

Revenue Substitution? How Foreign Aid Inflows Moderate the Effect of Bilateral Trade Pressures on Labor Rights

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Summary. — This paper investigates how foreign aid inflows moderate bilateral trade-based pressures on the exporting countries' labor rights. Because aid provides additional resources to recipient governments, it reduces the importance aid-recipient governments attach to the preferences of their export partners. Consequently, aid inadvertently moderates the leverage exercised by importing countries on the governments of exporting, developing countries. Our analysis of a panel of 91 aid recipient countries for the period 1985–2002 lends support to the “revenue substitution” hypothesis. When aid levels are low, bilateral trade-based pressures are associated with improved labor rights. As aid levels rise, however, the effect loses significance.

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1. INTRODUCTION

Developing countries are linked to the global economy in numerous ways, including participating in trade and receiving foreign aid. While such linkages present developing countries with a range of opportunities, they also expose them to a variety of external pressure and influences. In many instances, the external pressures generated by these linkages all push domestic actors in the same direction; for instance, they encourage improvements in the rule of law or increased investment in human capital. In other situations, however, different external linkages create conflicting incentives for government leaders, simultaneously exposing them to and insulating them from pressures for reform. This article explores one such instance: while bilateral trade relationships serve to transmit higher labor standards across national borders, foreign aid inflows dull, or even blunt, this transmission effect. By establishing the opposing effects of these external influences, we point to the need for development policy scholars to consider both direct and conditional (and sometimes unanticipated) effects of external influences on domestic policy outcomes.

Both trade and foreign aid lead to resource transfers from developed countries to developing countries. Often, developing countries export significant volumes to, and receive important aid flows from, the same nations. During the last decade, exports accounted for 44% of developing countries' GDPs, on average.¹ As of 2008, more than half of exports originating from the developing world – amounting to \$15.78 trillion in value – were absorbed by the developed world.² During the same time, foreign aid provided by developed countries, either bilaterally or through multilateral institutions, also increased steadily. Net official development assistance (ODA) increased by 63% during 2000–10, reaching \$128.5 billion in 2010.³ While foreign aid (specifically, official development assistance, or ODA) transfers resources directly from donor governments to recipient governments, trade serves as an indirect, usually via the private sector, transfer of resources. By providing markets for exports, developed countries influence the current account balance and, ultimately, public revenues and economic growth of developing countries.

Because both trade and aid can influence domestic policy outcomes in recipient/exporting nations, theories linking external economic flows with internal policy choices must address the multiplicity of external pressures (Lim, Menaldo, & Prakash, 2014). We do so by asking how, in the context of workers' rights, foreign aid and trade shape governments' incentives to enact laws vis-à-vis their labor force.⁴ We suggest that, while bilateral trade serves as an important mechanism for the diffusion of laws influencing labor rights (Greenhill, Mosley, & Prakash, 2009; Cao, Greenhill, & Prakash, 2013), foreign aid can intervene, unexpectedly, in the workings of such trade-based diffusion mechanisms. Because aid serves as an alternative source of external funds for governments, our intuition is that it might render recipient governments less likely to accede to the demands of actors based in their key export markets.

We test our argument about the conditioning effect of aid on the bilateral trade-based diffusion mechanism in a panel of 91 developing countries for the period 1985–2002. First, we replicate prior research suggesting that bilateral trade serves to diffuse labor rights from importing to exporting countries. Next, to test our claim that aid conditions the operation of trade-based pressures, we assess the interactive effects of bilateral trade and aid. We find that when foreign aid levels are low, the diffusion effects of bilateral trade-based mechanisms persist (Greenhill *et al.*, 2009; Prakash & Potoski, 2006; Vogel, 2005). However, as foreign aid levels rise, this trade-based diffusion effect loses significance. Thus, countries that receive moderate to high levels of foreign aid tend not to experience changes in labor rights, even when their trading partners have very different – better *or* worse – labor standards. Importantly, our findings are robust to alternate specifications of foreign aid such as measuring bilateral aid and multilateral aid separately, controlling for bilateral aid extended by the United States, and including aid provided by non-traditional donors.

In the first section of the paper, we review the existing literature on the effect of foreign aid, as well as trade, on labor

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rights in the developing world. Building on this literature, Section 2 describes our theoretical framework and hypotheses. Section 3 presents the data and methods for empirical analyses, and Section 4 presents and discusses our findings. The last section concludes.

2. AID, TRADE AND LABOR RIGHTS: WHAT DO WE KNOW?

For several decades, U.S. government officials have argued that engagement with the global economy offers the best hope for social and economic development in low and middle-income countries. A key pillar for promoting such engagement has been the push for trade liberalization, via the multilateral trade system, as well as via various regional, bilateral, and unilateral trade preference arrangements. The 1968 “Enabling Clause” of the General Agreement on Tariffs and Trade (GATT) allowed wealthy countries to offer developing nations preferential market access for a range of exports, going beyond the most favored nation (MFN) status extended to all GATT members (Blanchard & Hakobyan, 2012; Tsogas, 2000). The 1970s and 1980s witnessed continued efforts at trade liberalization, especially in the context of the structural adjustment policies of the mid-to-late 1980s; the period also is characterized by a further expansion of foreign aid, albeit often driven by Cold War politics (Bearce & Tirone, 2010). While the 1990s saw a greater policy focus on trade than on aid, the emergence of the Millennium Development Goals brought a renewed attention to aid during the last decade. The OECD identifies foreign aid as “a necessary and complementary source of finance” for achieving the goals of pro-poor, pro-rights growth.⁵

The implicit premise behind this dual focus on trade liberalization and foreign aid is that both can serve as means to promote economic growth and to improve citizens’ material wellbeing. The “aid for trade” discourse, which conceives aid as a “valuable complement” to the trade negotiations, also appears to reflect the assumption that aid and trade are complementary tools at developed nations’ disposal (United Nations Economic Commission for Africa, 2013).⁶ Thus far, there has been little empirical investigation into whether this is necessarily the case, especially when the end goal is beyond trade liberalization. How might the simultaneous inflows of export receipts and foreign aid affect domestic policy outcomes? Would each enhance the effect of the other; would they sometimes work at cross-purposes to one another; or would they work in a more compartmentalized fashion, so that the effect of trade is independent of that of aid? To answer this question, we examine the interactive effect of trade and aid on labor rights in developing nations.

The category of labor rights is multi-dimensional, including both the capacity of workers to act collectively (to associate freely, bargain collectively and strike) as well as the individual conditions they experience (hours of work, protection of health and safety, non-discrimination in hiring and compensation). The diversity among “labor rights” is reflected in the International Labour Organization (ILO)’s 189 conventions. The most important of these labor rights are those four types specified in the ILO’s 1998 Declaration on Fundamental Principles and Rights at Work: the elimination of all forms of compulsory and forced labor; the prohibition of discrimination in employment and pay based on race, gender, ethnicity, or religion; the elimination of child labor (or, at least, the worst forms of child labor); and freedom of association and the right to collective bargaining. Our theoretical claims concern these core rights. Empirically, we focus on a subset of

these core rights, namely the right of workers to associate freely, form unions, bargain collectively and strike. This represents procedural, rather than substantive labor right. Rather than imposing specific outcomes (wages or working conditions, for example), the right to collective bargaining offers workers the opportunity to achieve such outcomes.

Let us first consider the unconditional effects of aid and trade on labor rights outcomes. The evidence on the effect of foreign aid on labor rights is mixed. Most studies have focused on human rights generally, rather than on labor rights specifically, but the lessons likely hold for the latter. On the one hand, the potentially pernicious (although unintentional) effects of foreign aid can be inferred from a range of studies. Aid – the amounts of which are often small by global or donor country standards, but substantial relative to recipient-nation budgets and economies – is likely to be seen as a replacement for tax-based revenues. The increased aid flows thus allow governments to be less accountable to its own citizens and ignore broad public demands (Djankov, Montalvo, & Reynal-Querol, 2008; Gibson, Andersson, Ostrom, & Shivakumar, 2005; Remmer, 2004; Ross, 2012), enable rent-seeking behavior among political elites (Ahmed, 2012; Svensson, 2000), and undermine local civil society (Chahim & Prakash, 2014), all of which would hinder labor rights progress. These pernicious effects are linked to the process by which donor governments disburse aid: donor governments often are motivated by political and strategic, rather than by socioeconomic development, goals. If donor governments curry favor with recipient regimes, and if recipient regimes have substantial *de facto* discretion over how to spend aid, then recipient governments will have few incentives to spend aid in ways that provide broad public benefits or that might upset the political status quo.

Yet, donors have also increasingly sought to incorporate conditionality in foreign aid; requirements often include human and labor rights outcomes as well as broader “good governance” behaviors. Of course, the effect of such conditionality on actual outcomes is contingent on their implementation and, therefore, far from automatic (Demirel-Pegg & Moskowitz, 2009; Nielsen, 2013; Lebovic & Voeten, 2009). If the conditions and the associated aid cutoffs are effectively enforced, we might expect a positive association between more recent forms of foreign aid and labor rights. One also might expect that foreign aid could facilitate the enactment of rights-related policies by enhancing governments’ capacity. Indeed, over the last two decades, ODA to social sector programs, including government and civil society promotion, has increased relative to foreign aid directed at economic and production sectors.⁷ Such programs can assist governments in revising their labor laws to meet ILO core conventions, hiring additional labor inspectors, and educating private employers on basic standards for the treatment of workers (Schrank, 2009). Consistent with this logic, in a global study of the effects of various economic flows on personal integrity rights during the 1990s, Apodaca (2001) finds that aid positively affects human rights. Similarly, Dunning (2004)’s analysis of aid flows to African nations suggests that, from the late 1980s, aid is significantly and positively associated with human rights outcomes. As the competing insights from the existing literature indicate, our understanding about the unconditional (direct) influence of foreign aid on labor rights is far from conclusive.

The literature on the effect of trade on developing countries’ labor rights also displays mixed findings. The “race to the bottom” narrative reminds us that market competition, which is enhanced by economic globalization, requires firms to lower production costs. It creates incentives for firms to establish

production locations or supply chain relationships in countries that offer lower costs – in terms of labor, the environment, or corporate taxation. Since a large number of developing countries seek to host the same exporting firms or their suppliers, some predict that these countries will competitively lower their labor rights standards (Seidman, 2007; see Flanagan, 2006 for a contending view). In support of these claims, several studies report negative relationships between overall trade openness and labor rights (Cingranelli & Tsai, 2003; Mosley & Uno, 2007).

Yet many scholars question the race to the bottom narrative; some disagree with the premise that trade integration overall has a negative impact. It has been suggested that trade can improve rights-related outcomes, in the long run, via economic growth and efficiency gains in production. A more recent strand of research considers the specific influence of trading partners' labor rights on exporting countries' labor outcomes, rather than the general effect of trade openness on labor rights. Central to this stand of research is the claim that trade serves as a channel for transmitting labor rights between countries.

Greenhill *et al.* (2009)'s empirical study finds that exporting to destinations with strong collective labor laws strengthens the collective labor laws of a developing country, even controlling for the existence of bilateral trade agreements containing specific labor rights conditions. This is because importing firms can exert leverage on the governments of the developing countries by demanding higher labor rights standards for their subsidiaries and supply chain partners. Indeed, a desire to avoid a negative "spotlight" (Spar, 1998) vis-à-vis consumers, as well as pressure from shareholders, has motivated firms in developed nations to appear socially responsible, and to be sensitive about labor rights in their subcontractors as well as in their direct subsidiaries (Bartley, 2005; Locke, 2013). Those supplying inputs to final assemblers focused on branded products (Gereffi & Korzeniewicz, 1994) and embedded in buyer-driven commodity chains are expected to be particularly subject to such pressures.

Overall, the literature regarding the direct unconditional effects of both trade and foreign aid on host economies offers a somewhat mixed picture. In some accounts and in some empirical analyses, the direct effects are positive; in others, they are negative. One explanation for these mixed findings may be the tendency of scholars to treat "aid" and "trade" as existing in silos: scholarship which examines the effects of trade on developing countries does not consider how these effects might be moderated by inflows of foreign aid, and vice versa.

We assert that scholarship must consider the *interactive* effects of economic flows, including those of trade relationships and foreign aid disbursements. While we sympathize with the claim that bilateral trade relationships can serve as vehicles to diffuse labor rights from importing to exporting countries (Greenhill *et al.*, 2009), we move beyond this finding, to argue that the workings of the trade-based diffusion mechanism are conditioned by the availability of foreign aid. Although foreign aid, on its own, is not necessarily inimical to labor rights, it weakens bilateral trade-based pressures. Consequentially, bilateral trade-based pressures can be expected to affect labor rights outcomes *only* at lower levels of foreign aid inflows. We develop this logic in the following section.

3. THE INTERPLAY BETWEEN BILATERAL TRADE PRESSURES AND AID INFLOWS

The central actor in our theoretical narrative is the developing country government: the government decides whether to

enact, or keep in place, labor rights laws that are consistent with internationally recognized core labor rights.⁸ We assume that governments want to maintain their political office. As part of doing so, they seek to access different sources of revenue, which would help regime survival in different ways, from basic issues such as running the governmental machinery to providing payoffs to important interest groups. These revenues come in many forms; for the purposes of our analyses, the relevant ones are export receipts (which occur largely in the private sector, but which the government accesses via taxation) and foreign aid (which flows directly to governments).

Labor rights pose a dilemma for revenue-seeking governments. On the one hand, governments worry that labor rights protection leads to an increase in labor costs, and put their country at a competitive disadvantage relative to their regional and income-group peers. If economic growth and, subsequently, governmental revenues suffer as a result of losing out in the competition, domestic discontent will destabilize the government.⁹ Also, providing the right to organize, bargain collectively and strike facilitates the emergence and growth of labor movements; such movements might challenge the authority of the governing party and its elite supporters. These concerns make developing country governments hesitant to provide collective labor rights.

On the other hand, recall that bilateral trade-based pressures can provide incentives for governments to respect labor rights, even if they have internal concerns about doing so. If external, pro-labor stakeholders pressure governments via trade relationships to improve labor rights, governments will be inclined to do so. Acceding to such pressures allows governments, and their firms and workers, to continue exporting successfully. Each of these activities not only satisfies those in the export-oriented sector – workers and owners –, but also provides governments with income and corporate tax revenue.

Facing such mixed incentives regarding the provision of labor rights, it is unclear what choice developing country governments might make. This is where foreign aid comes into our theoretical narrative. Thus far, we have assumed that all governments are equally inclined to attend to bilateral trade-based pressures. We expect, however, that there is variety among governments, driven by the availability of other types of revenue, especially foreign aid. When foreign aid flows provide an alternative source of funds, governments' inclination to accede to bilateral trade-based pressures will be weakened. In this regard, foreign aid tips the balance between the mixed incentives by insulating governments from trade-related pressures regarding labor rights. We expect to see foreign aid serving to partially offset (and, at the extreme, to eliminate) the labor rights diffusion effect of the bilateral trade-related relationship.

Historically, foreign aid from donor governments has been disbursed directly to recipient governments. Because aid constitutes a direct contribution to government revenues, it provides more degrees of freedom to recipient governments. These governments might invest aid proceeds in a wide range of revenue-generating industrial projects, use aid to substitute for domestic sources of revenue, or divert aid to offer patronage to domestic interest groups. To some degree, foreign aid substitutes for the resources that the government can generate indirectly via exports. Given this dynamic, foreign aid has an unexpected political consequence: it reduces the policy leverage of the importing-country firms – and thus of their shareholders and consumer groups – on developing country governments.

Our main hypothesis, therefore, is that the availability of foreign aid conditions the effect of bilateral trade-based

diffusion mechanism on labor rights. At lower levels of aid, exporting to countries with better (worse) labor rights protections tends to improve (diminish) labor rights in developing countries. However, at higher levels of foreign aid, bilateral trade-based pressures – either upward or downward – on labor rights are diluted. We test this claim empirically, using a large-N analysis, in the following section. We find support for this hypothesis, even when we control for various other potential determinants of labor rights and when we measure foreign aid in different ways.

4. DATA AND METHODS

We test our central claim using a cross-country panel data analysis. Our dataset, which is an unbalanced panel, includes 91 developing countries and covers the period from 1985 to 2002. This sample includes all countries with data availability that ever received Official Development Assistance (ODA), based on the OECD record.¹⁰ The ending year of our dataset is determined by the availability of our dependent variable, collective labor rights.

Our empirical analysis focuses on collective labor rights, which are one type of core labor rights. Collective labor rights – the ability of workers to form and join unions, and the capacity of those unions to bargain – are perhaps the element of core labor rights that is most relevant, across the largest swath of countries, to participation in the global economy. There also exist detailed measures of the collective labor rights, including an indicator with a focus on government legal provision of such rights. We use [Mosley and Uno \(2007\)](#)'s collective labor laws indicator, which captures the extent to which workers' rights to associate, organize, bargain collectively and strike are provided by and protected in domestic law. We do not assess individual rights or working conditions directly, although the rights to act collectively allow workers to achieve better working conditions and compensation ([Mosley, 2011](#)).

Importantly, we focus exclusively on laws enacted by the government rather than practices (i.e., whether the law is observed by employers). This is because the key actor in our framework is the developing country government, as the creator and enactor of labor law, and also as a key recipient of foreign aid. Although a government's willingness and ability to enforce labor laws certainly affects the labor practices of firms, there are many additional factors, beyond government incentives and actions, affecting labor rights practices, and these often vary not only cross-nationally, but across sectors and across firms. As a result, the practice indicator is less appropriate for evaluating how foreign aid conditions the effect of bilateral trade pressures on governments' decisions over labor rights provision.¹¹

The collective labor laws indicator is measured annually, on the basis of information provided in three sources: the US State Department's annual *Country Reports on Human Rights Practices*; the International Labor Organization's Committee of Experts on the Applications of Conventions and Recommendations (CEACR) and the Committee on Freedom of Association (CFA) reports; and the International Confederation of Free Trade Unions' (now part of the International Trade Union Confederation) *Annual Survey of Violations of Trade Union Rights*. The coding template includes 37 types of violations of rights, ranging from minor to severe, in six categories: freedom of association and collective bargaining-related liberties; the right to establish and join worker and union organizations; other union activities; the right to bargain collectively; the right to strike; and rights in export processing zones.¹² We reverse the scale of these measures, so that higher

values of the collective labor rights measure represent greater levels of respect for labor rights, and lower values represent lower levels of respect. The collective labor law scores range from 1.5 to 28.5 for the country-years included in our sample.¹³

Our key explanatory variable is the interaction between foreign aid and the bilateral trade-based pressures. To measure foreign aid, we use the OECD-Development Assistance Committee (DAC) database on ODA. Our main indicator of foreign aid combines bilateral aid from the DAC member donors and multilateral aid from intergovernmental institutions such as the World Bank. We also investigate whether the conditioning effect of foreign aid varies by the type of aid donor or the donors' stated purpose of aid. While our main model operationalizes foreign aid in terms of ODA as percentage of GDP, as a robustness check we also test an alternative operationalization: (logged) ODA per capita ([Alesina & Dollar, 2000](#); [Younas & Bandyopadhyay, 2009](#)).

To capture the pressures on labor laws emanating from bilateral trade relationships, we follow [Greenhill et al. \(2009\)](#) and measure the bilateral trade context (BTC) for each country-year. The BTC is the average of the collective labor laws indicator in the country's export partners, weighted by the contribution of each export partner to total exports:

$$BTC_i = \sum_j \left(\text{Labor Laws}_j * \frac{\text{Export}_{ij}}{\text{Total Export}_i} \right)$$

Export_{ij} represents the volume of exports sent from country *i* to country *j*, Labor Laws_{*j*} refers to the collective labor laws score for the destination country *j*, and Total Exports_{*i*} represents the total volume of goods exported from country *i* to all of its destinations. To elaborate, think of a country A which trades with country B and country C. Suppose B accounts for 20% of A's exports and C accounts for the remaining 80%. Now suppose the labor rights score for B is 8 and for C is 15. The BTC for country A will be: (0.2*8) + (0.8*15), that is 1.6 + 12 = 13.6. The BTC score can change either if the salience of exports to B or C change, or if the labor rights scores of B and C change.

We control for a number of variables that can independently influence collective labor laws, according to existing literature. We control for total trade flows measured as a percentage of GDP to capture the volume-wise, as opposed to context-wise, dependence on international trade. We control for FDI stock, measured as a percentage of GDP, as we might expect multinational firms to transmit labor rights internationally, in either a "race to the bottom" or a "bringing best practices" fashion. To capture the possible association between the level of economic development and labor laws, our main specification also controls for the (logged) GDP per capita in constant 2007 dollars and adjusted for purchasing power parity.¹⁴ Moreover, we control for membership in preferential trade agreements (PTA) that make trade relationships contingent on the maintenance of human or labor rights ([Hafner-Burton, 2005, 2009](#)). We include a dummy variable that is equal to 1 when a country is a member of any PTA with "hard" human rights conditions.¹⁵ To account for the possibility that the availability of natural resource rents renders the government less inclined to provide rights protection, we control for dependence on natural resources.¹⁶

Although we focus on external influences that affect revenue-seeking governments' decisions regarding collective labor rights provision, we are also aware that labor laws – like many government policies – are explained in part by domestic social and political factors. Because higher levels of industrialization

may create societal pressures for more stringent collective labor laws as a greater percentage of the workforce becomes involved in the urban, manufacturing sector, we control for the industry value added as a percentage of GDP¹⁷ and the (logged) size of the urban population. These indicators also serve as proxies for the size of the labor force in the formal sector, which again might allow for more effective articulation of demands for collective labor rights.

Furthermore, we control for the level of democracy (Polity2 score): more democratic governments should exhibit greater respect for collective labor rights, all else equal. To assess whether government ideology is associated with better protections for workers' rights, we also include a measure – as a dummy variable – of the presence of a left-leaning ruling party or, in the case of a coalition government, a left-leaning party as the largest among the ruling parties (Mosley & Uno, 2007; Neumayer & De Soysa, 2006).¹⁸ We therefore account for potential drivers of government decisions over labor rights that might be independent from external pressures. Several additional control variables are introduced in a series of robustness specifications, discussed below. Since one might suspect that large foreign aid recipients are atypical in terms of the values of the control variables, a series of histograms showing the distributions of selected variables between highly aid-dependent observations and the rest of the sample are included in the Appendix, along with summary statistics for all independent variables.

In dealing with serial correlation, we prefer an Autoregressive Distributed Lag (ADL) model as a fully general dynamic specification to other restricted versions of dynamic models, so as not to impose (potentially invalid) restrictions on the functional form of lag structure (De Boef & Keele, 2008).¹⁹ Our main model specification is expressed as follows:

$$\begin{aligned} \text{Labor Law}_{it} = & \phi_1 \text{Labor Law}_{i,t-1} + \gamma_1 \text{BTC}_{it} + \gamma_2 \text{BTC}_{i,t-1} \\ & + \gamma_3 \text{Aid}_{it} + \gamma_4 \text{Aid}_{i,t-1} + \gamma_5 \text{BTC} * \text{Aid}_{it} \\ & + \gamma_6 \text{BTC} * \text{Aid}_{i,t-1} + \mathbf{x}_{it} \beta_1 + \mathbf{x}_{i,t-1} \beta_2 + \alpha_i + \tau_t \\ & + \varepsilon_{it} \end{aligned}$$

where ϕ_1 captures effect of lagged dependent variable, γ_1 through γ_6 captures the effects of our key explanatory variables. \mathbf{x} is the matrix of control variables, and β_1 and β_2 represent the vectors of coefficient estimates for the contemporaneous and one-year lag terms of the control variables. α_i and τ_t are country and time fixed effects respectively,²⁰ and ε_{it} is the error term.²¹

To identify the total effect an independent variable has on the dependent variable distributed over future time periods, we calculate each independent variable's Long-Run Multiplier (LRM). The ADL specification allows us to estimate the LRMs without running the risk of imposing invalid restrictions on the dynamic process. For example, the LRM for bilateral trade context (BTC) and foreign aid would be²²:

$$\text{LRM}_{\text{BTC}} = \frac{\gamma_1 + \gamma_2}{1 - \phi_1}$$

$$\text{LRM}_{\text{Aid}} = \frac{\gamma_3 + \gamma_4}{1 - \phi_1}$$

The Delta Method is used to calculate the correct standard errors for the LRM. In doing so, we also use Driscoll-Kraay (1998)'s robust variance-covariance estimator, a non-parametric technique designed for panel data estimated with group fixed effects. The estimator addresses both groupwise contemporaneous correlation and heteroskedasticity.

Our analysis proceeds as follows. We first estimate a null specification that simply regresses labor laws on bilateral trade context (*BTC*), foreign aid (*Aid*), and the control variables described above, with no interaction term. This model evaluates existing claims regarding the direct and unconditional effects of trade relations and foreign aid on labor rights. Next, we add our main variable of interest, the interaction term between *BTC* and *Aid*. We then investigate whether the conditioning effect of foreign aid varies by the type of aid donor and stated purpose of aid. Because aid and *BTC* might be endogenous to labor rights, as a specification check, we also estimate a series of instrumental variable models.

5. FINDINGS

The first column in Table 1 reports the results of Model 1, which focuses on the unconditional and separate effects of *BTC* and *Aid* on labor rights. Consistent with Greenhill *et al.* (2009), *BTC* is positively and significantly associated with collective labor laws in the developing world. In this model, the coefficient of *Aid* is not statistically significant.²³ Thus, we find that bilateral trade pressure by itself affects the legal provision of collective labor rights in exporting countries controlling for foreign aid; yet, foreign aid, by itself, does not have a statistically significant effect on labor rights laws controlling for *BTC*.

In Model 2, we report the findings from a model that includes the interaction of *BTC* and *Aid*. This model assesses whether aid moderates the effect of the bilateral trade-based diffusion mechanism identified in Model 1. The interaction term is statistically significant and negative, which is consistent with our theoretical expectations that aid dampens the effect of bilateral trade-based pressures on labor rights. Following Brambor, Clark, and Golder (2006), Figure 1 presents the long-run change in collective labor law score implied by a one-unit improvement in *BTC*, conditional on the country's foreign aid receipts.²⁴ The exterior dotted lines are 95% confidence intervals. The "rugs" (the intensity of shading on the x -axis) show the distribution of the 1,226 observed data points included in the analysis.

These findings support our main claim: at lower levels of aid, there is evidence that bilateral trade pressures influence the collective labor laws of exporting countries: increases (decreases) in the provision of labor laws in export partners are associated with the improvement (deterioration) of collective labor laws in the developing country exporter. When a country's *Aid* is zero, a one-unit increase (decrease) in the country's *BTC* would, over time, lead to a 0.5 point increase (decrease) in the collective labor law score.²⁵ A one standard deviation (1.9) increase (decrease) in *BTC* then leads to an almost one point increase (decrease) in the collective labor law score.

Figure 1 also reveals that the magnitude of the trade-based diffusion effect diminishes as aid levels increase. Foreign aid nullifies the effect of the bilateral trade context when aid is greater than approximately 10% of GDP. The mean value of aid in our sample, 8% of GDP, is indeed close to this threshold, and more than a quarter of our observations lie above the 10% threshold. (See Appendix for descriptive statistics).

To aid in the substantive interpretation of the findings, Table 2 summarizes the cases of Vietnam and Laos, two of the lower middle-income economies in South East Asia governed by left-leaning (communist) parties.²⁶ Vietnam is representative of countries whose aid dependence remained relatively low, at a level far below the 10% threshold where

Table 1. *Determinants of collective labor law standards*

LRM	Model1 Null	Model2 Main	Model3 Post Cold War	Model4 Exc. top ten recipients	Model5 Aid per capita
BTC: Labor Law	0.196 (0.093)	0.434 (0.095)	0.384 (0.089)	0.438 (0.158)	0.404 (0.176)
Aid	0.014 (0.015)	0.673 (0.156)	0.726 (0.187)	1.030 (0.403)	1.404 (0.816)
BTC: Labor Law \times Aid		-0.026 (0.006)	-0.029 (0.008)	-0.038 (0.017)	-0.063 (0.035)
Trade	-0.021 (0.009)	-0.021 (0.009)	-0.004 (0.009)	-0.014 (0.013)	-0.021 (0.009)
FDI	0.046 (0.016)	0.042 (0.015)	0.018 (0.019)	0.034 (0.018)	0.046 (0.015)
GDP per capita	0.525 (1.287)	0.613 (1.364)	1.577 (1.131)	1.273 (1.306)	0.548 (1.359)
Natural resource	-0.018 (0.029)	-0.024 (0.030)	-0.104 (0.048)	0.002 (0.030)	-0.021 (0.028)
Democracy	0.111 (0.024)	0.097 (0.024)	0.033 (0.019)	0.109 (0.025)	0.117 (0.027)
Left ruling party	0.500 (0.300)	0.557 (0.299)	0.340 (0.334)	0.902 (0.328)	0.499 (0.305)
Industry	0.069 (0.028)	0.068 (0.028)	0.070 (0.023)	0.066 (0.035)	0.062 (0.029)
Hard PTA	-0.715 (0.474)	-0.669 (0.466)	-0.830 (0.362)	-0.315 (0.520)	-0.747 (0.500)
Civil war	-0.024 (0.342)	-0.097 (0.349)	-0.140 (0.283)	-0.040 (0.438)	-0.126 (0.344)
Urban population	0.361 (2.252)	0.141 (1.965)	3.412 (4.189)	2.157 (3.866)	0.262 (2.158)
Lagged DV (ϕ_1)	0.250 (0.051)	0.248 (0.050)	0.152 (0.065)	0.249 (0.050)	0.250 (0.054)
N (Country)	1226 (91)	1226 (91)	927 (90)	1096 (81)	1226 (91)
Fixed effects	Country, Year				

Note.(i) LRMs are reported with Driscoll–Kraay standard errors in parentheses.

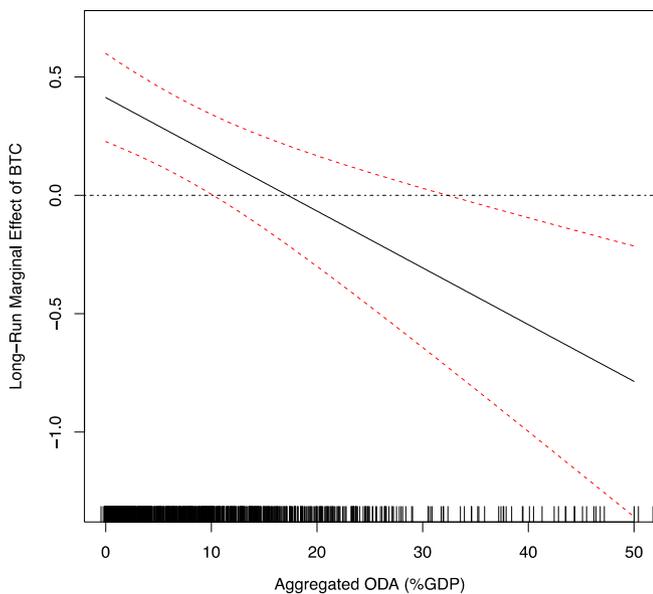


Figure 1. *Effect of Bilateral Trade Context (BTC) on labor laws.*

aid is found to nullify the BTC effect. Laos, on the contrary, is representative of countries whose aid dependence has, over time, increased beyond the threshold.²⁷ Although both countries experienced some increases in BTC over the period covered in our analysis, the effect of these increases on labor

Table 2. *Selected cases: Vietnam and Laos*

	BTC (1985→2002)	Aid (1985→2002)	Labor Law (1985→2002)
Vietnam	16.9→22.9	1→3.6%	15→20
Laos	20.6→23.6	1.5→15%	17→14

laws was not uniform. The BTC-based diffusion seems to have worked only in low-aid Vietnam, where improvements in the BTC led to more stringent labor laws. In high-aid Laos, the BTC-based diffusion mechanism is not observed. Collective labor laws deteriorated. This is consistent with our theoretical narrative and our large-N findings.

Among the control variables, FDI stock, democracy, and the size of industry positively contribute to collective labor law protections in developing countries. The FDI finding is consistent with past studies (e.g., Mosley & Uno, 2007); the substantive effect of this variable is rather small, however. While much FDI to developing nations comes from developed countries and is likely to bring with it better labor rights standards, not all FDI brings with it such pressures for improvements. Indeed, future work – assuming improved data availability for bilateral FDI – would do well to consider the effect of the bilateral FDI context (labor standards in investing economies) on rights in low and middle-income host nations. The coefficient estimate for total volume of trade is

negative.²⁸ Such an estimate is consistent with our view on the predisposition of developing country governments that they are often reluctant to provide collective labor rights lest their provision lead to an increase in labor costs, which would put their country at a competitive disadvantage.

The significance of the interaction effect also holds when we limit the sample to post-Cold War years (1991–2002) (see Model 3). This result suggests that our findings are not driven by Cold War-era policies. Further, our key results hold even when we exclude the top ten most aid dependent countries from our model (Model 4).²⁹ This suggests that the ceiling effect in a small number of aid outliers is not driving our findings. To make sure that our use of the GDP-denominated aid indicator does not bias our findings, we also employ a population-denominated (i.e., per capita) measure of aid (Model 5). The interaction term is again significant, suggesting that our finding is robust against the different choice of denominators.

6. VARIETIES OF FOREIGN AID: DOES DONOR TYPE OR AID PURPOSE MATTER?

Given the validity of the claim that not all trade is created equal and that the identity of trading partners matters, we also

consider whether all foreign aid has similar effects on recipient nations. In a series of additional robustness checks, we employ a range of different foreign aid variables to test whether aid from different donors and for different stated purposes affects labor rights outcomes differently. We find little evidence that this is the case, as Table 3 reports.

First, in Model 6, we account for the potential difference that the inclusion of non-DAC donors might make on recipient countries' incentives regarding collective labor laws. That is, perhaps some donors, especially those in the North, do care about rights-related practices in recipient countries, while "emerging donors" may not. We therefore employ an aid indicator that includes bilateral aid from non-DAC nations as well as DAC nations. We find the size of interaction term coefficient (−0.024) is almost identical with the one from our main model (Model 2, −0.026).³⁰

In Models 7 through 9, we focus on bilateral aid. In Model 7, we include only bilateral aid as our foreign aid indicator. In Model 8, we also take into account the variation in labor rights among bilateral aid donors by t (BAC), analogous to the way we constructed the BTC .³¹ In Model 9, we further exclude US bilateral aid to rule out the possibility that the US, as the largest country donor of development aid in absolute terms, drives our findings. Arguably, US bilateral aid may

Table 3. *Do types of foreign aid matter?*

LRM	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
	Inc. Non-DAC		Bilateral			Multilateral	Social Sector Aid
		Total	Control for BAC	Exc. US Aid	Total	Exc. IMF/IBRD	
BTC: Labor Law	0.423 (0.093)	0.416 (0.105)	0.391 (0.100)	0.436 (0.111)	0.329 (0.090)	0.346 (0.138)	0.231 (0.099)
Aid	0.640 (0.143)	1.150 (0.318)	1.235 (0.297)	1.374 (0.369)	0.894 (0.307)	1.363 (0.771)	0.583 (0.340)
BTC: Labor Law × Aid	−0.024 (0.006)	−0.044 (0.013)	−0.047 (0.012)	−0.053 (0.015)	−0.035 (0.012)	−0.055 (0.030)	−0.032 (0.015)
BAC			0.382 (0.231)				
Trade	−0.021 (0.009)	−0.021 (0.008)	−0.020 (0.008)	−0.021 (0.008)	−0.020 (0.009)	−0.015 (0.014)	0.029 (0.004)
FDI	0.042 (0.015)	0.042 (0.015)	0.041 (0.011)	0.042 (0.015)	0.044 (0.016)	0.033 (0.019)	−0.035 (0.005)
GDP per capita	0.603 (0.367)	0.577 (1.385)	0.762 (1.340)	0.557 (1.368)	0.484 (1.398)	0.314 (1.360)	−0.994 (0.721)
Natural resource	−0.024 (0.030)	−0.022 (0.030)	−0.013 (0.028)	−0.024 (0.030)	−0.025 (0.031)	−0.050 (0.037)	−0.038 (0.023)
Democracy	0.097 (0.024)	0.099 (0.024)	0.093 (0.024)	0.098 (0.024)	0.101 (0.026)	0.096 (0.030)	−0.067 (0.044)
Left ruling party	0.555 (0.300)	0.574 (0.307)	0.454 (0.345)	0.578 (0.302)	0.523 (0.301)	0.634 (0.404)	−0.335 (0.448)
Industry	0.068 (0.028)	0.063 (0.028)	0.060 (0.027)	0.063 (0.028)	0.069 (0.028)	0.061 (0.031)	0.066 (0.026)
Hard PTA	−0.671 (0.466)	−0.679 (0.452)	−0.636 (0.679)	−0.576 (0.441)	−0.681 (0.470)	−0.490 (0.604)	0.973 (0.732)
Civil war	−0.094 (0.349)	−0.122 (0.364)	−0.156 (0.339)	−0.108 (0.361)	−0.075 (0.344)	−0.220 (0.392)	−0.270 (0.322)
Urban population	0.141 (1.966)	0.080 (1.913)	−0.178 (1.665)	0.117 (1.899)	0.113 (2.245)	−0.753 (2.384)	−2.732 (0.658)
Lagged DV (ϕ_1)	0.248 (0.050)	0.249 (0.050)	0.245 (0.051)	0.249 (0.050)	0.250 (0.050)	0.322 (0.054)	
N	1226	1226	1193	1226	1226	1127	491
(Country)	(91)	(91)	(88)	(91)	(91)	(82)	(86)
Fixed effects			Country, Year				Country

Notes.

(i) For Models 6–11, LRMs are reported with Driscoll–Kraay standard errors in parentheses.

(ii) Model 12 is a static model. Independent and control variables are lagged by one year. Breusch–Godfrey/Wooldridge test rejects the alternative hypothesis that there is a serial correlation in idiosyncratic errors. Coefficient estimates are reported with robust standard errors in parentheses.

have more pernicious effects than other aid, if the US is more inclined than its counterparts to extend aid for military, political, and economic self-interest reasons (Bearce & Tirone, 2010). Our finding of aid's negative conditioning effect holds in all four models.

Models 10 and 11 focus on multilateral aid. In Model 10, we only include multilateral aid as our foreign aid indicator, and in Model 11, we further exclude the net flow of concessional loans from the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD, World Bank). This is to explore the possibility that multilateral aid from particular international financial institutions (IFI) that are known for advocating labor market flexibility is driving our finding. Our finding of aid's negative conditioning effect holds in both Models.

Figure 2 presents the long-run changes in collective labor law score implied by a one-unit improvement in *BTC*, conditional on the country's bilateral (left, based on Model 7) and multilateral (right, based on Model 10) aid receipts, respectively. Overall, these additional models suggest that the negative interaction effect of *Aid* on *BTC* is not driven by particular country or institutional donors.

The conditioning role of foreign aid might also vary depending on the sector to which aid it is allocated. Arguably, aid for social infrastructure and services development such as education, health, and civil service might be less growth-oriented and more conscious to human and social development than aid committed to economic infrastructure development and various production sectors. If so, one might find the blunting role of social sector aid on trade-based diffusion of labor rights to be weak or insignificant. In Model 12, we report results from using donor-reported aid commitment to social infrastructure and service sectors as our dependent variable. This category of aid (OECD DAC code100) relates essentially to efforts to develop the human resource potential of developing countries.³² Our results hold nonetheless: large social infrastructure and services sector aid nullifies the workings of trade-based labor rights diffusion. That foreign aid seemingly least inimical also works as a weakening environment for trade-based labor rights diffusion gives us more confidence in our proposed causal mechanism. Regardless of its types of donors and stated purpose, foreign aid is an addition to government revenue that can free recipient governments from trade-related pressures on labor rights.

7. ADDITIONAL ROBUSTNESS CHECKS: ENDOGENEITY BIAS?

So far, we have interpreted our findings to suggest that bilateral trade context and foreign aid affect labor laws in a developing country. Econometrically speaking, however, our findings can also be interpreted as labor laws in developing countries shaping its bilateral trade context and aid receipts.

Arguably, donors might prefer to offer foreign aid to countries showing good potential for legal enforcement of labor rights. And similarly, importers in developed countries might prefer to do business with firms operating in a jurisdiction with a sound labor rights enforcement prospect. Such endogeneity of export and aid flows to labor laws might have been driving the positive and significant estimates of lower order term *Aid* and *BTC*. Previous empirical works, however, suggest that this type of endogeneity is rather unlikely. The large aid literature suggests that aid allocation decisions often reflect strategic considerations rather than respect for human rights. Donor governments often ignore violations of internationally recognized rights, choosing instead to allocate aid to allied and potentially important governments. Wright and Winters (2010) report, for instance, that a recipient country's degree of political inclusiveness has no effect on its aid flows. Carey (2007)'s analysis of aid commitments from the European Commission, Germany, France, and the UK finds that "despite donors' emphasis on human rights in official documents, the human rights situation in developing countries does not consistently shape European aid commitments." Nielsen (2013) also finds that violations of human rights generate aid sanctions only in specific situations; at a general level, there is not a relationship between government respect for rights and aid flows. Given these patterns, we have little theoretical reason to expect that labor rights in recipient countries are significant determinants of foreign aid inflows from donor countries.

Likewise, existing studies suggest there is little empirical ground to expect that importers systematically favor sourcing products from developing countries with sound labor laws (Mosley, 2011). Indeed, Greenhill *et al.* (2009), who focuses on *BTC* as a mechanism for labor standards diffusion, instrument bilateral export composition using several versions of the standard gravity model of international trade, and find the effect of *BTC* robust against the endogeneity of bilateral export composition.

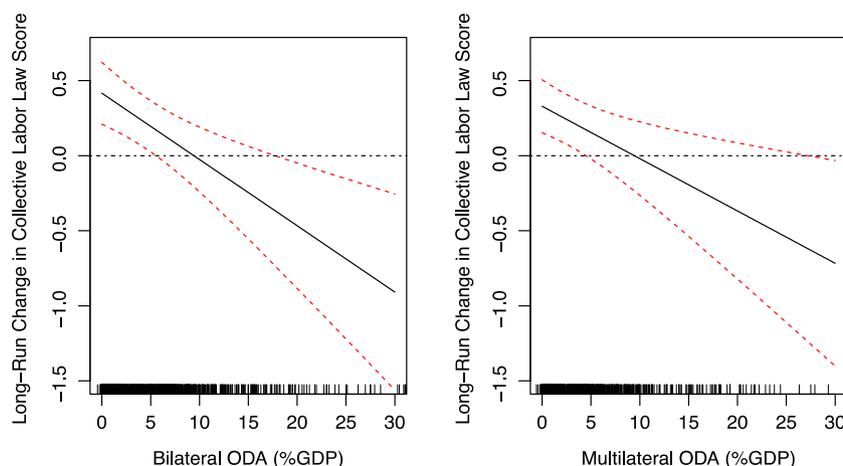


Figure 2. Do donor types matter?

Still, our findings may suffer from other, unexplained endogeneity. We address the remaining endogeneity concerns through system-generalized method-of-moments (GMM) estimation (Blundell & Bond, 1998) of our ADL model. GMM is designed for a situation with independent variables that are not strictly exogenous, and importantly for us, it does not assume that good instruments are available outside the dataset. In the GMM setting, it is in effect “assumed that the only available instruments are internal-based on the lags of the instrumented Variables” (Roodman, 2009a). While we suspect that certain regressors in our model may potentially be endogenous, we do not have a specific source or mechanism of endogeneity in mind, which makes it difficult to find strong

external instruments to conduct standard instrumental variable regression (e.g., two stage least squares or 2SLS). Thus we prefer GMM as a strategy to grasp the magnitude and direction of the unexplained endogeneity.

Specifically, the System GMM estimation strategy we adopt combines the difference equation and the level equation into a single system, and uses the lagged “levels” of the potentially endogenous variables as instruments for the difference equation, while using the lagged “differences” of the potentially endogenous variables as instruments for the level equation. One caveat is that in panel data with relatively large time dimension (as opposed to a single digit time dimension), GMM specification is prone to instrument proliferation, as

Table 4. *Additional robustness checks*

LRM	Model 13	Model 14 GMM	Model 15	Model 16 2SLS
BTC: Labor Law	0.654 (0.191)	0.961 (0.202)	1.066 (0.269)	1.023 (0.357)
Aid	0.816 (0.314)	1.271 (0.281)	1.231 (0.268)	1.057 (0.296)
BTC: Labor Law × Aid	−0.031 (0.012)	−0.049 (0.011)	−0.048 (0.011)	−0.041 (0.012)
Trade	−0.018 (0.007)	−0.013 (0.007)	−0.005 (0.007)	−0.025 (0.008)
FDI	−0.001 (0.009)	0.002 (0.009)	−0.006 (0.008)	0.053 (0.013)
Income	−0.675 (1.790)	−0.749 (1.514)	−0.923 (1.033)	0.462 (0.943)
Natural resource	−0.047 (0.035)	−0.036 (0.028)	−0.027 (0.030)	−0.080 (0.029)
Democracy	0.161 (0.037)	0.127 (0.040)	0.171 (0.034)	0.075 (0.025)
Left ruling party	1.451 (0.665)	1.570 (0.696)	1.331 (0.758)	0.300 (0.395)
Industry	0.057 (0.030)	0.032 (0.028)	0.055 (0.033)	0.101 (0.039)
Hard PTA	3.703 (3.223)	1.839 (3.504)	6.125 (3.752)	−0.967 (0.510)
Civil War	−0.388 (0.786)	−0.736 (0.642)	−0.366 (0.480)	0.655 (0.394)
Urban population	−1.095 (12.277)	−1.012 (11.811)	−0.917 (6.033)	1.716 (1.670)
Lagged DV (ϕ_1)	0.360 (0.035)	0.328 (0.031)	0.325 (0.038)	0.162 (0.057)
N (Country)	1078 (89)	1078 (89)	1078 (89)	957 (89)
Fixed effects	Country, Year	Country, Year	Country, Year	Country, Year
Instrumented	LDV	LDV BTC: Labor Law	LDV BTC: Labor Law Aid	BTC: Labor Law
Instruments	LDV ($t - 3, t - 4, t - 5$)	LDV ($t - 3$) BTC: Labor Law ($t - 3$)	LDV ($t - 3$) BTC: Labor Law Aid ($t - 3$)	BTC: Democracy BTC: Income
Over-identifying restrictions	41.66	45.93	44.98	0.07
Sargan Chi-sq test (p -value)	(0.99)	(0.99)	(1.00)	(0.79)
AR(2)	0.91 (0.37)	0.55 (0.58)	0.61 (0.54)	
Endogeneity: Durbin–Wu–Hausman (p -value)				2.462 (0.117)
Weak IVs: First stage F -test (p -value)				27.08 (0.000)

Notes.

(i) For ADL-GMM estimators in Models 13–15, LRMs are calculated from two-step efficient estimators. The Delta Method is employed to calculate the correct standard errors for the LRMs, using Windmeijer’s finite sample corrected variances (Windmeijer, 2005).

(ii) 2SLS estimation in Model 16 is conducted on partial adjustment specification to reduce overfitting risks. LRMs (the coefficient estimate divided by $1 - \phi_1$) are reported with Driscoll–Kraay standard errors in parenthesis.

the instrument count is quadratic in the time dimension of the panel. This might lead to an over-fitting of endogenous variables. Thus we only use a partial lag rather than using all available lag structures in generating the instrument set (Roodman, 2009b). In Model 13, we instrument the lagged dependent variable with its further lags (third to fifth lags) in levels and differences. In Model 14, in addition to the lagged dependent variable, we also instrument BTC with its past values (third lags). In Model 15, we instrument the lagged dependent variable, BTC, as well as foreign aid variable (third lags).

The results are summarized in Table 4. LRMs are calculated from two-step efficient estimators, and the Delta Method is employed to calculate the standard errors for the LRMs, using Windmeijer's finite sample corrected variances (Windmeijer, 2005). Our key findings regarding the interaction effect of foreign aid and BTC hold in all three models. The models pass Sargan test of over-identifying restrictions, suggesting that instrumental variables required by the GMM approach are exogenous. They also pass autocorrelation test on the residuals in first differences, or AR(2) test, satisfying the requirement that there be no autocorrelation in the underlying levels variables.

Interestingly, the GMM estimates of our main explanatory variables are not only consistent with our theoretical narrative, but are substantially *greater* in magnitudes than those in earlier models. The increase is especially pronounced in Models 14 and 15 where BTC is treated as endogenous. For instance, in our main model, the coefficient estimates of the lower order BTC term and the interaction term were 0.434 and -0.026 , respectively. In Models 14 and 15, the estimates of BTC are 0.96 and 1.06, and those of the interaction term are -0.049 and -0.048 . Why do we see such effect size increases?

First, we have a relatively long panel of 18 years. Even when we restrict the set of moment conditions used as instruments, one of our GMM models (Model 15) had a too good Sargan test p -value of 1.00, often indicative of Sargan test being weakened by too many instruments. Our endogenous variables (BTC, Aid, and the interaction term) might have been overfitted as a result. Yet, given that the estimate increase is also observed in Model 13 and Model 14, it is unlikely that overfitting alone accounts for the increase.

Second, the increases could result from successfully purging an unexplained endogeneity mechanism associated with the BTC that was biasing the results *against* our theoretical narrative. As defined earlier, BTC is a spatial lag variable. BTC of a developing exporting country i is calculated from two distinct attributes of its importing countries: the importing countries' labor law standards and their share of i 's exports. While existing studies have provided evidence that the latter is largely exogenous, we are less certain about the former. If importing countries' labor laws respond to i 's labor laws, and if that response is a counteracting one (i.e., importers *raise* their standards in response to their i 's *poor* standards), BTC's effect on i 's labor laws would be downwardly biased. Addressing such endogeneity of importing countries' labor laws can make the positive effect of BTC on i 's labor laws substantially more pronounced.

We empirically investigate whether this explains the increase in BTC estimates in our GMM models. Because now we have a specific endogeneity mechanism in mind, we turn to 2SLS with external instruments. In constructing BTC, we instrument labor laws of importing countries using two of their own exogenous variables: GDP per capita and Polity2. The intuition is that an importing country's level of economic development and level of democracy should have a significant impact on its own labor laws, but is not directly associated

with labor laws of a developing country it exports from (Davies & Vadlamannati, 2013). In essence, we create a hypothetical world where exporting countries no longer influence the labor laws of its importers.

The results are reported in the last column of Table 4 (Model 16).³³ The estimate of BTC in the 2SLS model (1.023) is close to the GMM estimate in Models 14 and 15 where BTC was treated as endogenous. The magnitudes of the lower order aid and the interaction term coefficients are also similar to the GMM estimates. This additional analysis lends some support for the argument that the previous estimates of our key explanatory variables (e.g., Model 2) were downward-biased due to the endogeneity associated with the importing countries labor laws. After addressing this endogeneity through 2SLS estimation, our main finding (i.e., the effect of BTC being conditioned by foreign aid) clearly holds.

8. CONCLUSION

Labor issues are often salient in global public policy discussions, especially in the context of how global trade and the recent growth of global supply chains influence labor rights in developing countries. While research establishes that many of the determinants of labor standards are domestic in nature, it also demonstrates that external factors can play a key role. Indeed, debates regarding the most appropriate means of influencing labor standards – capacity building of governments *versus* voluntary private regulation, for instance (see Locke, 2013) assume the ability of actors based in developed nations to influence outcomes, and governments' behavior, in the developing world.

Our paper therefore speaks to an important, ongoing topic in contemporary policy. Theoretically, we move the debate on the consequences of economic globalization for domestic policy in a new direction by considering how different external resource flows taken together can have possibly unanticipated consequences on domestic policy. Trade can empower pro-labor stakeholders in importing developed countries to exert pressures on developing country governments. It also can provide an access point for transnational advocacy groups interested in workers' rights and seeking to build coalitions with similarly minded domestic groups. While developing country governments may favor economic growth over the promotion of labor's rights, to capture the economic benefits associated with exports, they sometimes must accede to pressures on labor rights from developed country firms, consumers and governments. We thus observe a linkage between labor laws in a country's main trading partners and labor laws in the exporting nation.

When, however, foreign aid offers exporting nation governments an alternative source of revenue, they are less sensitive to trade-based pressures to improve labor laws. Although some donors are arguably sympathetic to labor issues, they may not prioritize labor laws over numerous other goals, including economic development, humanitarian relief, and geopolitical stability. Thus, foreign aid becomes a mechanism to transfer resources to developing country governments, without accompanying pressures related to labor rights. Herein lies the perverse effect of foreign aid on labor rights. By providing resources to governments, foreign aid allows the recipient governments to be less responsive to labor law related pressures from trade partners.

Our findings may have important policy implications, given the recent calls for expanding foreign aid and transferring responsibility for planning and managing funds from donors

to recipients (Clay, Geddes, & Natali, 2009), coupled with mounting concerns about worker safety and worker rights in Bangladesh, China, and Pakistan. Our paper should not be interpreted as suggesting that foreign aid is necessarily inimical to labor rights, or that donor governments are opposed to the realization of core labor standards in recipient nations. We do suggest, however, that because donor governments are considering a range of factors when allocating aid, and because the actors within governments who make aid allocation decisions are often different from those who consider social policies and labor conditions abroad, aid may have unintended consequences for workers' rights abroad. While importing firms' policy stance is shaped quite narrowly by the preferences of major shareholders and active consumer groups, donor governments have a much broader range of issues and stakeholders to consider when allocating aid. They are quite unlikely to cut off, or to not offer, aid (and GSP trade privileges) to countries that are important allies but which happen to violate workers' rights.

What is ironic and perhaps tragic is that the same countries tend to provide aid as well as the markets for exports, yet there is little attempt to seek coherence among different policy instruments by anticipating their crosscutting effects. We highlight the need for greater policy coherence – or at least greater

attention to unanticipated consequences – lest different units of the same government work at cross-purposes in the global context. As a starting point, scholars of international political economy should recognize, theoretically, the potential for interaction between various facets of economic globalization.

Data availability limits our analysis to the 1985–2002 period. Future work should examine whether our findings hold after 2002. On the one hand, aid should increasingly serve to enhance labor rights, given the emphasis on social and human development in Millennium Development Goals and the resulting call for selective aid allocation to recipients with sound governance. On the other hand, there is a decline in the salience of traditional donor countries located in the Global North and the emergence of new donors located in developing countries.³⁴ The new donors not only have lower overall labor standards than the traditional donors, but their aid allocation practices often appear to be motivated by factors which are fundamentally different from those of the traditional donors. Indeed, there is some speculation about factors motivating allocation of foreign aid by China. Thus, how the new aid architecture and changing donor composition would affect, both directly and in interaction with trade, the labor rights in developing countries should be an exciting and fruitful area for future research.

NOTES

1. The data are from World Bank Development Indicators (WBDI).
2. The data are from the World Trade Organization (WTO).
3. The data are from the Organization of Economic Cooperation and Development (OECD).
4. See below for a discussion of how we conceptualize and measure "labor rights."
5. <http://www.oecd.org/dac/theoecdandthemillenniumdevelopmentgoals.htm>.
6. <http://www.uneca.org/sites/default/files/publications/globalreview-on-aft-2013report.pdf>
7. ODA excludes military assistance.
8. We recognize that there are likely to be variations in collective labor rights at the industry level that national level data cannot capture. Yet, our choice of using state as a unit of analysis is appropriate to test the argument that aid conditions the effect of bilateral trade pressures on labor rights. National governments, not industries or firms, are the recipient of official development aid.
9. Indeed, such concerns may motivate governments to exempt firms located in export processing zones from labor laws. <http://www.solidaritycenter.org/content.asp?contentid=413>. Also see Mosley (2011).
10. Our original database includes over 160 countries that have ever received ODA since 1960s. We keep countries in the database even after they stop receiving aid (e.g., tiger economies in Asia) by tracking these countries in the Official Aid (OA) statistics. As a result, our sample has 28 (country-year) observations that have net ODA less than or equal to 0.

The country-year observations omitted in the sample are those for which data on one or more of the control variables are not available. Our final sample covers 91 developing countries with maximum time coverage of 18 years.

11. Indeed, Mosley (2011) reports that, among developing countries during the 1985–2002 period, the correlation between collective labor rights laws and collective labor rights practices is only 0.24.

12. The codebook for the collective labor rights dataset is available at the Harvard University Dataverse: http://dvn.iq.harvard.edu/dvn/dv/lmosley/faces/study/StudyPage.xhtml?globalId=hdl:1902.1/15590&studyListIndex=0_8f50a8b5df3a67255386031f6ea3.

13. We conduct Im, Pesaran, and Shin (2003)'s panel unit root test, which is based on averaging the (augmented) Dickey–Fuller statistics across the countries. The test statistic, -8.2 with p -value < 0.001 , allows us to reject the null hypothesis of non-stationarity. The results hold with or without including individual intercepts and time trend. A lag length of 4 was used.

14. GDP per capita data are from Haber and Menaldo (2011).

15. Only 3% of the country-year observations included in our analysis had at least one hard PTA. We use a dummy variable rather than a count – total number of PTAs with conditions. We expect the effect of the hard PTA to be non-linear, with the effect of the first PTA being strongest.

16. We use the total natural resources rents indicator from the WBDI, which is the sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents.

17. The data are from WBDI. Industry value added comprises value added in mining, manufacturing, construction, electricity, water, and gas.

18. The data on the (largest) ruling party's political ideology are from the Database of Political Institutions (DPI). Our result also holds when we group left or center parties as 1 and right parties as zero. Our results also hold when we use the executive's political ideology instead of the ruling party's ideology.

19. In the ADL specification, covariates are entered both contemporaneously and with a one-year lag. Not including the lagged terms of the independent and control variables (i.e., a partial adjustment model) imposes a potentially invalid assumption that coefficient estimates of the lagged regressors are no different from zero. Similarly, only including the lagged terms of the independent and control variables (i.e., a dead start model) restricts the coefficient estimates of the contemporaneous regressors to be zero. The ADL model we adopt is also algebraically equivalent to Error Correction Model (ECM).

20. Given that the country-year is the unit of analysis, the inclusion of country fixed effects controls for country-specific and time-invariant (or largely invariant) factors such as ethnic homogeneity and origins of the legal system. Because collective labor rights protection in a given year (and across the cross-section of countries) may be affected by common shocks, we also include year fixed effects. By including both year and country fixed effects, we have set a very high bar for our model, which makes our estimates conservative.

21. It is well known that in dynamic panel models with fixed effects, the coefficient of the lagged dependent variable can be downwardly biased. While we report Generalized Method of Moments (GMM) estimators that address this so-called Nickell bias as a robustness check, we are reasonably confident that our linear models do not seriously suffer from the Nickell bias. This is because the bias is of order $1/T$, and when T gets to around 20, the bias is usually small (Beck & Katz, 2011).

22. The denominator in the LRM function, $1 - \phi_1$, indicates the error correction rate, or the speed of adjustment back to the long-run equilibrium level. Since we expect the effect of our independent variables to continue over a period of time with some monotonic decline, reporting long-run effect is theoretically more reasonable. We do not report short-term effects separately because such immediate effects (i.e., effects completed in a year) are of less theoretical interest.

23. We also test whether the effect of *BTC* – our proxy for bilateral trade-based pressures – is conditional on the overall – volume-wise – trade dependence of the economy. Our results suggest there is no significant conditioning effect of trade dependence on *BTC*.

24. The plot is based on the estimates from Model 2.

25. This interpretation assumes that a unit increase in *BTC* in time period 1 is sustained in the subsequent time periods. The speed of adjustment is relatively quick, as the error correction rate ($1 - \phi_1$) of 0.75 suggests. The relationship between collective labor laws and *BTC* returns to its long-run equilibrium at a rate of 75% per period.

26. GDP per capita (PPP) in 2012 was US\$3,500 in Vietnam and \$3,000 in Laos, respectively.

27. Because of the similarity in many (geo) political factors and the difference in aid dependency, Vietnam and Laos are prime candidates for paired comparative studies on aid effectiveness. See McCarty and Julian (2009), for example.

28. The substantive capacity of labor to organize politically and to influence labor rights laws might explain the level of collective labor rights protection. Following Rudra (2002), we control for potential labor power (PLP). PLP index is higher where more skilled workers are present, as well as where less surplus labor exists. When this measure is included, our finding of a negative interaction effect ($BTC \times Aid$) holds, while the coefficient for the PLP index is not statistically significant. We do not report findings in the manuscript as we lose two thirds of our observations by including PLP variable in the model specification. The results are available upon request.

29. We exclude the following countries based on country-level average aid dependency: Mauritania, Sierra Leone, Zambia, Rwanda, Malawi, Equatorial Guinea, The Gambia, Mozambique, Somalia, Guinea-Bissau. These countries typically have annual observations with *Aid* greater than 25% of their GDPs.

30. Since non-DAC donors report to the OECD on a voluntary basis, including their data might undermine the systematic comparability of the aid statistics. The non-DAC countries reporting to the OECD-DAC through (or from any time point up to) 2002 include the Czech Republic, Estonia, Hungary, Iceland, Israel, Kuwait, Latvia, Lithuania, Poland, Saudi Arabia (joined DAC in 2009), Slovak Republic, Turkey, and United Arab Emirates. When more recent data on labor rights become available, scholars can assess whether the growing (relative) importance of new aid donors makes a difference for rights outcomes.

31. BAC is calculated as follows:

$$BAC_i = \sum_j^j \text{Labor Laws}_j * (\text{Bilateral Aid}_{ij} / \text{Total Bilateral Aid}_i).$$

32. <http://www.oecd.org/dac/stats/purposecodessectorclassification.htm>. Disaggregated bilateral ODA based on donor-reported sector codes (DAC 5) are available from year 1995 to 1996 for most recipients, and disbursement data are available only after 2000. We use commitment data in our analysis to include more time periods.

33. When it comes to model diagnostics, Durbin–Wu–Hausman test for endogeneity suggests that there is indeed modest evidence (test statistics significant at 11% level) of endogeneity in the model without any instrument. A highly significant *F*-test statistic for the joint significance of the IVs at first stage indicates that the instruments used are likely to be relevant for predicting the *BTC*. The test of overidentifying restrictions fails to reject the null hypothesis that the instruments are exogenous.

34. Although non-DAC aid reported to the OECD's database is still marginal, accounting for less than 6% of total ODA as of 2013, there might be unreported aid, which requires the future study on this issue to look at various country-level sources.

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APPENDIX

See Figure A1 and Tables 5 and 6.

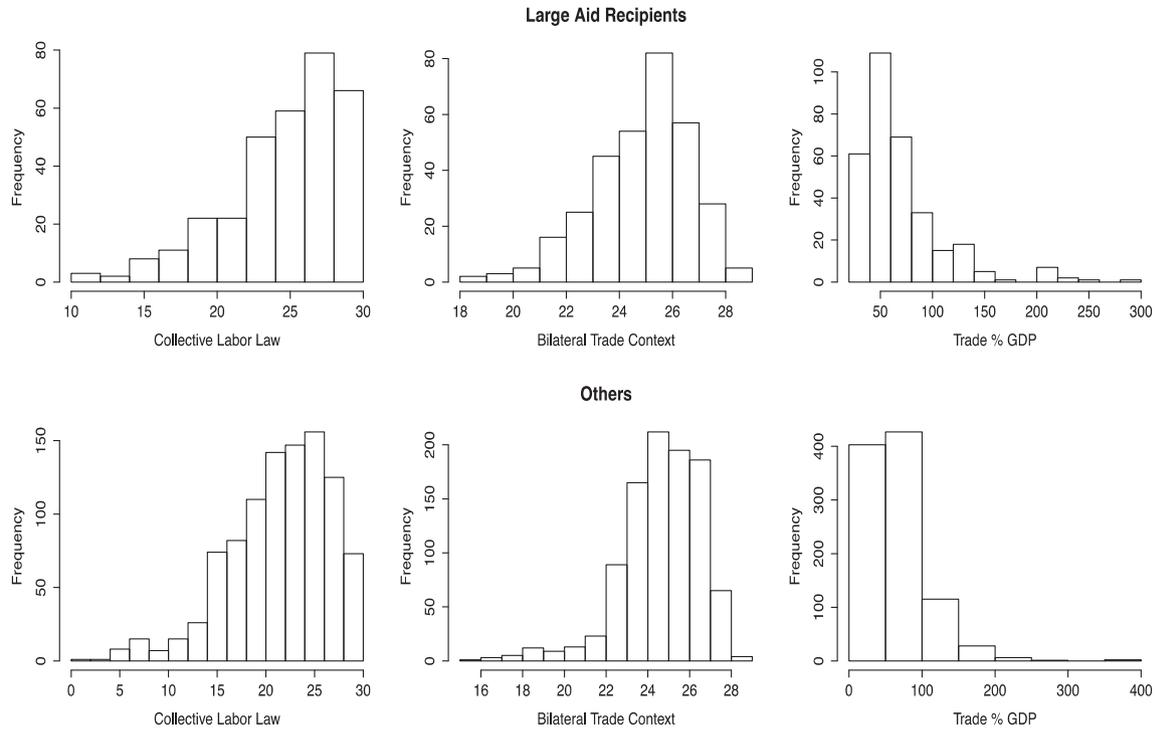


Figure A1. Are large aid recipients unique? Comparison in key variables.

Table 5. Descriptive statistics

	Min	1st Qu.	Median	Mean	3rd Qu.	Max
Collective Labor Law	1.50	19.00	23.50	22.32	26.50	28.50
Bilateral Trade Context (BTC)	15.91	23.61	24.89	24.69	26.06	28.42
Aid Main Indicator ^a	-0.45	0.60	3.64	8.01	11.67	93.99
(DAC) Bilateral Aid	-0.45	0.43	2.65	4.90	7.07	64.68
Multilateral Aid	-1.99	0.08	0.83	3.11	4.41	45.75
Non DAC Bilateral Aid	-0.52	0	0	0.03	0	3.64
Bilateral Aid Context (BAC)	21.52	25.70	26.59	26.46	27.38	28.50
Social Infra and Service Aid	0.001	0.29	1.34	2.60	3.96	19.57
Trade ^a	11.09	39.81	56.69	66.93	83.14	368.50
FDI ^a	0.010	5.83	11.34	20.32	25.05	358.82
GDP per capita	359	1,206	2,622	4,110	5,449	46,160
Democracy (Polity2)	-10	-6	0	0.60	7	10
Left ruling party	0	0	0	0.31	1	1
Hard PTA	0	0	0	0.03	0	1
Industry ^a	4.99	20.01	27.55	28.62	34.40	88.71
Urban population (1000s)	43	1,401	3,325	19,106	14,765	481,943
Civil War	0	0	0	0.22	0	1
Natural resource ^a	0	2.07	4.16	8.49	9.21	75.67

^a As a percentage of GDP.

Table 6. *Variation in BTC*

Country	Minimum	Mean	Maximum	Country	Minimum	Mean	Maximum
ALG	21.00	23.97	28.50	MAG	18.50	24.76	28.50
ANG	15.00	24.62	28.50	MAL	10.00	16.12	25.00
ARG	16.50	24.00	28.50	MAS	20.50	24.31	27.00
BEN	22.00	26.56	28.50	MAW	18.75	25.43	28.50
BFO	25.00	26.75	28.50	MEX	17.50	22.78	28.50
BNG	8.25	18.39	23.75	MLI	24.00	27.00	28.50
BOL	15.75	20.65	26.75	MON	25.50	27.00	28.50
BRA	20.25	24.78	27.00	MOR	21.75	25.99	28.50
BUI	20.50	25.15	28.50	MZM	21.25	25.38	27.00
CAM	18.25	22.97	26.50	NEP	24.00	25.73	27.00
CAO	15.75	19.74	22.50	NIC	15.50	20.56	28.50
CDI	20.25	25.34	28.50	NIG	16.00	16.00	16.00
CEN	14.50	22.87	25.50	NIR	24.00	26.62	28.50
CHA	11.50	23.21	28.50	OMA	4.50	12.68	26.50
CHL	20.25	23.62	28.50	PAK	9.50	17.52	24.75
CHN	9.00	17.31	24.00	PAN	13.75	19.31	28.50
COL	15.75	21.47	28.50	PAR	15.50	21.01	24.00
COM	26.75	28.38	28.50	PER	15.50	20.56	27.00
CON	23.50	26.25	28.50	PHI	16.25	21.29	28.50
COS	18.75	22.83	25.50	PNG	25.50	27.17	28.50
CUB	10.50	15.42	24.00	ROK	15.25	17.74	21.75
DJI	19.00	24.35	28.50	RWA	18.75	24.11	28.50
DRC	21.75	24.18	27.00	SAF	25.50	27.20	28.50
DRV	5.00	17.12	22.50	SAL	12.75	17.62	22.25
EGY	12.50	17.74	25.00	SAU	1.50	5.72	6.50
EQG	11.75	21.31	28.50	SEN	18.50	25.04	28.50
ETH	14.25	19.60	25.00	SIE	25.00	26.56	28.50
FIJ	11.00	22.10	28.50	SIN	19.00	19.00	19.00
GAB	20.00	22.59	25.50	SOL	27.00	28.38	28.50
GAM	23.50	25.27	28.50	SOM	25.00	25.00	25.00
GHA	18.75	23.02	25.50	SRI	21.25	24.76	27.00
GNB	18.50	27.25	28.50	SUD	6.50	16.86	26.50
GUA	19.00	22.60	27.00	SYR	14.25	20.08	25.50
GUI	22.50	24.86	27.00	TAZ	10.75	18.56	23.75
GUY	22.50	27.00	28.50	THI	15.25	20.24	27.00
HON	13.00	20.31	27.00	TOG	20.00	23.72	26.00
IND	16.75	23.44	26.50	TRI	25.00	26.47	28.50
INS	15.75	18.68	22.00	TUN	21.00	25.81	28.50
IRN	2.50	15.56	27.00	TUR	5.25	14.38	19.50
JAM	23.00	24.90	27.00	UAE	4.50	14.07	28.50
JOR	17.25	20.35	25.00	UGA	12.00	24.12	28.50
KEN	15.25	19.44	25.00	URU	23.75	27.31	28.50
KUW	5.75	15.47	18.00	VEN	22.00	25.56	28.50
LAO	12.50	18.00	28.50	YEM	17.50	19.91	22.00
LBR	18.25	20.04	23.00	ZAM	17.00	24.36	27.00
MAA	19.00	24.65	28.50	ZIM	13.25	21.01	28.50

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