Labor Rights, Economic Competition and Policy Convergence

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Colin M. Barry
University of Oklahoma

K. Chad Clay
University of Georgia

Matthew DiGiuseppe
University of Mississippi

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In the paper, we address the growing literature concerning the protection of labor rights and the debate regarding the role of economic globalization in policy convergence. Supporters of the competing "race to the bottom" and "climb to the top" hypotheses suggest that policy diffuses between states through economic competition. In the area of labor rights, which defenders of both hypotheses often invoke in their supporting arguments, researchers have not yet provided a direct test supporting the existence of policy diffusion through competition. This paper remedies this oversight. We construct spatial lags of competitors' labor rights weighted in accordance with geographical distance, labor endowment similarity, economic output similarity and export network similarity. Our results provide preliminary evidence that economic competition exerts a strong influence on a country's protection of labor rights. Furthermore, we find no evidence that diffusion through bilateral trade influences labor rights once economic competition is accounted for.

> "...the failure of any nation to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve the conditions in their own countries..." (from the Preamble of the ILO Constitution)

In February of 2012, Governor Mitch Daniels signed into law a bill making Indiana the 23rd 'Right to Work' state in the U.S. The reason given was simple and familiar: Indiana needed to "capture jobs for which...[it] was not currently being considered" (Davey 2012a: A12). Michigan followed suit, becoming the 24th such state in December of that same year (Davey 2012b: A1). While the political incentive for these Republican governors to seize an opportunity to weaken labor unions in these traditionally union-friendly states should not be overlooked, the fact remains that the opportunity (and a seemingly reasonable justification) to do so existed to begin with. States *without* such union-busting measures in place have a harder time competing for business and investment, and the economic benefits that they bring. In order to compete effectively, it is thought, social sacrifices have to sometimes be made.

Scholars of federalism have long considered the policy effects of this sort of economic competition between U.S. states or political subunits within other countries (see Treisman 2007 for a review of this literature). It is thought that the same logic can be applied on a much larger scale in the contemporary international political economy. Major advancements in telecommunications, transportation, and logistics technologies, coupled with a strong trend toward greater liberalization, have paved the way for a much more integrated global economy. The result has been transformative: Capital, goods, and services move across borders at an astonishing rate, as the production process itself has become increasingly globalized (Friedman 2005). This creates great opportunity to achieve higher levels of prosperity for many people in many countries, particularly those in the developing world (Bhagwati 2007). But at the same time, it is thought to exacerbate international competitive pressures. The same forces that have permitted businesses to operate on a global level have exposed

them to competition on a global level. The ensuing race to minimize production costs serves to benefit countries that maintain weak labor and environmental standards and lower tax and spending rates, and to punish those that do not (Drezner 2001). The consequence is a "race to the bottom," as states dismantle the social institutions that protect society from capitalism's worst tendencies in order to preserve the jobs and wealth-creation that capitalism creates (Greider 1997; Rodrick 1997; Faux 2006).

This is a provocative conjecture, and it has proven to be as contentious in scholarly debate as in the popular press and public discourse. We revisit this subject in this paper. We build on a growing body of scholarly research showing that the effects of 'economic globalization' are not absolute, but rather mixed and nuanced (e.g Moran 2002; Prakash and Potoski 2007; Greenhill, Mosley and Prakash 2009; Mosley 2011). We focus specifically on the provision and enforcement of policies protecting workers' rights in developing countries. While several studies have sought to 'test' the "race to the bottom" thesis (along with the counter-claim that globalization is producing a "climb to the top"), most have done so indirectly by analyzing the effects of total trade or foreign direct investment (FDI) inflows on government respect for human and workers' rights (e.g. Meyer 1996; Richards, Gelleny and Sacko 2001; Apodaca 2001; Blanton and Blanton 2007; Mosley and Uno 2007; Mosley 2011; Sorens and Ruger 2012), or vice-versa (e.g. London and Ross 1995; Blanton and Blanton 2007; 2009; 2012; Barry, Clay and Flynn 2013). We argue that, though this approach certainly tells us something useful about the world, it fails to capture the primary mechanism at the center of these theories: Competition.

While an integrated international economy brings countries into economic competition with each other, it does not necessarily follow that each state is brought into competition with all other states equally. Some countries – such as those that are geographically or economically proximate – are much more salient competitors than others. The extent to which these rivals protect the rights of

their workers has implications for the extent to which a state can protect (or not) the rights of its own workers. When competitors enforce rights to unionize, to a safe and healthy work environment, and to an adequate minimum wage, it reduces downward pressures by taking the risk of economic punishment by global markets off the table. But when competitors fail to enforce these rights, it increases downward pressures and constrains states to follow suit. What this implies is that we should observe convergence around labor policies among countries that are geographically and economically similar; but that the direction of this convergence may vary.

   In making this argument and testing its implications, we contribute to a growing body of work aimed at understanding the determinants of government respect for worker rights in both law and practice (Mosley and Uno 2007; Mosley 2011), and more generally to the emerging empirical literature on how political outcomes diffuse in the international system (e.g. Simmons, Dobbins and Garrett 2006; Elkins, Guzman and Simmons 2006; Greenhill, Mosley and Prakash 2009). The paper proceeds as follows. In the next section, we review the "race to the bottom" and "climb to the top" theses as they are currently understood and treated in the literature, with a particular focus on how globalization is thought to affect labor rights. We then turn to a discussion of how competition can serve as a mechanism for the diffusion of worker rights outcomes across countries, putting particular emphasis on the factors that determine which other countries states actually compete with, and why those competitors' practices can constrain (or not) a government's protection for the rights of its own workers. We also contrast this with other mechanisms by which diffusion of worker rights is thought to occur (e.g. Greenhill, Mosley and Prakash 2009). We then introduce our research design for testing the according hypothesis, and present the results of our preliminary analysis.

Racing to the Bottom, or Climbing to the Top? Worker Rights in a Global Economy

The notion that the expansion of global capitalism has sociopolitical implications is not new (Polanyi 1944). It was the concern that capitalists from the global "core" tend to prefer partnering with autocrats – especially when investing in the global "periphery" – that largely motivated the critical view of Western-style liberalization proffered by the dependency perspective and its descendants (e.g. Cardoso 1973; O'Donnell 1978; Evans 1979; Bornschier and Chase-Dunn 1985; Parenti 1989). Underlying this concern is the assumption that global capitalism both empowers corporations to move capital and resources freely around the globe, but also constrains them to be short-term profit-maximizers. This incentivizes trade with, and investment in, developing countries for the purpose of commandeering their less competitive domestic markets, exploiting their cheaper labor, and using them as a dumping ground for outdated technologies and production processes (e.g. Bornschier and Chase-Dunn 1985). As dictators and tyrants are better positioned to provide capitalists with monopoly status over local markets, major tax breaks and other pecuniary incentives, and an oppressed and powerless labor force, they were argued to be particularly appealing to corporations eager to increase profit margins by decreasing production costs (Oneal 1994; London and Ross 1995; Maxfield 1998). Integration into the global capitalist order in turn will tend to benefit authoritarian elites (O'Donnell 1978; Evans 1979), and generates a "race to the bottom" in terms of human and worker rights, environmental protection, and social welfare, as states compete for foreign capital and market share by slashing all policies and programs that impose costs on international business (Greider 1997; Rodrick 1997; see Drezner 2001 for a good review of this argument).

There is an alternative perspective rooted in neoclassical economics that is decidedly more optimistic. It contends that integration into the global economy helps developing countries in

particular to *modernize*, by redistributing wealth and social consciousness from the West (Spar 1998; Friedman 2005; Bhagwati 2007). It drives economic growth and facilitates the emergence of wage-earning middle classes (UNCTAD 1992; Kristof and WuDunn 2000). These developments bring stability and empower locals to demand better treatment from their governments and their employers (Richards, Gelleny and Sacko 2001; Cingranelli and Tsai 2003). Economic globalization, from this vantage point, is more likely to help developing countries "climb to the top" than it is to generate a competitive rat race to the "neoliberal bottom."

The empirical evidence is as mixed as the theories it is used to test. Earlier studies do find some support for the idea that exposure to Western-style global capitalism is exploitative and encourages backwardness in developing countries (Bornschier and Chase-Dunn 1985).[1] But many of the worst-case hypotheses produced by "dependency theory" and early critics of globalization have failed to garner consistent support. Liberalization has been simultaneously tied to greater social dislocation and unrest, on one hand, and greater societal stability on the other (Rothgeb 1990; Li and Schaub 2004; Barbieri and Reuveny 2005;Bussmann and Schneider 2007). Likewise, while it has actually led to an *increase* in welfare state spending in highly developed countries (Rodrick 1998; Garrett 1998), it has tied the rate of social investments to the strength and performance of the global economy in the developing world (Wibbels 2006). This means that social protections are often dismantled at the very times they are needed most – an outcome that may be the result of the relatively weaker bargaining position of the Labor-Left in emerging markets (Rudra 2002).

The relationship between economic globalization and human and worker rights is similarly contentious and empirically unclear (Hafner-Burton 2005). London and Ross (1995), for example, find evidence from earlier decades that capital does seem to seek out countries where labor is "controlled;" where there are few strikes or protests, and where the state maintains some moderate

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[1] See Bornschier and Chase-Dunn (1985) for an extensive review of earlier empirical studies on this question.

level of repression. Rodrick similarly points to evidence that global competition for foreign capital encourages reductions in human and labor rights (1997). Blanton and Blanton (2007), on the other hand, find that FDI and respect for physical integrity rights are mutually reinforcing. This finding is consistent with earlier studies showing that economic globalization has positive effects on human rights outcomes (Meyer 1996; Apodaca 2001; Richards, Gelleny and Sacko 2001; Cingranelli and Tsai 2003), and negative effects on child labor (Neumayer and de Soysa 2005). Others still find evidence that any absolute claims about the direction of this relationship should be taken with caution (Hafner-Burton 2005; Sorens and Ruger 2012; Barry, Clay, and Flynn 2013). Dreher and colleagues (2012), for example, find that, while overall globalization and economic liberalism do seem to correspond with better government respect for physical integrity rights, their effects on respect for social 'empowerment' rights (which include labor rights) are weaker and less robust.

The consensus emerging from all this noise is that economic globalization is not monolithic, but multidimensional; and that its social effects are nuanced and myriad. Layna Mosley argues convincingly that whether we observe a 'race to the bottom' or a 'climb to the top' depends in large part on the particular ways in which countries integrate into the global economy (2011). Hers is one of relatively few studies that focus explicitly on outcomes in labor rights. She argues that states exposed to globalized production via direct investment by multinational companies are more likely to improve their respect for workers' rights to unionize, collectively bargain, and strike. This is because FDI brings much-needed technologies, efficient organizational capacities, and effective managerial strategies to places where such things are in short supply.[2] These "spillover effects" into local economies empower people, rather than exploit them. Multinationals engaging in FDI also encourage the rule of law and smart investments in social and physical infrastructure; they value labor *skill* more than *cost*; and they standardize practices across their directly owned affiliates,

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[2] See entire volume edited by Moran, Graham, and Blomström (2005) on how FDI generates "spillover effects" in host nations.

bringing the "best practices" of their home markets with them into host markets (2011: 53-55). Moreover, as they can be held directly accountable for what happens in their foreign subsidiaries, they are more susceptible to the "spotlight phenomenon" (Spar and La Mure 2003; Barry, Clay and Flynn 2013). The evidence she presents in this and earlier work supports this hypothesis (2011; see also Mosley and Uno 2007).

States that rely more exclusively on sub-contracting relationships with global producers, however, fare notably less well. Mosley argues and finds supporting evidence that, all else constant, higher rates of total trade results in weaker labor laws (2011). This is because sub-contracting typically takes place in labor-intensive industries, like apparel and toys, where wage and non-wage benefits make up a large proportion of overhead production costs. As skilled labor is less necessary in these industries, producers' incentive is not to seek out and retain the best workers, but the cheapest and most pliable (Aaronson and Zimmerman 2006). States that integrate via sub-contracting relationships thus face steep pressures to repress any workers who agitate for representation and bargaining power in the workplace (Mosley 2011).

Of course, this is only one dimension along which we can distinguish between modes of integration. Mosley goes on to say that the particular structure of countries' economies and the industries in which they specialize likely also factor into how they respond to globalization, in terms of their protection and enforcement of workers' rights (2011). This echoes recent work by Blanton and Blanton, showing that human and worker rights outcomes vary in accordance with sectoral differences in FDI profiles (2009; 2012). Although all of these studies mark important advancements in our understanding of what 'globalization' is and what its implications are for social welfare in developing countries, they also sidestep one of the central mechanisms in the logic underlying the theories they are intended to test: Competition. Specifically, they fail to account for how a state's worker rights policies and practices can be influenced by the policies and practices of its

competitors. This is unfortunate, as it is the primary means by which globalization is thought to drive international 'convergence' in worker rights and other social outcomes.

Diffusion of Worker Rights through Competition

A core theme in much of the theoretical work on globalization is the idea that, as countries continue to integrate and global markets continue to expand, states are losing some of the policy autonomy and independence they have traditionally enjoyed (see Garrett 1998 for a review of this literature). Some thinkers took these developments to their logical extreme, predicting the demise of sovereignty as the prevailing international norm, and even a "retreat of the state" (Vernon 1971; Strange 1996). While evidence supporting these claims has yet to substantially materialize, the notion persists that as states become more interconnected, so too do their policy choices.

This is thought to manifest itself in policy diffusion – the adoption of similar policies across time and space. For example, the rapid spread of political and economic liberalization around the world during the latter part of the 20th century is *not* merely a coincidence; but rather likely reflects that the adoption of liberal reforms by some states encourages other to follow suit (e.g. Simmons and Elkins 2004). Scholars have considered several mechanisms by which globalization and interconnectedness cause policies to diffuse, both material (e.g. forced via political or economic coercion, or compelled by competition) and ideational (e.g. informed by observational learning, or mimicked through emulation) (Simmons, Dobbin and Garrett 2006). But regardless of which mechanism (or combination of mechanisms) is activated in any particular instance, an implication is that globalization is driving states to converge on the same policies, and therefore the same outcomes (Drezner 2001).

Policy diffusion has thus been a core element in arguments concerning the effects of globalization on labor rights and other social outcomes. Indeed, the fundamental difference between

the "race to the bottom" and the "climb to the top" theses is in their respective expectations about the directions in which we should see policy convergence. That is, while the former predicts that the competitive pressures of integration will drive even the most developed societies to dismantle social institutions until they reach the lowest common denominator (Greider 1997; Rodrick 1997), the latter predicts that societies with the weakest institutions in place will ultimately come to resemble those with the most advanced (Bhagwati 2007).

As discussed in the previous section, it has become increasingly clear that globalization is not monolithic in its form or its effects. Thus, any absolutist notion that the world will universally 'race' in either one direct or the other is clearly unfounded (Garrett 1998; Drezner 2001). However, this does not discredit the basic idea that integration may be driving policy diffusion and convergence in labor rights among groups of states via competition. In fact, empirical tests that rely exclusively on states' economic openness – or even those that go as far as distinguishing between states' total trade and FDI inflows – as measures of integration and competition are not *really* testing the 'diffusion' element that is so central in theories concerning the sociopolitical consequences of globalization. To the extent that they claim to, they necessarily assume that each country competes with all others equally, and that greater integration through trade and investment thus encourages changes in states' policy choices universally in one direction or the other. This is clearly a straw man.

Indeed, the logic of diffusion through competition specifies that states' policy choices are motivated, in part, as a response to *other states'* policy choices (e.g. Elkins, Guzman and Simmons 2006; Simmons, Dobbin and Garrett 2006). Though global integration through trade and investment may be making these sorts of considerations more salient, this is a different causal mechanism than the one by which states make policy choices in response to higher levels of integration itself (which is, in effect, the relationship that many existing empirical studies evaluate). This is an important distinction because so much of debate about the long term consequences of economic globalization

for workers, the environment, and the welfare state revolve around *competition.* If we are to thus really test the logic that international competition factors into states' protection and enforcement of labor rights, we have to consider whom precisely they are competing with, and to what extent those particular competitors protect the rights of their own workers (e.g. Simmons, Dobbin and Garrett 2006: 792-795).

For any given state, some countries represent much greater competition than others. In a global economy, these are going to be countries that have similar factor endowments. Classical economics tells us that countries' natural factor endowments – their relative abundance or scarcity of labor, land, and capital – largely determine what they can produce efficiently and what they cannot, and therefore what they should produce and what they should trade for. In other words, not all countries produce and consume the same things, and thus not all countries are direct competitors. States positioned to specialize in the production of labor-intensive goods, for example, do not directly compete with those positioned to specialize in the production of capital-intensive goods. While both might be competing for shares of the global economy, the particular shares they are competing over are different. In contrast, states that *do* compete for the same shares of the global economy represent a much greater competitive threat, and this is likely shaped in significant ways by their natural factor endowments and the structure of their domestic economies. Neighboring countries can also be competitors. Not only do they often share similar factor endowments, but they also represent natural competition for regional political and economic pre-eminence. Finally, competitive pressures are likely to be higher between countries that have similar trading partners (e.g. Elkins, Guzman, and Simmons 2006). In other words, competition is derived not only from similarities in what countries produce, but also from similarities in the clientele they serve.

Thus the strongest competitors are likely neighboring states with similar factor endowments who export to the same markets; while the weakest are those from far-away countries with entirely different factor endowments and who rely on a different set of trading partners. The extent to which stronger rivals protect the rights of their workers has implications for the extent to which a state can protect (or not) the rights of its own workers. When competitors enforce rights to unionize, to a safe and healthy work environment, and to an adequate minimum wage, it reduces downward pressures by taking the risk of economic punishment by global markets off the table. It gives states room to breathe, and in some cases may even encourage improvements in worker rights practices. In other words, we should *not* observe a competitive "race to the bottom" among these groups of countries, but rather a convergence around stronger labor policies. However, when competitors fail to enforce these rights, it increases downward pressures and constrains states to follow suit. Those that do not are put at a competitive disadvantage and will likely suffer economic losses as a result. Like Governor Mitch Daniels of Indiana, leaders of these states are more likely to see weakening labor protections as the only way to "capture jobs" that would otherwise pass them by for their competitors.

What this logic implies is that we should observe convergence around labor policies among countries that are geographically and economically proximate. It bears repeating that this *does not* imply the direction of convergence will always be the same; but rather that it will vary in accordance with the stringency in which states' competitors enforce the rights of their own workers. This means it may resemble an 'upward' convergence in some cases, and a 'downward' convergence in others. We posit the following hypothesis:

H1: *Government respect for worker rights is positively related to competitors' respect for worker rights.*

In testing this hypothesis, we build directly on preliminary analyses conducted by Mosley (2011). Indeed, her results show that respect for collective labor rights (i.e. the right to unionize and collectively bargain) has a strong positive correlation with the average level of respect found in the broader region. This implies that states are likely to shift their own level of enforcement in accordance with shifts made by the countries in their geographic neighborhood. Likewise, when distinguishing between protection for worker rights in law versus enforcement in practice, she finds that the former demonstrates a strong correlation with the laws of states that are at a similar level of development. Interestingly, although they are downplayed in her discussion by comparison, the estimated effects of these variables are notably stronger than the effects attributed to trade openness and FDI (2011: 148). We employ a much finer-grained measure to capture competitors' worker rights policies here, and evaluate its effects on a broader assortment of labor rights; but Mosley's findings show preliminary support for the notion that worker rights policies diffuse through competition.

We also build on, and to some extent challenge, a budding literature focused on other mechanisms by which worker rights policies and practices diffuse. Recent work by Hafner-Burton (2009) shows strong evidence that human rights promotion through trade agreements has actually been effective at improving respect for physical integrity rights. Specifically, states that commit to PTAs with "hard" (i.e. enforceable) human rights provisions subsequently demonstrate better respect for the basic rights of their citizens than those that commit to PTAs with "soft" or no human rights provisions. Though there are fewer PTAs that specify worker rights provisions, some recent evidence similarly suggests that they, too, may be effective in coercing change in member states' practices (Kim 2012).

However, formal trade agreements may not be necessary to induce better respect for worker rights among trading partners. Greenhill, Mosley and Prakash (2009) argue and find supporting

evidence that developing states are likely to adopt stronger laws protecting the rights of their workers when their primary trading partners have stronger worker rights protections in place. They take this as evidence of a "California Effect" (Vogel 1995), in which key export markets exert influence on the policies of their major providers. Likewise, Mosley presents preliminary evidence that the effect of FDI on a host countries' labor policies and practices is determined to some extent by where the FDI originated from (2011). As the 'best practices' of U.S. or Japanese MNCs are substandard relative to those from continental Europe, FDI from the former is less likely to produce improvements in hosts' worker rights outcomes than is FDI from the latter. In either case, the 'diffusion' of worker rights by this logic is driven more by whom states do business with, rather than by whom they compete against.

While this is a reasonable hypothesis, we expect that these groupings of states are fairly similar. That is, states that 'compete' with each other for global market shares likely also have similar trading partners. By not directly accounting for the 'competition' mechanism, it is possible that the results of the Greenhill, Mosley and Prakash (2009) study are spurious. While we are primarily concerned with the effects of competition, we account for both mechanisms here in order to better gauge the extent to which each is responsible (or not) for diffusion in worker rights policies and practices.

Research Design

We test the above theory of the competitive diffusion of labor rights using a data set of 123 non-OECD states from 1994 to 2010. We utilize several new measures of worker rights, as observed in both law and practice, in order to both build on previous research (e.g. Mosley 2011) and to isolate the particular dimensions of labor rights that are affected by competition. We add to this novel measures of competitors' labor policies and practices, based on geographic and economic 'distance',

as well as existing measures of trading partners' worker rights policies and practices (Greenhill, Mosley and Prakash 2009), and a set of control variables found to correlate with worker rights outcomes in previous studies (e.g. Mosley and Uno 2007; Mosley 2008; 2011). These are discussed in turn, below.

Dependent Variables: Worker Rights in Law & Practice

Our dependent variables are drawn from the Worker Rights in Law & Practice (WRLP) Data Project (Barry, Cingranelli, and Clay 2014), which provides ordinal measures of respect for seven different labor rights in law and practice for 191 countries between 1994 and 2010. These seven rights correspond with those identified by the ILO as being fundamental in providing for workers' individual and collective wellbeing, and include: (1) *the Right to Association*; (2) *the Right to Bargain Collectively*; (3) *Freedom from Forced or Compulsory Labor*; (4) *Minimum Age of Employment*; (5) *Minimum Wage*; (6) *Occupational Safety and Health*; and (7) *Reasonable Limitations on Working Hours* (ILO 2009). These data were chosen for their extensive breadth compared to previous efforts to quantify labor rights, which have tended to focus heavily on union rights, such as the right to associate and the right to bargain collectively (Cingranelli, Richards, and Clay 2013; Mosley and Uno 2007).

As such, the WRLP data set contains 14 variables – two measures, one in law and one in practice, of government respect for each of the seven aforementioned labor rights. Each of these measures ranges from 0 to 2, where 0 indicates little to no observance of respect for the ILO standards regarding that right, and 2 indicates that all relevant ILO standards are adequately observed. In many of the analyses below, we look at each of these variables separately. That said, in order to facilitate comparability with previous studies as well as to provide something of a more comprehensive understanding of the relationships at play, we also created 4 indices that combine the various measures along the lines of previous work. First, we create indices measuring *Union Rights*

Law and *Union Rights Practice.* These two indices vary from 0 to 4 and are the result of summing the respective law and practice measures of the rights to associate and bargain collectively. Second, we create indices measuring *Substantive Rights Law* and *Substantive Rights Practice*, each of which can vary from 0 to 10 and are the result of summing the respective law and practice measures of the five labor rights in the WRLP data that hinge on government guarantees of minimum standards, i.e. freedom from compulsory labor, minimum age of employment, minimum wage, occupational safety and health, and reasonable limitations on working hours. The addition of these latter index variables, and each of their component parts, marks an important advancement over existing studies, which rely almost exclusively on workers' collective rights (e.g. Mosley and Uno 2007).

Independent Variables: Competitive Context & Bilateral Trade Context

In order to test the above theory, we must have estimates of respect for labor rights among the group of states that are most competitive with any given country in our analyses. In particular, we suggest that a state's primary trade competitors will be states that are (1) located nearby with (2) similar factor endowments, (3) similar economic outputs, and a (4) similar set of export targets. In order to create these variables, we follow previous research and create a number of matrices that weight states according to their similarities across each of these four dimensions (e.g. Beck, Gleditsch, and Beardsley 2006; Greenhill, Mosley, and Prakash 2009; Simmons and Elkins 2004). We then use these matrices to develop a series of spatial lags, which take the form of an average level of respect for labor rights weighted according to each state's competitiveness with the referent.

Geographic Distance. In order to determine the competitive relevance of a state's respect for labor rights based on proximity, we created a row-standardized inverse distance matrix, $\mathbf{W}^{distance}$, that gives each state a weight according to how distant it is from the referent state. That is,

$$W_{ij}^{distance} = \frac{^1/_{d_{ij}}}{\Sigma_{j=1}^n {}^1/_{d_{ij}}},$$

where d_{ij} equals the distance between states i and j in kilometers.[3] As such, states that are nearer will receive a much higher weight than those that are far away. Thus, by multiplying $\mathbf{W}^{distance}$ by the vector of any of our many measures of respect for labor rights, we are able to generate an average level of respect for that right weighted according to geographic proximity. The inverse distance matrix was created using minimum distance data from the CShapes package in R (Weidmann and Gleditsch 2010; Weidmann, Kuse, and Gleditsch 2010).

Labor Endowment. We rely on the existing literature on labor endowments in economics (e.g. Leamer 1984; Midford 1993) and political science (e.g. Wibbels and Ahlquist 2011; Christensen and Wibbels 2013) and measure labor endowment as equal to (State Population/World Population)/(GDP/World GDP). In order to determine the similarity of states' labor endowments, and thus their competitive relevance to one another along this dimension, we once again rely on a row-standardized inverse distance matrix, $\mathbf{W}^{lendow}$, that gives each state a weight according to how similar its labor endowment is to that of the referent state, such that:

$$W_{ij}^{lendow} = \frac{^1/_{(l_{ij}+1)}}{\Sigma_{j=1}^n {}^1/_{(l_{ij}+1)}},$$

where l_{ij} equals the absolute value of the difference between the labor endowments of states i and j. As such, respect for labor rights in states that have similar labor endowments are weighted much more highly than that in states with very dissimilar labor endowments. This matrix is then multiplied by the each of our measures of labor rights to generate averages weighted according to this similarity.

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[3] Contiguous states are treated as if they were 1 km apart.

Economic Output. We measure a state's economic output using the United Nations' National Accounts Main Aggregates Database (2012). The UN measures economic output in four categories: agriculture and fishing, mining and utilities, manufacturing, and services. In order to develop a weights matrix based on similarity in economic output, we follow similar efforts by Simmons and Elkins (2004) and create our weights based on the correlation between states' distribution of their total outputs across these four categories. As such, this row-standardized matrix, $\mathbf{W}^{output}$, takes the following form:

$$W_{ij}^{output} = \frac{o_{ij}}{\Sigma_{j=1}^{n} o_{ij}},$$

where o_{ij} is equal to the correlation between the economic outputs of states i and j. As with the previous matrices, this matrix was then multiplied by each of our labor rights measures to generate averages weighted according to the similarity between the types of industries that make up states' economic outputs.

Export Network. Using data from the Correlates of War Project Trade Data Set (Barbieri and Keshk 2012; Barbieri, Keshk, and Pollins 2009), we measure total exports as the natural log of total exports from state i to state j. Using these data, we generate another row-standardized weights matrix, $\mathbf{W}^{export}$, based on the correlation between two states' export networks, i.e. the group of states each state exports to and the total volumes of those exports. As such,

$$W_{ij}^{export} = \frac{x_{ij}}{\Sigma_{j=1}^{n} x_{ij}},$$

where x_{ij} is equal to the correlation between the export networks of states i and j. We then multiply this matrix by our various labor rights measures to create averages weighted according to similarity in states' export networks.

Competitive Context. While we use each of these disaggregated measures of respect for labor rights among competitively relevant states, our theory suggests that the best measure of the

competitive labor rights context would include all of these dimensions of relevance. As such, we create another weights matrix, $\mathbf{W}^{compete}$, that combines all of these dimensions by multiplying each cell of each matrix by its corresponding cells in the other matrices, creating a product that has the same dimensions as the four matrices used to produce it. That is, we calculate $\mathbf{W}^{compete}$ by taking the Hadamard product of the other four matrices, which we then row-standardize such that:

$$W_{ij}^{compete} = \frac{(W_{ij}^{distance})(W_{ij}^{lendow})(W_{ij}^{output})(W_{ij}^{export})}{\sum_{j=1}^{n}(W_{ij}^{distance})(W_{ij}^{lendow})(W_{ij}^{output})(W_{ij}^{export})}.$$

In order to generate measures of the competitive context for each of our labor rights measures, we simply multiply each measure by this matrix.

   Bilateral Trade Context. To ensure that our findings are not spurious, we must control for the alternative explanation proffered by Greenhill, Mosley, and Prakash (2009), i.e. a state's respect for labor rights improves as their trading partners' respect for those rights improve. As such, we create versions of their bilateral trade context measure that utilize the WRLP data. We do this by multiplying each of our labor rights measures by a bilateral trade matrix, $\mathbf{W}^{bilateral}$, which takes the following form:

$$W_{ij}^{bilateral} = \frac{e_{ij}}{\sum_{j=1}^{n} e_{ij}},$$

where e_{ij} is equal to the total exports from state i to state j based on data from the Correlates of War Project Trade Data Set (Barbieri and Keshk 2012; Barbieri, Keshk, and Pollins 2009).

Control Variables

   Beyond our central independent and dependent variables, we include several other covariates. Where we can, we emulate previous studies' empirical models of labor rights (Mosley and Uno 2007; Greenhill, Mosley and Prakash 2009; Mosley 2011).

In each of our models, we include controls for economic activity and country size. As such, we include the log of a state's population and the log of GDP per capita. We also control for external economic activity with a state's trade dependence and foreign direct investment, measured by the sum of imports and exports divided by GDP and FDI inflows divided by GDP, respectively. We have drawn these variables from the World Bank's World Development Indicators database (World Bank 2012). Next, we control for political institutions with the 21-point Polity index (Marshall, Jaggers and Gurr 2012). We also control for domestic instability with a variable counting the number of domestic or external conflicts a country experienced on its territory in each year, as defined by UCDP/PRIO (Themnér and Wallensteen 2013). Lastly, we include a lagged dependent variable in each of our models to reflect policy inertia.

Analysis

Table 1 reports the results four ordered probit models estimating the impact of competitors' labor laws and practices on states' own labor laws and practices. First, it is important to note that in each model the *competitive context* and *bilateral trade context* variables reflect the practices of other states along the dependent variable employed. For example, in Model 1, the dependent variable is *Union Laws* and thus the spatial variables indicate economic competitors' protection of *Union Laws.* The spatial variables in Model 2 similarly reflect competitors' respect for union rights, but as they are observed in practice. Models 3 and 4 estimate a state's laws and practices related to substantive rights (compulsory labor, minimum age, minimum wage, safety and health and working hours) employing an 11-value ordinal scale, and the spatial variables includes in these models reflect competitors' respect for substantive rights in law and practice, respectively.

The coefficient for our central independent variable, *competitive context,* is positive and significant in each of the four models. These initial results are supportive of our argument that

competitive forces help shape a states' own labor laws and practices. States with competitors that maintain higher (lower) labor laws and practices will also have more (less) respect for labor laws and practices. This applies for rights relevant to organized labor and substantive rights.

A comparison of the *competitive context* coefficients in the laws and practices models suggests that in relation to both union related rights and substantive rights, the influence of competitors appears to be larger in the adoption of laws rather than practices. The coefficient is 70% larger in estimates of union related laws than practices, and 200% larger in estimates of substantive labor laws than substantive practices. Substantively, this evidence suggests that policy convergence is more likely to occur on the surface, reflecting states' desire to appease external actors or placate domestic constituents without necessarily following through with legislated rights. The larger impact of international competition on the adoption of laws corresponds with previous evidence suggesting that export competition is related to the adoption of liberal policies and international treaties (Simmons and Elkins 2004; Elkins, Guzman and Simmons 2006). It is also consistent with GMP's findings that diffusion through bilateral trade is relevant to the adoption of laws but not practices (2009). However, our analysis does not find evidence consistent with GMP's hypothesis.

Our variable capturing the laws and practices of bilateral trading partners, that replicated the GMP (2009) *bilateral trade context* variable, is insignificant in each of our four models. We think it is problematic to employ the bilateral trade context variable without also addressing a state's competitive environments because economic competitors are likely to trade with similar third parties. In practice, this likely reflects the large consumer markets in the United States and European Union. Consequently, evidence for a "California effect" or the diffusion of laws and practices between bilateral trading partners may indirectly capture the effects of competition.[4] As is clear, we include both diffusion variables in our estimation and, we think, this approach provides a more

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[4] The two variables are correlated at .34, .39, .34, and .12 in Models 1-4 respectively. We ran multicollinearity diagnostics for each model and found no evidence to suspect a problem.

rigorous test of GMP's "California effect" hypothesis. The evidence presented here finds no evidence to support the conclusion that the laws or practices of trading partners exerts an influence on states' labor laws and practices. This holds not only for union rights, which was the focus of GMP's article, but it also stands for substantive rights which, to our knowledge, have not been tested within this context.

Disaggregating Competition

The *competitive context* variable used above is generated using four indicators that we have argued determine states' major competitors for international trade and investment. We run additional analyses isolating the different weights to get a better understanding of which specific dimensions matter most. Due to space considerations, Table 2 only presents the coefficient of our central independent variable estimated in 16 different models employing the four dependent variables used in Table 1, along with the four separate spatially-weighted indicators of 'competitiveness.' As in the previous models, these spatially-weighted indicators of competitiveness correspond with the labor rights outcome measured in the dependent variable of each model.

First, weighting labor rights based on geographic distance appears to demonstrate a positive relationship on union and substantive laws and substantive practices. States with similar labor endowments and states with similar export networks only exert a positive influence in regards to union rights practices. Contrary to our expectations, the substantive rights laws of states with similar labor endowments has a negative impact (in a one-tailed test) on states' own substantive rights laws. Lastly, the union rights and substantive rights practices of states with similar economic output are positively associated with states' own union and substantive rights practices, respectively.

In general, these findings indicate that competition based on geographical distance appears to play the biggest role in terms of laws protecting workers' rights. In contrast, there are a number of dimensions upon which a state's economic competitors influence labor practices.

Disaggregating Labor Rights

As detailed above, our measures of union- and substantive- labor rights are an additive index of several indicators measuring more specific labor rights. Potentially, practices and laws in some areas may be more susceptible to competitive pressures from abroad. As a robustness check and to gain a greater understanding of the underlying relationship, we disaggregated the dependent variables employed above and estimated two separate ordered probit models for the observation of laws and practices along each of the seven labor rights dimensions summed in the two variables presented in the preceding analyses. Given space constraints, we present only the coefficients for our competition variable and the bilateral trade context variable.

In general, Table 3 indicates that our results are not an artifact of the decision to create indices based on several separate measures of labor rights. Our argument continues to find support, while the evidence suggests that diffusion through bilateral trade relationships is not statistically related to states' own labor laws and practices. In only two of the fourteen models summarized in Table 3 do we find that *bilateral trade context* has a statistically relevant relationship with worker rights outcomes: compulsory labor laws and practices. In contrast, we find that *competitive context* has a positive and statistically significant correlation with laws protecting the rights of association, compulsory labor and working hours, in addition to enforcement of the rights to association, collective bargaining, compulsory labor, minimum wage and safety and health conditions in practice.

An added convenience of disaggregating the labor rights indices is the ability to clearly illustrate the substantive effects of our central independent variables. Figures 1 and 2 present

predicted probabilities associated with two hypothetical situations across the values of the corresponding spatial measure of competitors' respect for labor rights. The red bars indicate the 90% uncertainty around the predicted probability of observing no protection for the given labor right, on the 0-2 scale, when the state had some protection for that right in the previous period [Pr(Y=0|LDV=1)]. The shaded areas represents the 90% uncertainty around the predicted probability of observing some protection for a labor right when a state had full protection for that right in the previous period [Pr(Y=1|LDV=2)]. We constructed both figures by employing simulations via the Clarify program (King, Tomz and Wittenberg 2000). Figure 1 presents the simulations for both the laws and practices regarding the right of association and collective bargaining. The upper left panel demonstrates that there is a higher probability of seeing a roll back in the right of association (from a 1 to 0) when a state's economic competitors have lower respect for freedom of association. Substantively, states whose economic competitors have perfect legal protection for the right of association (Spatial Weight = 2) are 61% less likely to back slide on legal protection than states whose economic competitors have no (Spatial Weight = 0) legal protection for the right of association, according to our estimates. A similar relationship is evident in the upper right panel in regards to practices at both starting points, and this also holds when a state previously had fully protected collective bargaining rights (LDV=2, in the lower-right panel).

Figure 2 plots similar simulations for each of the substantive rights. The largest substantive effects are apparent in regards to compulsory labor laws and practices, minimum wage practices and working hours laws. The simulations in both graphs indicate that competitors' laws and practices have a greater impact for states that somewhat protect these rights in law or practice in relation to states that hold full respect for these rights. This is evident in that the simulations representing a change from 1 to 0 (red bars) are significant more than those simulations indicating a change from 2 to 1 (shaded areas).

Conclusion

The primary aim of this paper has been to revisit what is widely acknowledged as one of the central mechanisms in the logic underlying theories of how globalization affects labor rights, but one that has also been largely untested (or tested indirectly) in most of the existing empirical literature. Specifically, this is the diffusion of worker rights policies and practices via *competition* between similarly situated states. We argued that states that are geographically and economically proximate represent major sources of competition in the contemporary global economy; and that we should thus observe *convergence* in de jure and de facto respect for worker rights among such countries.

While all of the results reported here reflect only preliminary analysis, we believe they demonstrate reasonably strong evidence in support of this main proposition. That is, states' respect for worker rights in both law and practice shows a strong, positive correlation with the respect for worker rights exercised by their major competitors. This implies that when conditions exist such that economic rivals backslide in their protection of labor rights, states face steep economic pressures to follow suit. Alternatively, when economic rivals are able to protect the rights of their workers to form unions and to enjoy basic decency and dignity in the workplace, states are freer to provide the same protections without the fear of being punished by global markets for doing so.

This should be taken neither as evidence in favor of a "race to the bottom," nor a "climb to the top," resulting from globalization. Rather, it should merely be taken as evidence that states' policies and practices are, to some extent, dependent upon the competitive context in which they are situated. This is consistent with the emerging consensus in scholarly circles that economic globalization is ultimately a multidimensional phenomenon, and that its effects are myriad. Furthermore, it should be taken as evidence that one of the primary theoretical propositions of globalization theory – diffusion through competition – actually has some basis in reality, and that it

is perhaps stronger than existing research has acknowledged. We plan to build on this basic insight

and explore the directionality of the influence in future drafts of this paper.

References

Aaronson, Susan Ariel and Jamie M. Zimmerman. 2006. "Fair Trade? How Oxfam Presented a Systemic Approach to Poverty, Development, Human Rights, and Trade." *Human Rights Quarterly* 28(4): 998-1030.

Abouharb, Rodwan M. and David Cingranelli. 2007. *Human Rights and Structural Adjustment.* New York: Cambridge University Press.

Apodaca, Clair. 2001. "Global Economic Patterns and Personal Integrity Rights after the Cold War." *International Studies Quarterly* 45(4): 587-602.

Barbieri, Katherine and Rafael Reuveny. 2005. "Economic Globalization and Civil War." *Journal of Politics* 67(4): 1228-1247.

Barry, Colin M., K. Chad Clay and Michael E. Flynn. Forthcoming. "Avoiding the Spotlight: Human Rights Shaming & Foreign Direct Investment." *International Studies Quarterly.*

Bhagwati, Jagdish. 2007 [2004]. *In Defense of Globalization.* New York: Oxford University Press.

Blanton, Shannon Lindsey and Robert Blanton. 2007. "What Attracts Foreign Investors? An Examination of Human Rights and Foreign Direct Investment." *The Journal of Politics* 69(1): 143-155.

Blanton, Shannon Lindsey and Robert Blanton. 2009. "A Sectoral Analysis of Human Rights and FDI: Does Industry Type Matter?" *International Studies Quarterly* 53(2): 469-495.

Blanton, Robert G. and Shannon L. Blanton. 2012. "Labor Rights and Foreign Direct Investment: Is there a Race to the Bottom?" *International Interactions* 38(3): 267-294.

Bornschier, Volker and Christopher Chase-Dunn. 1985. *Transnational Corporations and Underdevelopment.* New York: Praeger Publishers.

Bussmann, Margit and Gerald Schneider. 2007. "When Globalization Discontent Turns Violent: Foreign Economic Liberalization and Internal War." *International Studies Quarterly* 51(1): 79-97.

Büthe, Tim, and Helen V. Milner. 2008. "The Politics of Foreign Direct Investment into Developing Countries: Increasing FDI through International Trade Agreements?" *American Journal of Political Science* 52 (4):741-62.

Cardoso, Fernando Henrique. 1973. "Associated-Dependent Development: Theoretical and Practical Implications." in *Authoritarian Brazil,* pp. 142-176, edited by Alfred Stepan. New Haven: Yale University Press.

Cingranelli, David. 2002. "The Impact of Democratization and Economic Globalization on Workers' Rights: A Comparative Analysis." In eds. Edward McMahon and Thomas Sinclair,

Democratic Institutional Performance: Research and Policy Perspectives. Westport, CT: Praeger Publishers.

Cingranelli, David, K. Chad Clay and David Richards. 2013. "The Cingranelli-Richards (CIRI) Human Rights Datset." Available at http://www.humanrightsdata.org.

Davey, Monica. 2012a. "Indiana Governor Signs a Law Creating a 'Right to Work' State." *The New York Times*, Feb. 2: A12.

Davey, Monica. 2012b. "Limits on Unions Pass in Michigan, Once a Mainstay." *The New York Times*, Dec. 12: A1.

Dreher, Axel, Martin Gassebner and Lars H.R. Siemers. 2012. "Globalization, Economic Freedom, and Human Rights." *Journal of Conflict Resolution* 56(3): 516-546.

Drezner, Daniel W. 2001. "Globalization and Policy Convergence." *International Studies Review* 3(1): 53-78.

Elkins, Zachary, Andrew T. Guzman and Beth A. Simmons. 2006. "Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960-2000." *International Organization* 60(4): 811-846.

Evans, Peter. 1979. *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil.* Princeton: Princeton University Press.

Falk, Richard. 2002. "Interpreting the Interaction of Global Markets and Human Rights." In *Globalization and Human Rights*, pp. 61-76, edited by Alison Brysk. Berkeley: University of California Press.

Faux, Jeff. 2006. *The Global Class War.* Hoboken, NJ: John Wiley & Sons, Inc.

Friedman, Thomas L. 2005. *The World is Flat: A Brief History of the Twenty-First Century.* New York: Farrar, Straus and Grioux.

Garret, Geoffrey. 1998. "Global Markets and National Politics: Collision Course or Virtuous Circle?" *International Organization* 52(4): 787-824.

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): 669-690.

Greider, William. 1997. *One World, Ready or Not.* New York: Simon and Schuster.

Hafner-Burton, Emilie M. 2005. "Right or Robust? The Sensitive Nature of Repression to Globalization." *Journal of Peace Research* 42(6): 679-698.

Hafner-Burton, Emilie M. 2009. *Forced to be Good: Why Trade Agreements Boost Human Rights.* Ithaca, NY: Cornell University Press.

Kim, Dong-Hun and Peter F. Trumbore. 2010. "Transnational Mergers and Acquisitions: The Impact of FDI on Human Rights, 1981-2006." *Journal of Peace Research* 47(6): 723-734.

Kristof, Nicholas D. and Sheryl WuDunn. 2000. "Two Cheers for Sweatshops." *The New York Times*, Sept. 24: A1.

Li, Quan and Drew Schaub. 2004. "Economic Globalization and Transnational Terrorism: A Pooled Time-Series Analysis." *Journal of Conflict Resolution* 48(2): 230-258.

London, Bruce and Robert J. S. Ross. 1995. "The Political Sociology of Foreign Direct Investment: Global Capitalism and Capital Mobility, 1965-1980." *International Journal of Comparative Sociology* 36(3): 198-218.

Maxfield, Sylvia. 1998. "Understanding the Political Implications of Financial Internationalization in Emerging Market Countries." *World Development* 26(7): 1201-1219.

Meyer, William H. 1996. "Human Rights and MNCs: Theory versus Quantitative Analysis." *Human Rights Quarterly* 18(2): 368-397.

Moonhawk, Kim. 2012. "*Ex Ante* Due Diligence: Formation of PTAs and Protection of Labor Rights." *International Studies Quarterly* 56(4): 704-719.

Moran, Theodore. 2002. *Beyond Sweatshops: Foreign Direct Investment and Globalization in Developing Countries.* Washington, DC: Brookings Institution Press.

Moran, Theodore, Edward M. Graham and Magnus Blomström, eds. 2005. *Does Foreign Direct Investment Promote Development?* Washington, DC: Institute for International Economics.

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): 923-948.

Mosley, Layna. 2008. "Workers' Rights in Open Economies: Global Production and Domestic Institutions in the Developing World." *Comparative Political Studies* 41: 674-714.

Mosley, Layna. 2011. *Labor Rights and Multinational Production.* New York: Cambridge University Press.

Neumayer, Eric and Indra de Soysa. 2005. "Trade Openness, Foreign Direct Investment and Child Labor." *World Development* 33(1): 43-63.

O'Donnell, Guillermo. 1978. "Reflections on the Patterns of Change in the Bureaucratic Authoritarian State." *Latin American Research Review* 13(1): 3-38.

Oneal, John. 1994. "The Affinity of Foreign Investors for Authoritarian Regimes." *Political Research Quarterly* 47(3):565-588.

Parenti, Michael. 1989. *The Sword and the Dollar: Imperialism, Revolution, and the Arms Race*. New York: St. Martin's Press, Inc.

Polanyi, Karl. 1944[2001]. *The Great Transformation: The Political and Economic Origins of our Time*. Boston: Beacon Press.

Prakash, Aseem and Matthew Potoski. 2006. "Racing to the Bottom? Trade, Environmental Governance, and ISO 14001." *American Journal of Political Science* 50(2): 350-364.

Richards, D.L, Gelleny, R.D, and Sacko, D.H. 2001. "Money with a Mean Streak? Foreign Economic Penetration and Government Respect for Human Rights in Developing Countries." *International Studies Quarterly*. 45: 219-239.

Rodrik, Dani. 1997. *Has Globalization Gone Too Far?* Washington, DC: Institute for International Economics.

Rothgeb, John M. Jr. 1990. "Investment Dependence and Political Conflict in Third World Countries." *Journal of Peace Research* 27(3): 255-272.

Rudra, Nita. 2002. "Globalization and the Decline of the Welfare State in Less-Developed Countries." *International Organization* 56 (2): 411-445.

Simmons, Beth A. and Zachary Elkins. 2004. "The Globalization of Liberalization: Policy Diffusion in the International Political Economy." *American Political Science Review* 98(1): 171-189.

Simmons, Beth A., Frank Dobbin, and Geoffrey Garrett. 2006. "Introduction: The International Diffusion of Liberalism." *International Organization* 60(4): 781-810.

Sorens, Jason and William Ruger. 2012. "Does Foreign Investment Really Reduce Repression?" *International Studies Quarterly* 56: 427-436.

Spar, Debora. 1998. "The Spotlight and the Bottom Line: How Multinationals Export Human Rights." *Foreign Affairs* 77(2): 7-12.

Spar, Debora and Lane T. La Mure. 2003. "The Power of Activism: Assessing the Impact of NGOs on Global Business." *California Management Review* 45(3): 78-101.

Strange, Susan. 1996. *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge: Cambridge University Press.

Treisman, Daniel. 2007. *The Architecture of Government: Rethinking Political Decentralization*. New York: Cambridge University Press.

United Nations. 1992. *World Investment Report: Transnational Corporations as Engines of Growth*. New York: United Nations Conference on Trade and Development.

United Nations. 2012. "National Accounts Main Aggregates Database." Available at http://unstats.un.org/unsd/snaama/introduction.asp.

Vernon, Raymond. 1971. *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York: Basic Books, Inc.

Vogel, David. 1995. *Trading Up: Consumer and Environmental Regulation in a Global Economy*. Cambridge, MA: Harvard University Press.

Wibbels, Erik. 2006. "Dependency Revisited: International Markets, Business Cycles, and Social Spending in the Developing World." *International Organization* 60 (2): 433-468.

Tables & Figures

Table 1: Ordered Probit Models of Labor Laws and Practices, 1995-2009

	(1)	(2)	(3)	(4)
	Union Rights		Substantive Rights	
	Laws	*Practices*	*Laws*	*Practices*
Competitive Context	0.141**	0.082**	0.189***	0.063***
	(0.067)	(0.040)	(0.030)	(0.021)
Bilateral Trade Context	0.095	0.062	-0.015	0.008
	(0.099)	(0.070)	(0.064)	(0.019)
ln(Population)	-0.058*	-0.085***	-0.010	-0.059**
	(0.033)	(0.031)	(0.033)	(0.024)
ln(GDPpc)	-0.035	-0.041	0.064*	0.122***
	(0.044)	(0.036)	(0.033)	(0.027)
Trade/GDP	0.002	0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
FDI/GDP	-1.658**	-0.498	0.244	-0.369
	(0.722)	(0.738)	(0.393)	(0.450)
Polity	0.018*	0.011	0.001	-0.003
	(0.010)	(0.007)	(0.006)	(0.005)
Conflict on Location	0.232**	0.127	0.031	-0.141*
	(0.111)	(0.089)	(0.081)	(0.084)
LDV	3.143***	2.079***	1.696***	1.038***
	(0.144)	(0.096)	(0.103)	(0.041)
Observations	1514	1514	1514	1514
Robust Standard errors clustered by country in parentheses				
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$				

Table 2: Spatial Weight Coefficients from 16 Ordered Probit Models estimating Labor Laws and Practices

	Dependent Variable			
Spatial Weight	*Union Laws*	*Union Prac.*	*Subst. Laws*	*Subst. Prac.*
Geographic Distance	0.136**	0.066	0.107**	0.046**
Labor Endowment	-0.636	0.979***	-0.299*	0.084
Export Networks	-0.513	1.167**	-0.91	0.137
Economic Output	0.025	0.932*	-0.209	0.139*

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

Table 3: Coefficients from 14 Ordered Probit models Estimating Labor Laws and Practices Along Seven Dimensions

	Union Related Rights				*Substantive Rights*			
	Right of Assoc.		Collective Bargaining		Compulsory Labor		Minimum Age	
	Laws	Practices	Laws	Practices	Laws	Practices	Laws	Practices
Competitive Context	0.292***	0.187**	0.085	0.221**	0.280***	0.209***	0.057	0.130
Bilateral Trade Context	0.158	0.134	0.608	0.301	0.599**	0.237***	0.127	0.130

	Substantive Rights					
	Minimum Wage		Safety &Health		Working Hours	
	Laws	Practices	Laws	Practices	Laws	Practices
Competitive Context	0.464	0.338***	-0.009	0.235*	0.748***	0.044
Bilateral Trade Context	0.047	-0.120	-0.099	0.142	-0.025	0.252

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

Figure 1: 90% Uncertainty around Labor Rights Back Sliding (Union Rights)

Dissagregated Union Rights

Right of Association

Laws / Practicies

Right to Bargain Collectively

Laws / Practicies

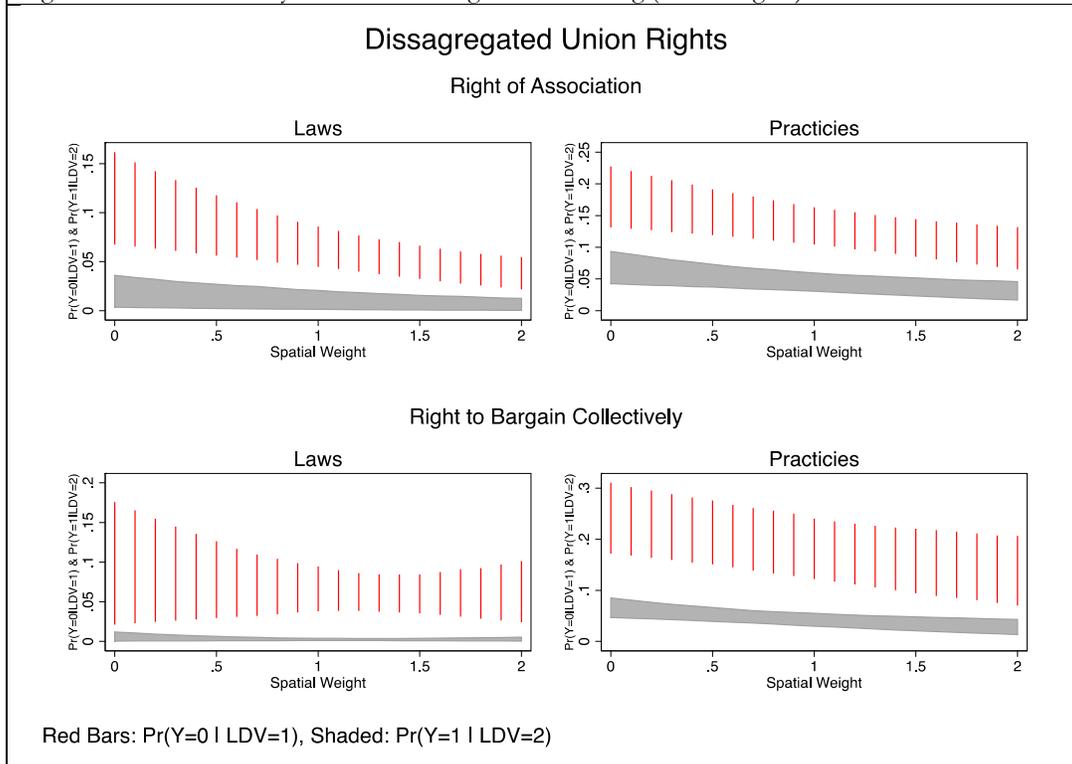Red Bars: Pr(Y=0 | LDV=1), Shaded: Pr(Y=1 | LDV=2)

Figure 2: 90% Uncertainty around Labor Rights Back Sliding (Substantive Rights)

Dissagregated Substantive Rights

Compulsory Labor / Minimum Age / Minimum Wage

Laws / Practicies

Saftey & Health / Working Hours

Laws / Practicies

Red Bars: Pr(Y=0 | LDV=1), Shaded: Pr(Y=1 | LDV=2)