

# REWARDS OF (DIS)INTEGRATION: ECONOMIC, SOCIAL, AND POLITICAL GLOBALIZATION AND FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING RIGHTS OF WORKERS IN DEVELOPING COUNTRIES

KRISHNA CHAITANYA VADLAMANNATI\*

---

A much-debated issue regarding globalization is whether it translates into Free Association and Collective Bargaining (FACB) rights for workers. The author uses Dreher's (2006) globalization index, which gauges globalization on economic, social, and political dimensions, and Mosley's (2011) FACB rights index, which measures 37 aspects of both *practices* and *laws* violations of FACB rights, to examine the impact of globalization on FACB rights of workers. Using panel data for 142 developing countries during the 1985–2002 period, the author finds mixed evidence of the impact of globalization on FACB rights, controlling for a host of relevant factors, including endogeneity concerns using a System-GMM approach. While social globalization is associated with both strengthening laws and enforcing the laws to protect FACB rights, this is not the case for political globalization. In addition, the positive effect of economic globalization on FACB rights is sensitive to estimation specifications.

---

The 2008 global economic downturn has heightened concerns over the social effects of globalization, particularly the impact of globalization on labor rights (see International Labor Organization [ILO] 2009; Baccaro 2010). Over the years, prominent academic scholars such as Bhagwati (1996, 1999, 2004) and Sen (1999) have argued that the global integration process has resulted in increased prosperity and an improvement in labor rights. They, among others (such as Kucera 2002; Flanagan 2006), argued that

---

\*KRISHNA CHAITANYA VADLAMANNATI is a Research Fellow at the Norwegian University of Science and Technology (NTNU). I thank Layna Mosley for making the FACB rights index data available. I thank her, Axel Dreher, Christian Bjørnskov, Indra de Sosya, Jonathon Mosses, Konstantin Wacker, Niklas Potrafke, Noel Gaston, and Ron Davies for providing comments on the initial draft. I thank Jamie Parsons for tight proof editing. Finally, I thank Jack Fiorito and three anonymous referees for their comments and suggestions. Financial assistance for this work from the Göttingen Graduate School of Social Sciences (GGG) is gratefully acknowledged. The data and do-files for replication can be obtained upon request from the author at [krishna.c.vadlamannati@svt.ntnu.no](mailto:krishna.c.vadlamannati@svt.ntnu.no).

KEYWORDS: globalization, FACB rights, endogeneity

---

*ILR Review*, 68(1), January 2015, pp. 3–27

DOI: 10.1177/0019793914555851. © The Author(s) 2014

Journal website: [ilr.sagepub.com](http://ilr.sagepub.com)

Reprints and permissions: [sagepub.com/journalsPermissions.nav](http://sagepub.com/journalsPermissions.nav)

---

those countries engaged in the economic side of the globalization process, namely foreign direct investment (FDI) and trade, are likely to experience high economic growth, technology transfer, and increased levels of employment. This, in turn, leads to a higher level of affluence, which not only benefits developing countries with large labor pools but also creates disincentives for rent-seeking forces that exploit labor and suppress Free Association and Collective Bargaining (FACB) rights in an attempt to maximize economies of scale. Critics of globalization argue that it breeds a sort of negative competition between countries for the business of multinational corporations (MNCs). This competition entails being the cheapest country in which to do business—that is, lowest labor costs or the most lax environmental standards—popularly known as a “race to the bottom” (Rodrik 1997; Stiglitz 2002; Milanovic 2003). This trend is of particular concern when considering labor rights. In this “race to the bottom,” critics of globalization also argue that FACB rights are potentially quashed as they translate into higher labor costs, thus deterring foreign investment (Davies and Vadlamannati 2013). All else being equal, mobile investment would prefer a location with lower costs. As a consequence, governments that seek to attract FDI and trade stifle FACB rights either by curtailing domestic FACB laws or by ignoring rather than penalizing violations of existing laws.

The ILO defines worker rights from the Declaration on Fundamental Principles and Rights at Work adopted by its member states in June 1998. The core rights of workers include freedom of association (right to unionize); effective recognition of the right to collective bargaining (right to bargain and protest); elimination of all forms of forced or compulsory labor; effective abolition of child labor; and elimination of discrimination with respect to employment and occupation. To have a focused analysis, I will concentrate on two of these labor rights: the freedom of association and the right to free collective bargaining (FACB). One argument in the literature is that FACB rights should not affect countries’ competitive advantage and should therefore be acceptable to governments. The counterargument is that the provision of FACB rights increases labor costs by empowering labor unions and associations to resist unfair and unsafe working conditions in their country.

Given that at present anecdotal literature dominates the discussions on the determinants of labor rights in general, it may be no surprise that empirical studies on the effects of globalization on FACB rights are underdeveloped. The existing empirical studies suffer from a number of theoretical and methodological shortcomings. First, studies (for example, Neumayer and de Soysa 2005, 2006) simply use trade openness or FDI as proxies for globalization. These variables may be complementary in some cases but can also be substitutes, even if both are used to gauge the extent to which a country has contact with global market processes. To date, the empirical support for using single indicators to proxy for globalization (such as trade and FDI) remains inconclusive when estimating its impact on basic social rights (see Hafner-Burton 2005). A further criticism is the disproportionate focus on the economic aspects of globalization while the social and political

aspects, and their social consequences, are largely ignored. The term “globalization” is multifaceted, and as a result, researchers need to encompass its multiple dimensions when conducting an empirical analysis. Following this argument, I use a comprehensive index developed by Dreher (2006) that uses social, political, and economic data to capture how globalized a country is in relation to each of these aspects.

Furthermore, I use Mosley’s (2011) FACB rights index to measure FACB rights. Previous studies have used indicators capturing single dimensions, such as labor regulations, ratification of ILO conventions (Botero et al. 2004), rate of worker injuries (Bonnal 2008), and other subjective indices (Cingranelli and Richards 1999). Unlike these single measures, Mosley’s index measures 37 aspects capturing both *practices* and *laws* violating FACB rights. The FACB rights index is disaggregated into two components. The *law* component captures whether the required laws are in place to safeguard the collective rights of workers. An example of this would be whether an industry is legally allowed to impose limits on workers’ right to strike or bargain collectively. The *practices* component captures the actual number of times that FACB rights, as prescribed by the law, are reported as being violated. To the best of my knowledge, with the exception of Greenhill, Mosley, and Prakash (2009), no study has estimated how the three distinctive dimensions of globalization affect the 37 different aspects of laws and practices concerning FACB rights, an important normative policy concern. I also address endogeneity concerns between globalization variables and FACB rights using System-Generalized Methods of Moments (SGMM) estimations with exogenous instruments.

Using panel data for 142 developing countries during the 1985–2002 period, I find mixed evidence on the effects of social, political, and economic globalization on the two aspects of FACB rights—laws and enforcement. I find that social globalization is associated with a strengthening of both FACB laws and their enforcement, while the same cannot be said for political globalization. I find economic globalization to have a positive effect on FACB rights that are sensitive to the estimation specification. These results challenge the existing literature, which is optimistic about the positive effects of global market integration on the promotion of FACB rights. The positive impact of social globalization seems to be logical as suggested by scholars focusing on global diffusion of norms in which social globalization becomes a means for promoting norms, the values of democracy, and respect for labor rights in general through learning processes, exchanges of information, and personal interactions (Simmons and Elkins 2004). The main findings suggest that information flows—exchanges of ideas and images and personal contacts—enhance both FACB laws and their enforcement.

### **Globalization and FACB Rights: Causal Relation**

FACB rights of workers are violated for many reasons, and such violations are in fact the outcome of how existing labor market institutions function

(Potrafke 2011). Undeniably, domestic political and economic factors play a key role in labor market outcomes. Of late, external factors such as globalization have also had a considerable impact on issues related to labor, in particular FACB rights. The debate on whether globalization promotes FACB rights is highly polarized. I see globalization not as a factor in and of itself but as a convenient term for explaining a host of simultaneous economic, social, and political processes, which can either positively or negatively influence FACB rights in a country. Previous studies on globalization have focused solely on its economic aspects while ignoring its social and political aspects and their respective consequences on labor rights (e.g., Neumayer and de Soysa 2005, 2006). While economic globalization mainly reflects the flow of goods, services, and capital, social globalization connects people and enables them to exchange ideas and thoughts, as well as to pursue solidarity for shared causes (e.g., human rights, labor rights, wages, and gender equality). Based on previous theoretical and empirical literature, I review the arguments presented by both sides on the impact of globalization on FACB rights.

### **Economic Globalization and FACB Rights**

A considerable amount of literature has sought to address the question of whether economic globalization improves worker rights, particularly FACB. Much of the literature that is concerned with its potential negative effects are centered on the possibility of a race to the bottom in which governments seek to attract FDI and trade by removing policies that may be socially desirable but are unattractive to firms. This concern has been expressed not only in the arenas of taxation and environmental regulation but also in labor rights. There are three causal pathways through which economic globalization could deter both FACB laws and practices. First, economic globalization leads to intense competition between countries to attract FDI and trade (Drezner 2001). The mobility of multinational firms coupled with the desire to generate jobs in the economy provide incentives for competing governments to engage in a race to the bottom in FACB rights in order to remain competitive in international markets (Munck 2002). As nations compete for mobile firms, one fear is that recipient countries will suppress FACB rights as a means to lower costs to attract new investment with the presumption that mobile investment would prefer locations with lower labor costs (Frenkel and Peetz 1998). Görg (2002), Javorcik and Spatareanu (2005), and Dewit, Görg, and Montagna (2009) provided evidence of FDI being deterred by FACB rights and labor costs. Kucera (2002) and Rodrik (1996), among others, found evidence for the opposite effect. If the former group is correct, the natural consequence would be an increase in the incidence of nations passing laws that stifle FACB rights. Another possibility is that countries with labor-friendly laws already in place may still be competing for FDI and trade by turning a blind eye toward violations of those FACB laws (or are simply unable to adequately enforce them). Indeed, Davies and

Vadlamannati (2013) showed that FACB rights in one country were positively correlated with FACB rights elsewhere. This effectively means that a cut in FACB rights in other countries to attract FDI reduces the FACB rights of the country in question. According to Davies and Vadlamannati (2013), this interdependence was stronger in those countries with already low FACB rights.

Second, skeptics also argue that the investments by multinational firms, especially in labor-intensive industries, *ex post facto* enjoy higher bargaining power vis-à-vis some of the host country governments to negotiate on issues related to production costs that threaten exit, forcing the host country governments to reduce FACB rights (Mosley and Uno 2007). In some instances a host country's government may opt to decrease their efforts in enforcing FACB laws rather than draw national and international criticism for subverting pending laws (Davies and Vadlamannati 2013). In such a situation, governments simply ignore violations of FACB rights, thus keeping FACB rights violations hidden from view. Faced with the same exit threats from multinational firms, workers themselves may also be willing to trade their FACB rights to secure jobs and remuneration (Freeman 1994). Rudra (2005) provided an example of Indian unskilled labor willingly accepting less FACB rights in order to remain employed.

Third, the reduction in trade and investment barriers has facilitated the development of global production networks. The objectives of global production networks are to reduce production costs and to improve profit margins. These production networks are owned by multinational firms in which a number of production activities are separated (Mosley 2011). While the production process itself belongs to a multinational firm, the inputs are either bought from another country through global commodity chains or subcontracted to cost-effective local suppliers. FACB is an important aspect of production costs as collective bargaining rights often result in higher labor costs. One way that multinationals can minimize their production costs is by reducing wage demands and other employment benefits through restricting rights to unionize, protest, and pursue free collective bargaining (Rodrik 1996). Three plausible channels may explain how global production networks can adversely affect FACB rights. First, a country that intends to attract investments through subcontracts from multinational firms to increase its export share might pass laws curtailing FACB rights. Second, it is plausible that these subcontracting firms can restrict the FACB rights of workers while the government may intentionally disregard these violations (Davies and Vadlamannati 2013). Third, in most developing countries, FACB laws are not applicable in several labor-intensive industries (such as garments, footwear, retail) that are concentrated primarily in the informal sector. This situation enables firms to manipulate FACB rights because of the absence of labor unions and the difficulty in tracing such violations because of weak enforcement mechanisms (Aggarwal 2005).

Fourth, in subcontracting to local firms and scouting for low-production-cost sites, multinational firms have had a hand in the growing number of

Export Processing Zones (EPZs) in developing countries. These zones are designed to allow export-producing firms to produce goods at the lowest possible cost, which is especially vital to firms that are competing internationally. In many developing countries, such as India and China, such zones have their own set of FACB laws and norms of enforcement that restrict FACB rights. EPZs thus become more attractive for multinational firms. Moreover, firms in these zones typically specialize in producing labor-intensive goods through subcontracting and outsourcing, industries that are notorious for their susceptibility to labor rights violations (Moran 2002).

The proponents of globalization see the opposite case as being true; namely, the competition that comes with globalization provides incentives for governments to strengthen FACB rights by passing laws that protect FACB rights and improve domestic regulatory capacity to oversee enforcement (de Soysa and Vadlamannati 2010). Economic globalization exposes multinational firms, their subcontractors, and the entire supply chain to international scrutiny, which demands that they demonstrate their compliance with domestic laws protecting FACB rights (Greenhill et al. 2009). In this way, multinationals may be forced to provide evidence that each link in their supply chain meets certain standards, thereby requiring that potential host countries first meet these standards before being eligible to be part of the chain. Thus, to be competitive and to increase FDI and exports, governments will seek to pass laws that meet international standards and that develop effective monitoring systems to uphold FACB rights. Guthrie (2006) provided evidence that local Chinese suppliers were required to improve the FACB rights and working conditions of laborers in their factories before being able to join the production network of several multinational firms operating there. These changes helped lead to the creation of the Labor Arbitration Commission (LAC) by the Chinese government.

The rewards of economic globalization can also be derived from basic international trade models such as Heckscher-Ohlin.<sup>1</sup> Accordingly, trade and FDI will benefit those countries with comparatively abundant factors of production. Because developing countries are generally labor rich and capital poor, their openness to trade and FDI is expected to benefit labor while hurting domestic rent-seeking capitalists (see Jakobsen and de Soysa 2006). Since FDI creates quality jobs that are associated with higher wages, better working conditions, and respected FACB rights, the labor involved benefits from the process of economic globalization. Critics question, however, whether increases in wages as a result of economic globalization actually translate into greater respect for FACB rights.

To a large extent, the positive effects of economic globalization on FACB rights are also associated with spillover effects from foreign affiliates to domestic firms, and from trade to domestic income (Desai, Foley, and Hines 2005). The diffusion of some of the best labor rights practices, including

---

<sup>1</sup>A general equilibrium mathematical model developed by Eli Heckscher and Bertil Ohlin at the Stockholm School of Economics.



that of FACB rights, occurs when best management practices are brought by the multinational firms into host countries, which are then passed on to domestic firms through supply chain collaborations (Markusen and Venables 1999; Bhagwati 2004). Facing public scrutiny and the associated risk of ruining their brand image and/or experiencing product boycotts, multinationals may go above and beyond what is required by local FACB laws when producing overseas (Neumayer and de Soysa 2006). Also noteworthy is that the multinational firms residing in source countries contribute to a large portion of the exports of developing countries through their global production networks (Bernard and Jensen 2004). Higher “audience costs” in their countries therefore act as an incentive for multinational firms’ affiliates operating in developing countries to include proper labor standards such as FACB rights as a precondition when dealing with their supply chain networks (local suppliers and subcontractors) in the host country (see Greenhill et al. 2009). To summarize, economic globalization is a mixed bag—an assortment having positive and negative attributes—when it comes to respecting FACB rights in developing countries. In this article I will seek to empirically define the direction of its overall effect.

### **Social Globalization and FACB Rights**

While economic aspects of globalization are the focal point of previous research, the social and political aspects of globalization are also worth considering in terms of the global spread of labor norms and their subsequent impact on workers (Finnemore and Sikkink 1998). Aspects of social integration, which come to fruition through globalization, are often ignored. Examples of such integration include greater levels of personal contacts through tourism and immigration (which includes potential new labor); “learning processes” through flows of information, exchanges of ideas, and dissemination of technology through various mediums (e.g., telephones, newspapers, radios, cable TV channels, and Internet); and cultural diversity through international cultural exchanges. All of these play a significant role in influencing both labor and human rights (Dreher, Gaston, and Martens 2008).

The influence of social integration on labor rights in a specific country is mainly through altering “public awareness” and spreading “norms and ideas.” When it comes to ideas on labor rights, new ideas typically disseminate from more affluent to less affluent places, allowing for a possible change in attitude toward labor, gender, and basic human rights (Bhagwati 2004). For instance, developed countries generally exhibit strong compliance with FACB rights and are therefore role models for countries seeking to improve FACB rights, both in terms of laws and how these are enforced. Such diffusion of rights seems to be unimaginable without information flows, communication, imitation, and so forth, which are all part of the social globalization process (Simmons and Elkins 2004). Social integration processes also boost the activities of NGOs and other activists who play an important role in sensitizing governments and bringing media attention to

violations of FACB rights (Finnemore and Sikkink 1998) as well as other workers' rights issues. For instance, with the development of the Internet and other telecommunication technologies, news about crackdowns on workers' protests for FACB rights can be spread quickly and provoke reaction in other countries. Such attention can function as a form of international pressure on countries where poor FACB standards are the norm. This idea of diffusion through public awareness and the spread of norms and ideas is explored by Neumayer and de Soysa (2006) and Finnemore and Sikkink (1998) within the broader definition of labor rights.

Social globalization can have more than a positive effect on practices concerning FACB rights, it can also influence governments to pass laws to protect the FACB rights of workers. The "yardstick model," introduced by Salmon (1987), provides an approximate explanation of the channel through which this impact occurs. This model posits that the tax authority in one jurisdiction depends on what occurs in other jurisdictions because voters judge the performance of their local authority by comparing the local tax rate to those of elsewhere. Similarly, social globalization helps labor unions, associations, and NGOs of one country judge their local government's level of respect for FACB rights by comparing existing FACB laws in their country with those of other countries. This could in turn allow labor unions and NGOs to exert pressure on the government to strengthen existing laws and to pass additional ones that guarantee the FACB rights of workers. A similar situation can also arise in a setting of imperfect information. In such a situation labor associations and other players interested in improving FACB rights can garner information on existing FACB laws in other countries and use this information to pressure the local government to improve its own FACB laws and practices. Social globalization can therefore create real changes in local laws and practices concerning FACB rights.

I therefore hypothesize that, compared to economic globalization, social globalization is more capable of causing real improvements in FACB rights. These positive effects will be minimized, however, in cases where the state exerts greater control over the media, the flow of information, immigration, and the activities of NGOs.

### **Political Globalization and FACB Rights**

Political integration is another dimension of the globalization that binds states to each other, through both bilateral contact and membership in international organizations. To be rated as highly integrated on the political globalization index, countries must have close political ties with other governments; membership in international organizations such as the ILO; be signatories to international treaties; and participate in United Nations' (UN) activities. First, although closer political ties between governments help in solving problems collectively, the actual evidence regarding labor markets, particularly in promoting FACB rights, is not straightforward. On the one hand, a prerequisite for European Union (EU) membership is that



countries have good human rights practices and laws that protect these rights. On the other hand, the Association of South East Asian Nations (ASEAN) often neglects issues related to human and/or labor rights. Second, signatories to international treaties related to labor rights may not necessarily uphold these rights at home (Neumayer 2005). Because of lower compliance in reporting requirements, it is quite plausible that some countries might sign and ratify ILO conventions, yet they may not cooperate with the ILO's Committee for Freedom of Association (CFA) to establish the facts regarding cases on violation of FACB rights filed against the government. Third, politics often dominate UN activities. Given that the permanent members of the UN Security Council include countries such as China and Russia, whose track record on human and labor rights are questionable, labor rights cases may take a backseat to internal politics. Additionally, conscious attempts by the UN and its members to name and shame several rogue regimes as "pariah states" have not actually improved conditions on the ground. Thus, the direction of political globalization's effect on FACB rights seems uncertain.

### **Measuring FACB Rights and Globalization**

To examine FACB rights, I use Mosley's (2011) Labor Rights data set. The index is constructed annually from 1985 to 2002 and covers 148 countries. This composite index, capturing "basic collective FACB rights," follows the template of Kucera (2002), which covers 37 types of labor rights under six different categories. These include 1) the freedom of association and collective bargaining-related liberties; 2) the right to establish and join worker and union organizations; 3) other union activities; 4) the right to bargain collectively; 5) the right to strike; and 6) rights in export processing zones. Although Mosley (2011) claimed that the index captures labor rights in general, the various components included to construct this index actually seem to specifically capture FACB rights and not the entire spectrum of labor rights per se. The index is therefore renamed as "FACB rights index" in this study. Mosley (2011) identified the presence of legal rights in each of the aforementioned six categories and whether these legal rights are upheld by the government and employers (local or foreign firms). Thus, the index covers both the laws and the practices aspects of FACB rights prevailing in a country. The first component of the composite index covers labor laws, capturing whether the laws required to safeguard the FACB rights of workers are in place. An example would be whether the industry is allowed to impose limits on the right to strike or bargain collectively. The second component is FACB practices, which captures whether the laws required to safeguard FACB rights are upheld. Extending the same example as above, this measures whether there are any registered acts that violate FACB laws.

Mosley's (2011) information for coding the FACB rights under each of the six categories was drawn from three different third-party sources. The first source is the U.S. State Department's annual country reports on human

rights practices. The second source consists of reports from both the Committee of Experts on the Application of Conventions and Recommendations (CEACR) and the Committee on Freedom of Association (CFA), which is associated with the ILO. Both the CEACR and the CFA provide annual reports based on information provided by respective governments on complaints filed by labor unions and other employee associations.<sup>2</sup> These reports are reviewed by two independent experts appointed by the ILO in the case of the CEACR, and by nine members with three representatives each from the government, employers, and workers in the case of the CFA. This process helps to ensure that evaluations of governments' performances, in terms of meeting international standards, are as unbiased as possible. The third source comprises annual surveys on trade union rights published by the International Confederation of Free Trade Unions (ICFTU); these provide information on legal barriers against unions, violations of rights, murders, disappearances, and detention of labor union members. The information reported in these annual surveys comes from each of the labor union centers of the respective nations. It is plausible that in some cases not all violations are reported, thereby leading to an unreported bias. Using the information generated by the third party vis-à-vis the government sources could, at least to some extent, mitigate this bias.

The index is constructed using Kucera's methodology, which assigns weights to each of the six aforementioned categories. Table 1 displays the weights allotted by Kucera to each category. If the information from all three sources displays a violation of FACB rights that year, Mosley (2011) assigns a score of 0. If this is not the case, a score of 1 is assigned.<sup>3</sup> This process is carried out for each country for each of the 37 indicators. Individual scores are then combined with the weights given for each category. This process resulted in an FACB laws rights index that was coded on a scale of 0 to 28.5 and an FACB practices rights index ranging from 0 to 27.5. Higher values represent the upholding of FACB rights. The sum of each of these scores is taken as the annual measure of aggregate FACB rights index, which in our sample of developing countries has a mean of 25.7 and a maximum of 37; although the maximum value possible is 37.5. Overall, Mosley's (2011) comprehensive measure is an improvement on previous measurements offered by Bohning (2005) and Cingranelli and Richards (1999) because of its distinction between laws and practices, its multiple third-party sources of information, and its data reliability.

By disaggregating the FACB index, I am able to examine the impact of globalization on each of these two measures separately. I can expect differing effects, because governments may respond to globalization by altering legal frameworks but the enforcement of these laws is affected by various

---

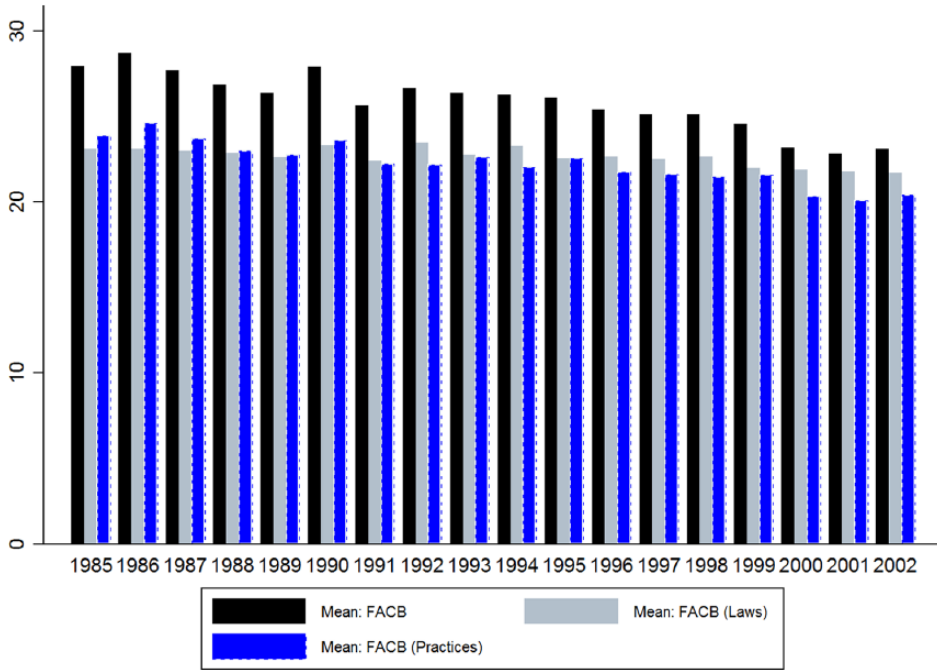
<sup>2</sup>The ILO mandates its member countries to submit these reports every year. Governments are also expected to present reports on how they have addressed the grievances filed by the unions.

<sup>3</sup>If a violation of FACB rights in the respective indicators is recorded more than once (in either one source or multiple sources), the value remains 0.

*Table 1. Mosley and Uno's (2007) FACB Rights Coding Based on Kucera's (2002) Template*

<i>Category</i>	<i>Description</i>	<i>Weights assigned</i>
Freedom of association/collective bargaining related liberties		
1	Murder or disappearance of union members or organizers	2
2	Other violence against union members or organizers	2
3	Arrest, detention, imprisonment, or forced exile for union membership or activities	2
4	Interference with union rights of assembly, demonstration, free opinion, free expression	2
5	Seizure or destruction of union premises or property	2
Right to establish and join union and worker organizations		
6	General prohibitions	10
7	General absence resulting from socioeconomic breakdown	10
8	Previous authorization requirements	1.5
9	Employment conditional on nonmembership in union	1.5
10	Dismissal or suspension for union membership or activities	1.5
11	Interference of employers (attempts to dominate unions)	1.5
12	Dissolution or suspension of union by administrative authority	2
13	Only workers' committees and labor councils permitted	2
14	Only state-sponsored or other single unions permitted	1.5
15	Exclusion of tradable/industrial sectors from union membership	2
16	Exclusion of other sectors or workers from union membership	2
17	Other specific de facto problems or acts of prohibition	1.5
18	(No) Right to establish and join federations or confederations of unions	1.5
19	Previous authorization requirements regarding above row	1
Other union activities		
20	(No) Right to elect representatives in full freedom	1.5
21	(No) Right to establish constitutions and rules	1.5
22	General prohibition of union/federation participation in political activities	1.5
23	(No) Union control of finances	1.5
Right to collectively bargain		
24	General prohibitions	10
25	Prior approval by authorities of collective agreements	1.5
26	Compulsory binding arbitration	1.5
27	Intervention of authorities	1.5
28	Scope of collective bargaining restricted by non-state employers	1.5
29	Exclusion of tradable/industrial sectors from right to collectively bargain	1.75
30	Exclusion of other sectors or workers from right to collectively bargain	1.75
31	Other specific de facto problems or acts of prohibition	1.5
Right to strike		
32	General prohibitions	2
33	Previous authorization required by authorities	1.5
34	Exclusion of tradable/industrial sectors from right to strike	1.5
35	Exclusion of other sectors or workers from right to strike	1.5
36	Other specific de facto problems or acts of prohibition	1.5
Export processing zones		
37	Restricted Rights in EPZs	2
Total score		

*Figure 1. Development of FACB Rights and Subcomponents over Time in Developing Regions*



factors other than just globalization. In other words, strong FACB laws may be undermined by weak enforcement due to factors external to the model resulting in a low FACB practices score, which is reflected in Figure 1. Figure 1 shows the time path of Mosley's (2011) aggregate FACB rights index (in black) and its subcomponents over the 1985–2002 period. As seen, the index capturing practices (in gray) reveal a slow increase in FACB rights violations over time while the index capturing laws (in short dashed lines) protecting FACB rights shows their relative stability.

### Globalization Measurement

Previous studies addressing the issue of globalization and labor rights have used single indicators such as trade and FDI as proxies for the entire process of globalization. The results of these studies have been mixed (Dehejia and Samy 2004; Javorcik and Spatareanu 2005; Neumayer and de Soysa 2005, 2006; Mosley and Uno 2007; Greenhill et al. 2009). These single indicators, however, capture only very specific aspects of economic globalization, which are but a part of the entire process. Trade openness is influenced by geographic factors such as access to the sea, proximity to major markets, and history of colonization. In addition, FDI and trade might complement each other at times but may also act as substitutes for each other in other situations. Taking these drawbacks into consideration, I make use of the

Konjunkturforschungsstelle (KOF) globalization index developed by Dreher et al. (2008) because of its coverage of countries, availability of time-series data, and refined methodology. Dreher's KOF globalization index is the most comprehensive measure of the process, capturing economic, social, and political dimensions of globalization, which are the missing elements in previous single and bidimensional indices. Additionally, the economic globalization part of the index combines many economic indicators as well as trade and investment restrictions that include hidden import barriers, mean tariff rates, taxes on international trade, and capital account restrictions. Another advantage lies in methodology: it uses the principal components method to derive the weights placed on each of the subcomponents rather than assigning weights subjectively. The index is disaggregated into:

- 1) **Economic Globalization**, consisting of two dimensions. The first is *capital flows*, which measure the extent to which a country is exposed to foreign capital and trade with the outside world (including income payments to foreign nationals). The second component includes *investment policies*, which are favorable to foreign capital and trade, providing free market access.
- 2) **Social Globalization**, classified into three categories: *personal contact*, capturing the direct interaction among people living in different countries; *information flows*, representing interactions among people from different countries, which aids in disseminating information and spreading ideas; and *cultural proximity*, measuring the influence of external culture.
- 3) **Political Globalization**, measuring the degree of a country's political integration. This measure involves diplomatic relations with the rest of the world, participating in peace missions and other forms of international relations.

To construct the indices, I transform each variable into an index on a scale of zero to 100, in which higher values denote a greater degree of globalization. When higher values of the original variable indicate a higher level of globalization, the formula  $[(V_i - V_{\min}) / (V_{\max} - V_{\min})] \times 100$  was used for transformation. Conversely, when higher values indicate a lower level of globalization, the formula used was  $[(V_{\max} - V_i) / (V_{\max} - V_{\min})] \times 100$ . Note that for subindices, weights are assigned using Principle Component Analysis. Table 2 highlights the weights allotted by Dreher et al. (2008) to each indicator under the various categories. This measure of globalization and its disaggregated components are scaled as an index ranging from 0 to 100. Higher values represent higher levels of globalization. The index is available for 208 countries over the 1970–2011 period and is updated every year.

### Data and Methods

I estimate pooled Time Series Cross-Section regressions for a sample of 142 developing countries. Accordingly, the model to be estimated is specified as:

Table 2. Weights Assigned in Dreher's (2006) Globalization Indicators

	<i>Indices and Variables</i>	<i>Weights</i>
<b>A.</b>	<b>Economic Globalization</b>	<b>[38%]</b>
	i) Actual Flows	(50%)
	Trade (percent of GDP)	(19%)
	Foreign Direct Investment, flows (percent of GDP)	(20%)
	Foreign Direct Investment, stocks (percent of GDP)	(23%)
	Portfolio Investment (percent of GDP)	(17%)
	Income Payments to Foreign Nationals (percent of GDP)	(21%)
	ii) Restrictions	(50%)
	Hidden Import Barriers	(21%)
	Mean Tariff Rate	(29%)
	Taxes on International Trade (percent of current revenue)	(25%)
	Capital Account Restrictions	(25%)
<b>B.</b>	<b>Social Globalization</b>	<b>[39%]</b>
	i) Data on Personal Contact	(34%)
	Telephone Traffic	(26%)
	Transfers (percent of GDP)	(3%)
	International Tourism	(26%)
	Foreign Population (percent of total population)	(20%)
	International letters (per capita)	(26%)
	ii) Data on Information Flows	(34%)
	Internet Users (per 1000 people)	(36%)
	Television (per 1000 people)	(36%)
	Trade in Newspapers (percent of GDP)	(28%)
	iii) Data on Cultural Proximity	(32%)
	Number of McDonald's Restaurants (per capita)	(37%)
	Number of Ikea (per capita)	(39%)
	Trade in books (percent of GDP)	(24%)
<b>C.</b>	<b>Political Globalization</b>	<b>[23%]</b>
	Embassies in Country	(25%)
	Membership in International Organizations	(28%)
	Participation in U.N. Security Council Missions	(22%)
	International Treaties	(25%)

Note: Weights are derived using Principal Component Analysis and may not sum to 100 because of rounding.

$$(1) \quad LR_{it} = \varphi_1 + \psi_2 H_{it} + \psi_3 Z_{it} + v_t + v_i + \omega_{it}$$

where  $LR_{it}$  is Mosley's (2011) FACB rights for country  $i$  in year  $t$ .  $H_{it}$  is the hypothesis variable(s), namely Dreher et al.'s (2008) economic, social, and political globalization indices for country  $i$  in year  $t$ , and  $Z_{it}$  is a vector of control variables.  $v_t$  represents time fixed effects,  $v_i$  country fixed effects, and  $\omega_{it}$  is the error term. These baseline specifications are estimated using a two-way OLS fixed-effects estimator with heteroskedasticity consistent robust standard errors (Beck and Katz 1995). Note that the Hausman (1978) test favors fixed effect over random effect models. The vector of control variables ( $Z_{it}$ ) includes other potential determinants of labor rights, which are obtained



from the existing literature on the subject. We follow the previous studies of Neumayer and de Soysa (2005, 2006), Mosley and Uno (2007), Greenhill et al. (2009), as well as other comprehensive evaluations of earlier studies on the determinants of basic labor rights (Brown 2001; Busse 2004). Accordingly, I control for the level of development by including per capita income (logged) in US\$ (year 2000 constant prices) sourced from the 2008 World Development Indicators. Following Neumayer and de Soysa (2006), I include manufacturing value added as a share of GDP as it is difficult to identify the violation of labor rights in the primary sector. I include political variables, namely democracy, measured by Freedom House's civil and political liberties' average score<sup>4</sup> on a scale of 1 (full liberties) to 7 (no liberties), and the ideology of the incumbent government. The data on ideology come from Beck et al. (2001), which is coded on a scale of -1 to +1, where a score of +1 implies a left-leaning government in power. Additionally, I include a dummy variable capturing whether a country has signed an International Monetary Fund (IMF) program (taken from Boockmann and Dreher [2003]). Finally, I use the ratification of key ILO conventions to measure whether these agreements have had any measurable impact on FACB rights. Rodrik (1996), Busse (2004), and Neumayer and de Soysa (2006) fail to find any impact of these agreements on labor rights in developing countries. Following Neumayer and de Soysa (2006), I include a variable that is equal to 1 when a country has ratified ILO convention number 87, which deals with freedom of association, and 2 if a country has also ratified ILO convention number 98, which secures the right to collectively bargain. The variable is constructed using the information from the ILO's Database on International Conventions. The data sources, definitions, and descriptive statistics are reported in an appendix (not shown here but available on request).

Finally, a note on endogeneity concerns. I utilize an instrumental variable approach, using Blundell and Bond's (1998) SGMM estimator, with which I instrument for both aggregate globalization and economic globalization measures that are associated with endogeneity concerns. The weighted average of the aggregate globalization and economic globalization indices in the other countries (with GDP of other countries excluding  $i^{\text{th}}$  country as weights) are used as instruments. Full technical discussion on endogeneity and GMM estimation method is described in detail in the appendix (available on request).

### Empirical Results

The results estimating the impact of globalization on FACB rights are presented in Table 3. Tables 4 and 5 capture the disaggregated effects of globalization on FACB laws and practices. Finally, Table 6 reports the SGMM

---

<sup>4</sup>The Polity measure is not considered because the sample includes many small countries for which the index is absent. To avoid losing observations from the study, I use the Freedom House score. Alternatively, when using the Polity index I find no significant changes in the main results.

*Table 3. Impact of Globalization on FACB Rights, 1985–2002*

	(1)	(2)	(3)	(4)	(5)
<i>Variables</i>	<i>FACB</i>	<i>FACB</i>	<i>FACB</i>	<i>FACB</i>	<i>FACB</i>
Constant	41.33*** (4.970)	42.99*** (5.012)	42.57*** (5.011)	42.00*** (4.924)	45.97*** (5.173)
Globalization	0.0517** (0.0245)				
Economic globalization		−0.0111 (0.0178)			−0.0279 (0.0179)
Social globalization			0.0693*** (0.0192)		0.0914*** (0.0191)
Political globalization				0.00855 (0.0140)	−0.00567 (0.0152)
Per capita GDP (log)	−0.673 (0.673)	−0.423 (0.664)	−0.945 (0.698)	−0.565 (0.665)	−1.141 (0.709)
Industry share in GDP	−0.00272 (0.0184)	−0.0441* (0.0240)	0.00358 (0.0181)	−0.00918 (0.0189)	−0.0328 (0.0240)
Freedom House Democracy Index	−1.159*** (0.113)	−1.144*** (0.116)	−1.133*** (0.110)	−1.145*** (0.111)	−1.142*** (0.117)
Left-wing government dummy	0.256 (0.166)	0.404** (0.174)	0.239 (0.168)	0.258 (0.166)	0.381** (0.173)
ILO ratification dummy	0.897** (0.417)	0.486 (0.414)	0.997** (0.427)	0.889** (0.417)	0.589 (0.418)
Participation in IMF program	0.301 (0.278)	0.321 (0.291)	0.315 (0.278)	0.298 (0.279)	0.318 (0.292)
<i>R</i> -squared	0.704	0.682	0.703	0.699	0.684
Hausman Test ( <i>p</i> -value)	0.251	0.744	0.623	0.000	0.038
Country specific fixed effects	Yes	Yes	Yes	Yes	Yes
Time specific fixed effects	Yes	Yes	Yes	Yes	Yes
Number of countries	142	117	143	145	117
Total observations	2,411	1,982	2,429	2,465	1,982

*Note:* Robust standard errors are in parentheses.

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

estimates. In Table 3, columns 1 to 4 assess the impact of globalization and its subcomponents on aggregate FACB rights, while column 5 includes all the subcomponents of globalization in one model. As can be seen, the aggregate globalization index has a statistically significant positive impact on aggregate FACB rights. Note that the aggregate FACB rights index score is a scale ranging from 0 (low rights) to 37.5 (high rights); therefore, a positive sign suggests that an increase in globalization reduces aggregate FACB rights violations. I find that for every 1 point increase in the globalization index, a corresponding 0.05 point increase occurs in the aggregate FACB rights index. Thus, an increase of 1 standard deviation in the globalization index would increase the aggregate FACB rights score by roughly 0.76 points, which is about 9.8% of the standard deviation of the aggregate FACB rights score covering 142 developing countries.

Interestingly, in column 2 I do not find any effect of economic globalization on aggregate FACB rights in developing countries. My results contradict those who argue in favor of economic globalization. I find that it does not have any effect on aggregate FACB rights in developing countries. This suggests that much of the positive significant effects of aggregate globalization on aggregate FACB rights in our sample are driven by the noneconomic components of globalization. These results give support to the mixed-bag view of economic globalization proposed by Neumayer and de Soysa (2006) and Mosley and Uno (2007). Remember that economic globalization can also ostensibly have many indirect effects through affecting the level of income and democracy, which are held constant in the models. These results certainly question the voluminous literature that predicts positive effects of global market integration on aggregate FACB rights (see column 2). Also noteworthy, however, is that the sample of countries comes down from 142 to 117 when using the economic globalization subcomponent. With this caveat, I move to column 3 in which economic globalization is replaced with the social globalization index.

In column 3, social globalization index is shown to have a positive effect on aggregate FACB rights in developing countries. The coefficient is significantly different from zero, at the 1% level, and the substantive impact is roughly half that of the combined globalization index. To be precise, an increase of 1 standard deviation in the social globalization index would increase the aggregate FACB rights score by roughly 1.4 points, which is about 18% of the standard deviation of the average aggregate FACB rights score for all developing countries in the sample. These results suggest that greater social contact and increased flows of information improve aggregate FACB rights. In column 4, I replace social globalization with the political globalization index, which remains statistically insignificant. Finally, in column 5, all three components of globalization are included. Note that the correlation between economic and social globalization is 0.7, suggesting that both are connected. In fact, the subcomponents of social globalization such as information flows and personal contacts are interrelated with the capital and trade flows of economic globalization. As seen, the positive significant effects are actually driven by social globalization, which remains robust to the inclusion of economic as well as political globalization measures.

With respect to the control variables, I find that GDP per capita remains statistically insignificant across the models. With the exception of column 2, value added by industry to GDP fails to gain significance. With respect to democracy, as seen in Table 3, the democracy index is negatively associated with aggregate FACB rights. Note that the measure of democracy used here is from Freedom House wherein a higher value implies absence of civil liberty and political freedom. Thus, a unit increase in the repression of civil liberties and political freedom is associated with a 1.1 point decline in the FACB rights index (see Table 3, column 1). Although in some models I find a positive impact of left-leaning governments on FACB rights, this result is not robust. Similar results can be found for ratification of ILO conventions

Table 4. Impact of Globalization on Laws Protecting FACB Rights, 1985–2002

	(1)	(2)	(3)	(4)	(5)
<i>Variables</i>	<i>FACB laws</i>	<i>FACB laws</i>	<i>FACB laws</i>	<i>FACB laws</i>	<i>FACB laws</i>
Constant	31.43*** (2.930)	33.90*** (3.697)	32.32*** (2.927)	31.91*** (2.403)	35.48*** (3.607)
Globalization	0.0451** (0.0197)				
Economic globalization		0.00381 (0.0152)			-0.00545 (0.0147)
Social globalization			0.0337** (0.0131)		0.0476*** (0.0124)
Political globalization				0.0191** (0.00943)	0.00747 (0.00963)
Per capita GDP (log)	-0.613* (0.372)	-0.732 (0.492)	-0.694* (0.387)	-0.569* (0.310)	-1.158** (0.474)
Industry share in GDP	0.00993 (0.0130)	-0.0165 (0.0133)	0.0106 (0.0130)	0.00731 (0.0134)	-0.00909 (0.0141)
Freedom House Democracy Index	-0.689*** (0.0659)	-0.629*** (0.0674)	-0.676*** (0.0653)	-0.673*** (0.0633)	-0.625*** (0.0680)
Left-wing government dummy	0.124 (0.0928)	0.202** (0.0936)	0.118 (0.0945)	0.119 (0.0912)	0.182* (0.0933)
ILO ratification dummy	0.546*** (0.207)	0.382** (0.176)	0.604*** (0.210)	0.531*** (0.206)	0.414** (0.183)
Participation in IMF program	0.172 (0.181)	0.273 (0.183)	0.178 (0.181)	0.165 (0.180)	0.270 (0.185)
R-squared	0.685	0.618	0.684	0.682	0.620
Hausman Test ( <i>p</i> -value)	0.421	0.998	0.803	0.000	0.473
Country specific fixed effects	Yes	Yes	Yes	Yes	Yes
Time specific fixed effects	Yes	Yes	Yes	Yes	Yes
Number of countries	142	117	143	145	117
Total observations	2,411	1,982	2,429	2,465	1,982

Note: Robust standard errors are in parentheses.

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

98 and 87. I also find no evidence that signing an IMF agreement has an impact on FACB rights.

In Tables 4 and 5, I replicate the specification for Table 3 but use the two subindices of aggregate FACB rights: laws protecting FACB rights (Table 4) and FACB practices (Table 5). For the control variables, as with the combined index, nondemocratic countries have worse FACB practices. Ratification of ILO conventions 98 and 87 along with democracy are associated with better FACB laws. In addition, industrialized states have worse FACB practices although this has no impact on FACB laws. Finally, no effect of IMF programs is seen on either laws or practices concerning FACB rights.

Increases in the aggregate globalization and social globalization indices are associated with an increase in laws protecting FACB rights (see Table 4).

Table 5. Impact of Globalization on Practices of FACB Rights, 1985–2002

	(1)	(2)	(3)	(4)	(5)
<i>Variables</i>	<i>FACB practices</i>	<i>FACB practices</i>	<i>FACB practices</i>	<i>FACB practices</i>	<i>FACB practices</i>
Constant	28.90*** (3.689)	28.09*** (3.357)	29.24*** (3.535)	29.09*** (3.703)	29.49*** (3.354)
Globalization	0.00662 (0.0240)				
Economic globalization		–0.0149 (0.0127)			–0.0225* (0.0121)
Social globalization			0.0356* (0.0190)		0.0438** (0.0176)
Political globalization				–0.0105 (0.00976)	–0.0131 (0.0101)
Per capita GDP (log)	–0.0598 (0.497)	0.309 (0.453)	–0.251 (0.497)	0.00439 (0.513)	0.0167 (0.466)
Industry share in GDP	–0.0126 (0.0101)	–0.0276* (0.0164)	–0.00698 (0.00971)	–0.0165 (0.0101)	–0.0238 (0.0159)
Freedom House Democracy Index	–0.470*** (0.0691)	–0.515*** (0.0790)	–0.458*** (0.0667)	–0.472*** (0.0687)	–0.516*** (0.0793)
Left-wing government dummy	0.132 (0.138)	0.202 (0.147)	0.121 (0.138)	0.138 (0.140)	0.199 (0.145)
ILO Ratification dummy	0.350 (0.255)	0.104 (0.284)	0.393 (0.264)	0.358 (0.256)	0.175 (0.283)
Participation in IMF program	0.129 (0.187)	0.0479 (0.203)	0.137 (0.187)	0.133 (0.187)	0.0479 (0.203)
<i>R</i> -squared	0.614	0.600	0.615	0.609	0.601
Hausman Test ( <i>p</i> -value)	0.061	1.000	0.035	0.000	0.300
Country specific fixed effects	Yes	Yes	Yes	Yes	Yes
Time specific fixed effects	Yes	Yes	Yes	Yes	Yes
Number of countries	142	117	143	145	117
Total observations	2,411	1,982	2,429	2,465	1,982

Note: Robust standard errors are in parentheses.

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

For instance, a standard deviation increase in aggregate globalization index is associated with a 0.63 point increase in FACB laws index. With respect to social globalization, in addition to yardstick competition discussed earlier, the coefficient could also be capturing coordination among labor associations fighting for tougher laws to protect FACB rights. Social globalization enables them to extract information on FACB laws set elsewhere, thus helping them to put pressure on their own governments to revise the existing FACB laws. In terms of FACB practices, however, I find that the social globalization index is the only one that is positive and statistically significant. The positive effects of social globalization on practices concerning FACB rights is consistent with the spread of norms and ideas and public awareness generated through increased people-to-people contact and flows of information. However, the statistical significance of social globalization has come

down from 1% in the case of laws to 5% here. Note that economic globalization remains statistically insignificant in both Table 4 and Table 5. This finding is reasonable because enforcing laws enacted to protect FACB rights depends on several other internal and domestic factors. These results also show how nations choose to apply the laws they have on the books. This also mirrors the differences across the two measures regarding the ILO's FACB rights conventions.

Next, I replicate the results in Tables 3 to 5, controlling for possible endogeneity between FACB rights and aggregate and economic globalization indices using the SGMM method.<sup>5</sup> The Hansen and Arellano-Bond tests and the Arellano-Bond test (1991) do not reject the GMM specifications at conventional levels of significance across columns 1 to 6 in Table 6. I lag FACB rights by two years to avoid second-order autocorrelation. Note that the numbers of instruments employed are sufficiently smaller than the number of countries, thus minimizing the possibility of weak instrumental problems.<sup>6</sup> The results show that aggregate globalization is positive and significantly different from zero, at conventional levels, for both aggregate FACB rights and FACB laws. Although positive, the aggregate globalization index remains statistically insignificant in the case of FACB practices (with *p*-value of 0.12). After controlling for potential feedback from FACB rights, the coefficient value of the globalization index in column 1 (of Table 6) has more than doubled—from 0.05 to 0.15. Conversely, the economic globalization index is now positive and significantly different from zero at conventional levels of significance for all three forms of FACB indices after controlling for other explanatory variables, including the lagged dependent variable.

The results obtained from this analysis highlight two interesting aspects. First, the selected instrument variables have a statistically significant effect on FACB rights with a joint *F*-statistic above 10 (estimated using the two-stage least squares method). Furthermore, the selected instruments also pass additional tests on instrument restriction criteria (see Hansen *J*-statistic). Second, the size of the coefficients for both the globalization and economic globalization variables increased when using the SGMM method (i.e., when the potential feedback effect of labor rights on the respective measures of globalization was controlled for). For example, an increase of 1 standard deviation in the globalization index would increase the aggregate FACB rights index by roughly 2.26 points using the SGMM method, compared to 0.76 points using the OLS fixed-effects method. These effects are different in the case of economic globalization because it is statistically insignificant in the OLS fixed-effects model but turns positive and significantly different from zero at the conventional levels of statistical significance for all three

<sup>5</sup>Note that the SGMM method was also applied to social and political globalization indices although the endogeneity issue may not be applicable in this case. The results show that the positive significant effect of social globalization on all three forms of FACB rights remains intact when using the SGMM method. These results are not shown due to the need for brevity but are available on request.

<sup>6</sup>To minimize the number of instruments, I follow Roodman (2006) in collapsing the instruments matrix.



Table 6. Impact of Globalization on FACB Rights, 1985–2002, System-GMM

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Variables</i>	<i>FACB</i>	<i>FACB</i>	<i>FACB</i> <i>laws</i>	<i>FACB</i> <i>laws</i>	<i>FACB</i> <i>practices</i>	<i>FACB</i> <i>practices</i>
Constant	19.33*** (3.460)	18.63*** (4.183)	13.70*** (3.149)	14.50*** (3.148)	19.61*** (2.778)	21.13*** (2.899)
Lagged dependent variable	0.437*** (0.0366)	0.364*** (0.0415)	0.442*** (0.0469)	0.369*** (0.0539)	0.287*** (0.0444)	0.243*** (0.0495)
Lagged dependent variable ( <i>t</i> -2)	0.119*** (0.0438)	0.0815** (0.0332)	0.142*** (0.0463)	0.0959*** (0.0336)	4.060*** (0.984)	5.638*** (1.266)
Globalization	0.145** (0.0700)		0.0430 (0.0391)		0.0874 (0.0769)	
Economic globalization		0.304*** (0.0962)		0.138** (0.0541)		0.145* (0.0752)
Per capita GDP (log)	-1.369** (0.564)	-2.433*** (0.800)	-0.576* (0.341)	-1.189** (0.483)	-0.657 (0.610)	-1.364** (0.655)
Industry share in GDP	-0.0108 (0.0292)	-0.0467 (0.0497)	-0.0137 (0.0169)	-0.0383 (0.0302)	-0.00700 (0.0248)	-0.0185 (0.0343)
Freedom House Democracy Index	-1.428*** (0.331)	-1.292*** (0.421)	-0.789*** (0.267)	-0.586** (0.259)	-0.698*** (0.256)	-0.760** (0.316)
Left-wing government dummy	0.896*** (0.301)	0.888** (0.418)	0.562*** (0.199)	0.488* (0.259)	0.734** (0.287)	0.678** (0.268)
ILO ratification dummy	-0.573 (0.427)	0.340 (0.494)	0.290 (0.273)	0.779** (0.382)	-1.094** (0.433)	-0.517 (0.371)
Participation in IMF program	0.0915 (0.342)	0.126 (0.363)	0.0670 (0.241)	0.0986 (0.240)	-0.0769 (0.270)	-0.0238 (0.269)
Arellano-Bond test for AR(1): <i>p</i> -value	0.000	0.000	0.000	0.000	0.000	0.000
Arellano-Bond test for AR(2): <i>p</i> -value	0.736	0.991	0.905	0.449	0.338	0.943
Hansen <i>J</i> -statistic ( <i>p</i> -value)	0.414	0.924	0.201	0.526	0.208	0.253
Number of instruments	71	71	71	71	71	71
Country-specific dummies	No	No	No	No	No	No
Time-specific dummies	Yes	Yes	Yes	Yes	Yes	Yes
Number of countries	142	117	142	117	142	117
Total observations	2,167	1,782	2,167	1,782	2,289	1,882

Note: Robust standard errors are in parentheses.

\*\*\**p* < 0.01, \*\**p* < 0.05, \**p* < 0.1

dependent variables in the SGMM estimation. I therefore need to highlight that the overall effects of economic globalization are sensitive to the type of estimation technique employed.<sup>7</sup> It is noteworthy that the drawback of the SGMM estimation method is that it is sensitive to the instruments used and lag structures employed. That said, not addressing the endogeneity

<sup>7</sup>Note that dropping emerging economies from the sample, namely, Brazil, Chile, China, India, Indonesia, Israel, Mexico, South Africa, South Korea, and Turkey, does not alter our main results.

concerns emanating from reverse causality leads to a downward bias in the coefficient of economic globalization measure estimated with OLS specification.

### Conclusion

The impact of globalization on FACB rights is a controversial and widely debated topic in the existing international political economy literature. On the one hand, supporters of globalization argue that growing interdependence among nation states improves the FACB rights of workers in peripheral countries. On the other hand, skeptics of globalization contend that it leads to a race to the bottom, with developing countries' governments lowering FACB rights to remain competitive and attract trade and investment. If this is the case, it jeopardizes the rewards associated with the global integration process. To date, studies dealing with this topic have used only single variables, such as trade or FDI, as proxies for the entire process of globalization. Likewise, previous studies on FACB rights have used indicators that capture only a single dimension of FACB rights. In this study, however, I make use of two comprehensive indices measuring globalization and FACB rights; namely Dreher's (2006) KOF globalization index, which measures globalization based on economic, social, and political dimensions, and Mosley's (2011) FACB rights index measuring 37 aspects of both practices and laws covering FACB rights. To the best of my knowledge, this empirical study is the first to look beyond single measures. Furthermore, I and other scholars have argued that undue attention is given to the economic aspects of globalization, grossly ignoring its political and social aspects and their consequences.

Using the KOF index of globalization and its disaggregate components along with the new FACB rights data set, I find positive effects of aggregate globalization and social globalization on aggregate FACB rights as well as on laws and practices of FACB rights in a sample of 142 developing countries over the 1985 to 2002 period. The positive effect of economic globalization is sensitive to the estimation technique used, while political globalization remains statistically insignificant. These results remain robust after controlling for potential feedback effects from FACB rights to globalization using an SGMM method of estimation. When controlling for endogeneity, aggregate globalization as well as economic and social globalization appear to affect FACB rights (both laws and practices).

Overall, my results confirm two important things. First, globalization needs to be considered as not just a single component (such as FDI or trade) but rather as a multifaceted concept that includes social and political dimensions. Second, my results do not fully support the claims that economic globalization has positive effects on FACB rights, as this result is sensitive to estimation technique used. Although generally disregarded in the existing literature, social globalization appears to have a strong positive influence on FACB rights. While economic globalization reflects primarily the flow of

goods and services, social globalization connects people and promotes the spread of ideas, norms, and civil actions worldwide. Social globalization plays a greater role in influencing both laws and enforcement of laws intended to protect FACB rights. Unfortunately, the FACB rights data used is only available for 142 developing countries (ignoring OECD countries, for example) and does not exist beyond 2002. Future research might be improved through the inclusion of OECD countries with updated data in order to test whether similar results can be found for both developed and developing countries.

## References

- Aggarwal, Aradhna. 2005. The influence of labour markets on FDI: Some empirical explorations in export oriented and domestic market seeking FDI across Indian states. Working Paper. Delhi University, India.
- Arellano, Manuel, and Stephen Bond. 1991. Some tests of specification for panel data: Monte Carlo evidence and application to employment equations. *Review of Economic Studies* 58(2): 277–97.
- Baccaro, Lucio. 2010. Does the global financial crisis mark a turning point for labour? *Socio-Economic Review* 8(2): 341–76.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. What to do (and not to do) with time-series cross-section data. *American Political Science Review* 89(3): 634–47.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. 2001. New tools in comparative political economy: The database of political institutions. *World Bank Economic Review* 15(1): 165–76.
- Bernard, Andrew B., and Bradford J. Jensen. 2004. Why some firms export. *Review of Economics and Statistics* 86(2): 561–69.
- Bhagwati, Jagdish. 1996. The demands to reduce domestic diversity among trading nations. In Jagdish Bhagwati and Robert E. Hudec (Eds.), *Fair Trade and Harmonization: Prerequisites for Free Trade?* Vol. 1, pp. 9–40. Cambridge, MA: MIT Press.
- . 1999. Globalization: Who gains, who loses? In Siebert Horst (Ed.), *Globalization and Labor*. Tübingen: Mohr Siebeck.
- . 2004. *In Defense of Globalization*. Princeton, NJ: Princeton University Press.
- Blundell, Richard, and Stephen Bond. 1998. Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics* 87(1): 115–43.
- Böhning, W. R. 2005. *Labour Rights in Crisis: Measuring the Achievement of Human Rights in the World of Work*. London: Palgrave Macmillan.
- Bonnal, Michaël. 2008. Export performance, labor standards and institutions: Evidence from a dynamic panel data model. *Journal of Labor Research* 31(1): 53–66.
- Boockmann, Bernhard, and Axel Dreher. 2003. The contribution of the IMF and the World Bank to economic freedom. *European Journal of Political Economy* 19: 633–49.
- Botero, Juan, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004. The regulation of labor. *Quarterly Journal of Economics* 119: 1339–82.
- Brown, Drusilla K. 2001. Labor standards: Where do they belong on the international trade agenda? *Journal of Economic Perspectives* 15(3): 89–112.
- Busse, Matthias. 2004. On the determinants of core labour standards: The case of developing countries. *Economics Letters* 83(2): 211–17.
- Cingraneli, David L., and David L. Richards. 1999. Measuring level, pattern, and sequence of government respect for physical integrity rights. *International Studies Quarterly* 43(2): 407–17.
- Davies, Ronald B., and Krishna Chaitanya Vadlamannati. 2013. A race to the bottom in labor standards? An empirical investigation. *Journal of Development Economics* 103: 1–14.
- Dehejia, Vivek, and Yiagadeesen Samy. 2004. Trade and labour standards: Theory and new evidence. *Journal of International Trade and Economic Development* 13(2): 179–98.

- Desai, Mihir A., C. Fritz Foley, and James R. Hines Jr. 2005. Foreign direct investment and the domestic capital stock. *American Economic Review* 95(2): 33–38.
- de Soysa, Indra, and Krishna Chaitanya Vadlamannati. 2010. Does being bound together suffocate or liberate? Testing the effects of economic, social and political globalization and human rights, 1981–2005. *Kyklos* 64(1): 20–53.
- Dewit, Gerda, Holger Görg, and Catia Montagna. 2009. Should I stay or should I go? Foreign direct investment, employment protection and domestic anchorage. *Review of World Economics* 145: 93–110.
- Dreher, Axel. 2006. Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics* 38(10): 1091–1110.
- Dreher, Axel, Noel Gaston, and Pim Martens. 2008. *Measuring Globalization, Gauging Its Consequences*. New York: Springer.
- Drezner, Daniel W. 2001. Globalization and policy convergence. *International Studies Review* 3: 53–78.
- Finnemore, Martha, and Kathryn Sikkink. 1998. International norms and political change. *International Organization* 52(4): 887–917.
- Flanagan, Robert. 2006. *Globalization and Labor Conditions: Working Conditions and Worker Rights in a Global Economy*. New York: Oxford University Press.
- Freeman, Richard B. 1994. A hard-headed look at labour standards. In Werner Sengenberger and Duncan Campbell (Eds.), *International Labour Standards and Economic Interdependence*, pp. 79–92. Geneva, Switzerland: International Labour Office.
- Frenkel, Stephen J., and David Peetz. 1998. Globalization and industrial relations in East Asia: A three-country comparison. *Industrial Relations* 37(3): 282–310.
- Görg, Holger. 2002. Fancy a stay at the Hotel California? FDI, taxation and firing costs. IZA Working Paper No. 665. Bonn, Germany.
- Greenhill, Brian, Layna Mosley, and Aseem Prakash. 2009. Trade-based diffusion of labor rights: A panel study, 1986–2002. *American Political Science Review* 103(4): 169–90.
- Guthrie, Doug. 2006. *China and Globalization*. New York: Routledge.
- Hafner-Burton, Emilie M. 2005. Right or robust? The sensitive nature of repression to globalization. *Journal of Peace Research* 42(6): 679–98.
- Hausman, Jerry A. 1978. Specification tests in econometrics. *Econometrica* 46(6): 1251–71.
- [ILO] International Labor Organization. 2009. Impact of financial crisis on finance sector workers. Issues Paper at the Global Dialogue Forum on the Impact of the Financial Crisis on Finance Sector Workers, pp. 24–25. Geneva.
- Jakobsen, Jo, and Indra de Soysa. 2006. Do foreign investors punish Democracy? Theory and empirics, 1984–2001. *Kyklos* 55(3): 383–410.
- Javorcik, Beata Smarzynska, and Mariana Spatareanu. 2005. Do foreign investors care about labour market regulations? *Review of World Economics* 141(3): 375–403.
- Kucera, David. 2002. Core labour standards and foreign direct investment. *International Labour Review* 141(1–2): 31–69.
- Markusen, James R., and Anthony J. Venables. 1999. Foreign direct investment as a catalyst for industrial development. *European Economic Review* 43: 335–56.
- Milanovic, Branko. 2003. The two faces of globalization: Against globalization as we know it. *World Development* 31(4): 667–83.
- Moran, Theodore H. 2002. *Beyond Sweatshops: Foreign Direct Investment and Globalization in Developing Countries*. Washington, DC: Brookings Institution Press.
- Mosley, Layna. 2011. *Labor Rights and Multinational Production*. Cambridge: Cambridge University Press.
- Mosley, Layna, and Saika Uno. 2007. Racing to the bottom or climbing to the top? Economic globalization and collective labor rights. *Comparative Political Studies* 40(8): 923–48.
- Munck, Ronald. 2002. *Globalization and Labour*. New York: Zed Books.
- Neumayer, Eric. 2005. Do international human rights treaties improve respect for human rights? *Journal of Conflict Resolution* 49(6): 925–53.
- Neumayer, Eric, and Indra de Soysa. 2005. Trade openness, foreign direct investment and child labor. *World Development* 33: 43–63.

- . 2006. Globalization and the right to free association and collective bargaining: An empirical analysis. *World Development* 34(1): 31–49.
- Potrafke, Niklas. 2011. Globalization and labor market institutions: International empirical evidence. Working Paper. University of Konstanz, Germany.
- Roodman, Daniel. 2006. How to do xtabond2: An introduction to “difference” and “system” GMM in Stata. Centre for Global Development Working Paper No. 103. Washington, DC.
- Rodrik, Dani. 1996. Labor standards in international trade: Do they matter and what do we know about them. In Robert Z. Lawrence, Dani Rodrik, and John Whalley (Eds.), *Emerging Agenda for Global Trade: High Stakes for Developing Countries*, pp. 35–79. Washington, DC: Overseas Development Council.
- . 1997. Has globalization gone too far? Washington, DC: Institute for International Economics.
- Rudra, Nita. 2005. Are workers in the developing world winners or losers in the current era of globalization? *Studies in Comparative International Development* 40(3): 29–64.
- Salmon, Pierre. 1987. Decentralization as an incentive scheme. *Oxford Review of Economic Policy* 3: 24–43.
- Sen, Amartya. 1999. *Development as Freedom*. Oxford: Oxford University Press.
- Simmons, Beth A., and Zachary Elkins. 2004. The globalization of liberalization: Policy diffusion in the international political economy. *American Political Science Review* 98: 171–89.
- Stiglitz, Joseph E. 2002. *Globalization and Its Discontents*. London: W. W. Norton.