogeneity is contestable in this case, but the results pass standard over-identification tests except for one model in the developing country only sample where it fails at the 10% level, and sensitivity analysis demonstrated that the main results are not affected much if this variable is dropped from the set of instruments. Data for the instrumental variables are taken from [Alešina and Dollar \(2000\)](#), [Hall and Jones \(1999\)](#), [UNCTAD \(2003\)](#), and [World Bank \(2003\)](#).

5. RESULTS

We start with a sample that includes all countries and first estimate a model with OLS. Column 1 of [Table 2](#) presents estimation results from our baseline model. To this, we add the legal system dummies (column 2). Finally, we add the index of economic freedom, which reduces the sample size by 24 countries (column 3). The same models are estimated with IV regression in columns 3–5.

Across all estimations, greater openness to trade is always associated with lower [FACB](#) rights violations. This is not the case for a higher penetration by FDI, which does not matter. When the index of economic freedom

Table 2. *FACB rights violation (full sample)*

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	IV	IV	IV
<i>TRADE/GDP</i>	-0.018 (4.48) ^{***}	-0.017 (4.13) ^{***}	-0.017 (3.79) ^{***}	-0.017 (1.87) [*]	-0.024 (2.79) ^{**}	-0.028 (2.65) ^{***}
<i>FDISTOCK/GDP</i>	0.012 (0.94)	0.013 (0.99)	0.008 (0.44)	-0.057 (1.21)	-0.023 (0.63)	-0.013 (0.32)
<i>ECONFREE</i>			-0.649 (3.24) ^{***}			-0.504 (1.65) [*]
<i>ln GDPPC</i>	-0.721 (1.87) [*]	-0.795 (1.66) [*]	-0.343 (0.59)	0.234 (0.22)	0.515 (0.49)	-0.477 (0.42)
<i>%MANUFACT</i>	0.071 (3.25) ^{***}	0.071 (3.34) ^{***}	0.044 (1.50)	0.052 (1.55)	0.051 (1.58)	0.040 (1.10)
<i>%INDUSTRYEMPL.</i>	0.049 (1.97) [*]	0.056 (2.02) ^{**}	0.051 (1.70) [*]	0.040 (1.25)	0.036 (1.22)	0.064 (1.94) [*]
<i>DEMOCRACY</i>	-0.589 (4.83) ^{***}	-0.571 (4.44) ^{***}	-0.452 (3.05) ^{***}	-0.718 (4.06) ^{***}	-0.732 (4.58) ^{***}	-0.468 (2.49) ^{**}
<i>GOVLEFT</i>	-0.787 (1.83) [*]	-0.748 (1.72) [*]	-0.621 (1.34)	-0.531 (1.01)	-0.562 (1.16)	-0.691 (1.40)
<i>CONV87RAT</i>	0.082 (0.19)	0.072 (0.16)	-0.343 (0.60)	-0.030 (0.06)	0.066 (0.15)	-0.307 (0.53)
<i>CONV98RAT</i>	-0.155 (0.33)	-0.309 (0.57)	-0.177 (0.32)	0.000 (0.00)	0.020 (0.03)	-0.230 (0.37)
North America	1.832 (1.27)	2.032 (1.22)	2.241 (1.45)	1.557 (1.41)	0.724 (0.51)	1.034 (0.74)
East Europe and Central Asia	-0.114 (0.16)	0.411 (0.36)	1.151 (0.79)	0.141 (0.11)	0.081 (0.07)	1.241 (0.99)
East Asia and Pacific	2.585 (3.47) ^{***}	2.942 (3.54) ^{***}	2.076 (2.31) ^{**}	3.656 (2.92) ^{***}	3.531 (3.51) ^{***}	2.269 (2.39) ^{**}
South Asia	2.694 (2.30) ^{**}	2.908 (1.87) [*]	0.660 (0.40)	3.410 (1.83) [*]	3.624 (1.73) [*]	-0.320 (0.19)
Middle East and Northern Africa	0.751 (0.88)	0.640 (0.69)	-0.676 (0.74)	1.431 (1.21)	1.159 (1.09)	-0.623 (0.75)
Sub-Saharan Africa	0.192 (0.21)	0.082 (0.07)	-1.125 (0.90)	2.217 (1.10)	2.137 (1.08)	-1.452 (0.95)
Latin America and Caribbean	2.832 (3.97) ^{***}	2.671 (3.21) ^{***}	1.412 (1.55)	3.956 (3.30) ^{***}	3.568 (3.14) ^{***}	1.337 (1.47)
<i>FRENCHCIVILLAW</i>		0.495 (0.80)	0.373 (0.59)		-0.023 (0.03)	-0.123 (0.18)
<i>GERMANCIVILLAW</i>		-0.737 (0.84)	-0.351 (0.44)		-2.097 (1.89) [*]	-1.668 (1.74) [*]
<i>SCANDCIVILLAW</i>		0.583 (0.62)	0.856 (0.88)		-0.946 (0.77)	-0.230 (0.20)
<i>SOCIALISTLAW</i>		-0.414 (0.32)	-1.176 (0.77)		0.212 (0.12)	-2.100 (1.35)
Countries	139	139	115	139	139	115
(Adjusted) <i>R</i> -squared	0.50	0.49	0.53	0.42	0.48	0.56
Hansen <i>J</i> statistic over-identification test				5.11 (0.53)	8.24 (0.22)	6.42 (0.38)

Notes: Ordinary least squares (OLS) and instrumental variable (IV) regressions. Absolute *t*-values or *z*-values in parentheses. Standard errors robust toward arbitrary heteroscedasticity. Constant included, but not reported. Hansen *J* statistic over-identification test is asymptotically chi-sq. distributed under the null of exogeneity, with *p*-values reported in brackets.

* Significant at the 0.1 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 3. *FACB rights violation (developing countries only)*

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	IV	IV	IV
<i>TRADE/GDP</i>	-0.021 (4.92)***	-0.020 (4.45)***	-0.018 (4.12)***	-0.025 (2.70)***	-0.023 (2.49)**	-0.035 (3.33)***
<i>FDISTOCK/GDP</i>	0.014 (1.01)	0.016 (1.11)	0.008 (0.45)	-0.011 (0.34)	-0.012 (0.35)	0.013 (0.33)
<i>ECONFREE</i>			-0.625 (2.53)**			-0.546 (2.16)**
<i>ln GDPPC</i>	-0.619 (1.36)	-0.750 (1.43)	-0.511 (0.81)	-0.524 (0.66)	-0.367 (0.43)	-0.068 (0.07)
<i>%MANUFACT</i>	0.073 (3.16)***	0.073 (3.24)***	0.054 (1.70)*	0.071 (2.40)**	0.066 (2.22)**	0.042 (1.00)
<i>%INDUSTRYEMPL.</i>	0.054 (2.00)**	0.058 (1.97)*	0.060 (1.78)*	0.061 (2.30)**	0.056 (2.07)**	0.061 (1.95)*
<i>DEMOCRACY</i>	-0.558 (4.55)***	-0.543 (4.15)***	-0.400 (2.59)**	-0.571 (4.16)***	-0.595 (4.16)***	-0.441 (2.54)**
<i>GOVLEFT</i>	-0.793 (1.57)	-0.671 (1.27)	-0.572 (0.98)	-0.785 (1.51)	-0.524 (0.95)	-0.448 (0.73)
<i>CONV87RAT</i>	0.264 (0.58)	0.220 (0.48)	-0.251 (0.39)	0.196 (0.43)	0.276 (0.61)	-0.202 (0.36)
<i>CONV98RAT</i>	-0.273 (0.52)	-0.413 (0.71)	-0.259 (0.40)	-0.248 (0.48)	-0.359 (0.65)	-0.125 (0.20)
East Europe and Central Asia	-0.442 (0.75)	0.427 (0.42)	1.617 (1.20)	-1.068 (1.46)	0.131 (0.14)	1.371 (1.15)
East Asia and Pacific	2.925 (3.76)***	3.200 (3.78)***	2.910 (2.60)**	2.818 (3.23)***	3.370 (4.19)***	2.746 (2.20)**
South Asia	2.572 (2.21)**	2.711 (1.81)*	1.203 (0.74)	1.991 (1.49)	2.203 (1.33)	0.155 (0.09)
Middle East and Northern Africa	0.552 (0.75)	0.452 (0.57)	-0.224 (0.26)	0.190 (0.25)	0.329 (0.43)	-0.705 (0.78)
Sub-Saharan Africa	0.137 (0.15)	-0.116 (0.11)	-0.739 (0.59)	0.030 (0.03)	0.202 (0.16)	-1.107 (0.73)
Latin America and Caribbean	2.505 (4.08)***	2.316 (3.21)***	1.800 (2.21)**	2.233 (2.82)***	2.297 (2.86)***	1.055 (1.05)
<i>FRENCHCIVILLAW</i>		0.538 (0.82)	0.577 (0.89)		0.099 (0.13)	0.069 (0.10)
<i>GERMANCIVILLAW</i>		0.334 (0.38)	0.107 (0.12)		-0.749 (0.65)	-1.135 (0.98)
<i>SOCIALISTLAW</i>		-0.722 (0.55)	-1.331 (0.86)		-1.100 (0.80)	-1.998 (1.30)
Countries	116	116	92	116	116	92
(Adjusted) <i>R</i> -squared	0.41	0.40	0.42	0.46	0.47	0.49
Hansen <i>J</i> statistic over-identification test				9.72 (0.14)	10.8 (0.06)	8.07 (0.15)

Notes: Ordinary least squares (OLS) and instrumental variable (IV) regressions. Absolute *t*-values or *z*-values in parentheses. Standard errors robust toward arbitrary heteroscedasticity. Constant included, but not reported. Hansen *J* statistic over-identification test is asymptotically chi-sq. distributed under the null of exogeneity, with *p*-values reported in brackets.

* Significant at the 0.1 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

is added in columns 3 and 6, respectively, it is significant and negatively associated with

FACB rights violation. Per capita income is marginally significant with a negative sign only

in columns 1 and 2. As expected, we find that more FACB rights violations are often detected in economies with a higher share of the manufacturing sector and with higher industrial employment as a share of total employment. Democracies have lower FACB rights violations. The dummy variable indicating whether the chief executive's party is left-wing oriented always has the expected negative sign, but is statistically significant only in columns 1 and 2. The ratification of neither ILO Convention 87 nor Convention 98 matters, confirming our suspicion that ratification of these treaties has no actual effects due to the weak enforcement mechanisms. South Asian, East Asian, and Pacific as well as Latin American and Caribbean countries often have more FACB rights violations than Western European countries, which are the reference category. Otherwise there are no statistically significant regional differences conditional on the other explanatory variables. Despite substantial differences in the unconditional regional average between Sub-Saharan Africa as well as the Middle East and Northern Africa on the one hand and Western Europe on the other, these differences are accounted for by the explanatory variables to an extent that renders the respective regional dummy variables insignificant. Interestingly, some of the regional dummy variables become insignificant once the index of economic freedom is included in the estimations, which suggests that some of the regional variation in FACB rights violation might actually reflect variation in entrepreneurial economic freedom. By and large, the legal system dummies do not assume statistical significance, which confirms the ambiguous effect of legal tradition suggested by theory.

Are our results driven by the inclusion of developed countries in the sample? In Table 3, we drop Canada, the United States, Western Europe (with the exception of Malta and Cyprus), Japan, Australia, and New Zealand from the sample. Results are generally consistent with the ones from the full sample. In particular, greater trade openness and economic freedom are associated with less FACB rights violation also in the developing world. The control variables test pretty much as before, sometimes marginally losing their statistical significance due to the reduction in sample size and therefore lower variation in the data. Overall, the results reported in Table 3 demonstrate that the effect of globalization on FACB rights is not contingent on the presence of developed countries in the sample.

6. CONCLUSION

Does globalization lead to an erosion of the rights to free association and collective bargaining? Given our cross-national research design, we have no definite answer to this question. In particular, we can only control for regional heterogeneity with regional dummy variables, but not for unobserved country-specific fixed effects. If anything, however, our regression analysis suggests that countries that are more open toward trade are more protective of FACB rights than countries with more closed economies. This effect is robust across a number of model specifications and sample sizes and upholds in instrumental variable regression. The size of the coefficient for the trade openness variable is often higher in IV than in OLS regression, that is, it is higher when the potential feedback effect of FACB rights on trade openness is controlled for. The effect is also substantively important. A one standard deviation increase in trade openness leads to a lowering of the FACB rights violation measure of between roughly 0.78 and 1.28 points in the global sample, rising to between 0.84 and 1.63 in the developing country only sample. This is clearly not negligible given that the rights violation measure runs from 0 to 10, with a mean of 4.3 and a standard deviation of 2.9.

Contrary to trade openness, we find no statistically significant effect of the extent of an economy's penetration with FDI, the second major component of globalization. What could explain this finding? FDI into the manufacturing sector is possibly more beneficial to FACB rights than FDI into the natural resource sector, which has a bad reputation due in large part to the nature of political "Dutch Disease" under conditions of resource extraction (Auty, 2001). Unfortunately, we have no data on the sectors in which FDI is concentrated in each country, but we know that a lot of foreign investment still goes into mining and other primary sector activities and the ratio of FDI stock to GDP is bound to be affected by the capital intensity of extractive activity compared with labor-intensive manufacturing.

We also found that an index of economic freedom, which gives higher values to neo-liberal free-market policies, the promotion of which critics argue forms part of globalization, to be associated with better FACB rights protection. This finding disperses concerns that countries that grant freedom to capitalists restrict the rights of the other factor of production, namely

labor. Instead, our results suggest complementarity.

Some of the results on our other variables are also interesting. We find no evidence that FACB rights protection is subject to a minimum level of economic development. In other words, wealth does not seem to be important for FACB rights unlike in the case of child labor where there is consistent evidence to suggest that poverty matters (Neumayer & De Soysa, 2005). We find that democracies have better FACB rights, which provides yet another normative argument against autocratic political decision making. The ratification status of the relevant ILO Conventions 87 and 98 does not matter. This confirms the suspicion of many that these conventions do not have much actual effect in reality. It also provides further reason to treat with great caution studies, which take ratification of such conventions as a measure of labor rights.

Maskus (2003) contends that the effect of globalization on labor standards cannot be tested conclusively. We agree with this. However, in this article, we have attempted to do our best to deal with the two reasons he invokes for his statement. First, we have used instrumental variable estimation to deal with the potential reverse causality between labor standards and globalization. Second, we have used a sophisticated measure of violation of FACB

rights that is much richer and contains much more information on actual violations than the number of ratifications of ILO conventions, which is a rather crude and highly questionable measure used generally in the literature. It is also superior to a measure of nominal domestic laws. Our results tentatively suggest that the increased opening of countries toward globalized markets is likely to reduce FACB rights violations than to enhance them. These results support others who link the association between trade openness and higher government spending to competitive pressures that compensate workers and enhance the competitiveness of the economy with higher investments in human capital (Garrett, 1998; Rodrik, 1996b)—it seems that governments may compensate workers not only with higher government expenditures, but also with better protection of FACB rights. It is entirely possible, of course, that globalization reduces workers' bargaining power due to capital's increased mobility and puts downward pressure on outcome-related labor standards, which are outside the realm of this paper's analysis.⁸ However, when it comes to the fundamental process-related labor standard of having the right to determine labor outcomes via free association and collective bargaining, globalization seems to be good rather than bad news for labor.

NOTES

1. The facts of wage losses and unemployment are relatively undisputed. What is contested, however, is what drives the facts. Is it increased trade with low labor standards countries? Or is it mainly due to technological change and other factors favoring the pay-off to the highly skilled part of the labor force? The basic Heckscher-Ohlin trade model would indeed predict that increased trade with countries with an abundance of unskilled labor and the specialization in skill-intensive production in developed countries leads to relative losses for the unskilled parts of the labor force. Also, Rodrik (1996a) points out that in more closed economies firms find it easier to pass some of the economic costs of high labor standards on to consumers, but in more open economies, they will not be able to do so thus increasing their demand for lower labor standards. Brown (2001, p. 99), in a review of the evidence, comes to the conclusion that "the bulk of the evidence supports the argument that skill-biased technological change is more important than trade as an explanation." However, it is concep-

tually and empirically extremely difficult to tell whether this skill-biased technological change would have occurred in the first place without increased competition from countries abundant in unskilled labor.

2. See Maskus (1997) for a discussion on whether higher freedom of association rights decrease or increase economic efficiency in an economy.

3. Mah (1997) also analyzes the effect of ILO Convention ratification on export performance, finding some evidence for a negative effect on performance. However, contrary to Rodrik (1996a, 1996b), he does not include a comprehensive set of control variables and his results are therefore likely subject to omitted variable bias. Rodrik's results are by and large confirmed by Dehejia and Samy (2004). In a developing country only sample, they find some evidence that a higher number of ILO convention ratifications lower export performance as measured by the log of exports divided by GDP, but no

significant result for other measures of the stringency of labor standards, which they regard as “more realistic” (Dehejia & Samy, 2004, p. 191).

4. See also the evidence cited in Graham (2000).

5. There has been much debate among sociologists and political scientists on the effects of internationalization of economies and social outcomes. The neo-marxist, dependency and world-systems theorists argue that trade openness and dependence on FDI strengthen comprador classes in poor countries, which leads to suppression of rights of lower classes and of labor (Cardoso & Faletto, 1979). Some suggest that poor countries should “delink” from the global capitalist system in order to escape the effects of dependency (Amin, 1990; Rothgeb, 1996). Others find that FDI and trade benefit society on dimensions other than just the narrowly economic (Bhagwati, 2004; De Soysa, 2003).

6. Industry includes mining and quarrying (including oil production), manufacturing, electricity, gas and water, and construction. We use manufacturing for value-added and industry for employment as taking industry as the reference for both led to multicollinearity problems.

7. The Freedom House measure has a wider data availability than the competing Polity data from Marshall, Jaggers, and Gurr (2003). Note that our democracy measure relies on the political rights measure from Freedom House only, as the complementary civil liberties measure includes aspects of FACB rights as part of the criteria used to construct the measure. The original score has been reversed such that higher values mean more political rights.

8. See Elliott and Freeman (2003) for an informative discussion.

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5. Seizure or destruction of union premises or property.
- Right to establish and join union and worker organizations*
6. General prohibitions.
 7. General absence resulting from socio-economic breakdown.
 8. Previous authorization requirements.
 9. Employment conditional on non-membership in union.
 10. Dismissal or suspension for union membership or activities.
 11. Interference of employers (attempts to dominate unions).
 12. Dissolution or suspension of union by administrative authority.
 13. Only workers' committees and labor councils permitted.
 14. Only state-sponsored or other single unions permitted.
 15. Exclusion of tradeable/industrial sectors from union membership.
 16. Exclusion of other sectors or workers from union membership.
 17. Other specific *de facto* problems or acts of prohibition.
 18. Right to establish and join federations or confederations of unions.
 19. Previous authorization requirements regarding the above row.
- Other union activities*
20. Right to elect representatives with full freedom.
 21. Right to establish constitutions and rules.
 22. General prohibition of union/federation participation in political activities.
 23. Union control of finances.

APPENDIX A. EVALUATION CRITERIA FOR VIOLATION OF FACB RIGHTS MEASURE OF KUCERA (2002)

Freedom of association/collective bargaining-related civil liberties

1. Murder or disappearance of union members or organizers.
2. Violence against union members or organizers.
3. Arrest, detention, imprisonment, or forced exile for union membership or activities.
4. Interference with union rights of assembly, demonstration, free opinion, free expression.

Right to collectively bargain

24. General prohibitions.
25. Prior approval by authorities of collective agreements.
26. Compulsory binding arbitration.
27. Intervention of authorities.
28. Scope of collective bargaining restricted by non-state employers.
29. Exclusion of tradeable/industrial sectors from right to collectively bargain.
30. Exclusion of other sectors or workers from right to collectively bargain.
31. Other specific *de facto* problems or acts of prohibition.

Right to strike

32. General prohibitions.
 33. Previous authorization required by authorities.
 34. Exclusion of tradeable/industrial sectors from right to strike.
 35. Exclusion of other sectors or workers from right to strike.
 36. Other specific *de facto* problems or acts of prohibition.

Export processing zones (EPZs)

37. Restricted rights in EPZs.

APPENDIX B. COUNTRIES IN SAMPLE
 WITH FACB RIGHTS VIOLATION SCORE
 AND REGIONAL CLASSIFICATION

Country	FACB rights violation	Region
Albania	4.51	eca
Algeria	4.21	mena
Angola	3.31	ssa
Argentina	7.44	lac
Australia	2.56	eap
Austria	0.00	we
Azerbaijan	0.90	eca
Bahrain	2.86	mena
Bangladesh	8.27	sa
Barbados	1.35	lac
Belarus	6.02	eca
Belize	5.41	lac
Belgium	0.90	we
Benin	1.80	ssa
Bhutan	10.00	sa
Bolivia	8.57	lac
Botswana	2.56	ssa
Brazil	6.17	lac
Bulgaria	3.76	eca
Burkina Faso	1.50	ssa
Burundi	2.56	ssa
Cambodia	4.06	eap
Cameroon	6.92	ssa
Canada	1.35	na
Cape Verde	2.56	ssa
Chad	6.77	ssa
Chile	4.14	lac
China	10.00	eap
Colombia	10.00	lac
Comoros	3.16	ssa
Congo, Dem. Rep.	7.07	ssa
Congo, Rep.	3.76	ssa

Country	FACB rights violation	Region
Costa Rica	7.44	lac
Cote d'Ivoire	4.66	ssa
Croatia	3.23	eca
Cyprus	1.35	we
Czech Republic	2.71	eca
Denmark	1.80	we
Ecuador	7.22	lac
Egypt	5.41	mena
El Salvador	7.22	lac
Equatorial Guinea	10.00	ssa
Estonia	1.95	eca
Ethiopia	7.67	ssa
Fiji	4.81	eap
Finland	0.45	we
France	1.05	we
Gabon	0.90	ssa
Gambia	1.80	ssa
Georgia	0.45	eca
Germany	0.53	we
Ghana	2.11	ssa
Greece	0.90	we
Guatemala	7.52	lac
Guinea	3.01	ssa
Guinea-Bissau	1.65	ssa
Guyana	1.35	lac
Honduras	6.92	lac
Hungary	3.16	eca
India	4.66	sa
Indonesia	9.02	eap
Iran	10.00	mena
Iceland	0.90	we
Ireland	0.00	we
Israel	3.31	mena
Italy	0.45	we
Jamaica	1.50	lac
Japan	3.61	eap
Jordan	3.31	mena
Kazakhstan	3.76	eca
Kenya	5.56	ssa
Kuwait	6.47	mena
Lao PDR	10.00	eap
Latvia	0.90	eca
Lebanon	4.66	mena
Lesotho	4.81	ssa
Lithuania	3.16	eca
Luxembourg	0.45	we
Madagascar	1.65	ssa
Malawi	4.96	ssa
Malaysia	7.82	eap
Mali	2.41	ssa

APPENDIX B—*continued*

Country	FACB rights violation	Region	Country	FACB rights violation	Region
Malta	0.45	we	Slovenia	1.95	eca
Mauritania	4.66	ssa	South Africa	4.51	ssa
Mauritius	3.61	ssa	South Korea	7.07	eap
Mexico	7.37	lac	Spain	1.95	we
Mongolia	2.86	eap	Sri Lanka	3.91	sa
Morocco	6.32	mena	Swaziland	6.77	ssa
Namibia	2.41	ssa	Sweden	0.45	we
Nepal	3.61	sa	Switzerland	0.45	we
Netherlands	0.45	we	Syria	10.00	mena
New Zealand	0.90	eap	Tanzania	3.31	ssa
Nicaragua	3.91	lac	Thailand	4.96	eap
Niger	3.01	ssa	Togo	4.51	ssa
Nigeria	7.97	ssa	Trinidad and Tobago	0.45	lac
Norway	1.35	we	Tunisia	3.46	mena
Oman	2.11	mena	Turkey	9.32	eca
Pakistan	7.22	sa	Uganda	3.91	ssa
Panama	4.81	lac	Ukraine	4.96	eca
Papua New Guinea	1.35	eap	United Kingdom	5.86	we
Paraguay	7.67	lac	United States	5.26	na
Peru	7.97	lac	Uruguay	1.35	lac
Philippines	8.05	eap	Uzbekistan	0.90	eca
Poland	1.80	eca	Venezuela	3.08	lac
Portugal	0.00	we	Vietnam	10.00	eap
Romania	5.71	eca	Yemen	4.96	mena
Russian Federation	6.02	eca	Zambia	7.52	ssa
Rwanda	10.00	ssa	Zimbabwe	5.56	ssa
Saudi Arabia	10.00	mena			
Senegal	4.06	ssa			
Sierra Leone	2.41	ssa			
Singapore	1.80	eap			
Slovak Republic	1.80	eca			

Note: eca: Eastern Europe and Central Asia; eap: East Asia and the Pacific; lac: Latin America and the Caribbean; mena: Middle East and North Africa; na: North America; sa: South Asia; ssa: Sub-Saharan Africa; we: Western Europe.

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