

MOSBACHER INSTITUTE WHITE PAPER SERIES



IMPROVING LABOR COMPLIANCE IN DEVELOPING COUNTRIES

A GLOBAL ANALYSIS OF POLICIES LEADING TO IMPROVED LABOR
OUTCOMES IN SUPPLY CHAINS

Raymond Robertson, Director
Mosbacher Institute for Trade, Economics, and Public Policy
The Bush School of Government and Public Service
Texas A&M University



TEXAS A&M UNIVERSITY
The Bush School
of Government & Public Service

Mosbacher Institute *for*
Trade, Economics, and Public Policy

FALL 2022

EXECUTIVE SUMMARY

Improving labor conditions around the world is a complex, lengthy, and multi-stakeholder aspiration. Governments, business, and workers all benefit from improving working conditions. Improving working conditions, including increasing factory compliance with national labor laws and harmonizing laws with international labor standards and the International Labour Organization's core labor conventions, plays an important role in international economic development and increasing the welfare of laborers worldwide. Finding the most effective ways to improve compliance, therefore, is a policy priority for governments, business, and workers.

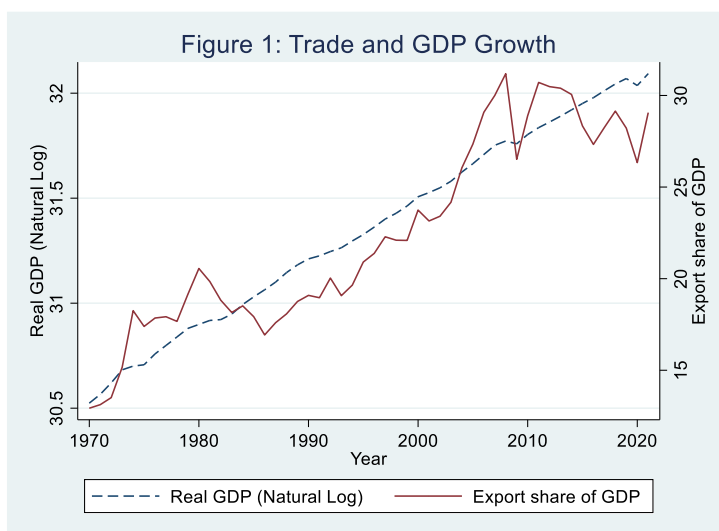
The goal of this paper is to complement a broad overview of existing research with new empirical results that evaluate the contributions of different stakeholders in improving labor compliance. The results suggest that rule of law and exporting-country government capacity may be the most significant factor in improvements in labor compliance. Other stakeholders also play important roles, of course, but domestic capacity is significantly associated with closing the gap between labor law and labor practice. Exporting-country government actions are by far the most often cited agents in removing goods from the Department of Labor's List of Goods Produced with Child and Forced Labor. Furthermore, policies that seek to regulate global supply chains in developed (importing) countries might have a smaller-than-expected effect because exporters make up a small share of total economic activity in exporting countries.

These results raise a critical question of how developed (importing) countries can better incentivize exporting-country governments to close the gap between labor law and labor practice. A review of recent literature suggests that trade agreements play a significant role in motivating governments to close the gap between labor law and labor practice, not just for exporting firms, but throughout the country. One of the main policy implications is that a renewed focus on trade agreements between developed and developing countries would be one of the most effective

ways to improve labor conditions in developing countries.

TRADE, GROWTH, AND WORKING CONDITIONS

It is widely accepted in the academic economics literature that there is a strong and positive relationship between exporting and economic growth. Figure 1, for example, uses data from the World Bank's Development Indicators database to show that real global GDP growth is highly correlated with the share of exports in GDP. Economics papers have established that the correlation shown in Figure 1 is, in fact, representing a causal relationship: exports promote economic growth. It is also well established that economic growth and working conditions are very closely related. The implied transitive relationship—that exports cause growth, and growth improves working conditions—suggests that exports are associated with improvements in working conditions. It is also well established that exporters in general pay higher wages and offer better working conditions. Exporters that are associated with more well-known “brand-conscious” international firms also tend to work with factories that have better working conditions than found in the rest of the economy—especially in developing countries.



Nevertheless, the rise in global trade since the 1990s has brought about a rising awareness of the poor working conditions found in developing countries. As these countries increased exports to developed countries, governments and workers

took notice and raised alarms about the poor conditions found in developing country factories. Although conditions in exporting factories were often better than found elsewhere in the country (especially in agriculture or domestic service), exporting factories received a great deal of attention. Finding ways to improve labor conditions in developing countries became a policy priority for many stakeholders. Adding data and formal analysis contributes to this debate. In the next section, we review both current literature and introduce new data into the debate on the role stakeholders play.

STAKEHOLDERS FOR LABOR COMPLIANCE

Ultimately, it is an “interactive ecology” of actors and policies that improves labor outcomes. Many stakeholders have a part to play in improving labor conditions (Amengual 2010). Networks of governments (national and foreign), the private sector, and worker organizations are necessary to create an environment conducive to improving labor conditions (Pangsapa et al. 2011). This report explores the central role of the state and the rule of law in improving labor conditions through literature and data analysis.

NATIONAL GOVERNMENTS

Although many stakeholders are involved in improving working conditions, national governments play a critical role. The most certain path to improving labor conditions globally is through the effective national enforcement of labor legislation (Kuruvilla et al. 2021 & Delautre et al. 2021). As pointed out by Delautre et al. (2021), “[T]he State remains the central actor in the governance of work. Only the State has the authority—and the responsibility—to promulgate and to enforce laws and regulations.” Government capacity (defined as the willingness and ability to legislate, audit, and enforce), therefore, may be the primary determinant of labor conditions.

Increases in government capacity for monitoring and enforcement as well as legislation reform is

often cited as a key reason behind labor condition improvement by the US Department of Labor (DoL). The DoL compiles a biannual list of all goods produced with forced and child labor called the List of Goods Produced with Child and Forced Labor: <https://www.dol.gov/agencies/ilab/reports/child-labor/list-of-goods>. This list is used to prevent these goods from entering the United States. Organizations can appeal to remove a good from the list provided they have evidence of the cessation of or severe reduction in child or forced labor. If the DoL determines that there is sufficient evidence, the good is removed from the list and restrictions on that good are removed. Table 1 breaks down the stakeholder contribution to improvements in the DoL goods list.

Table 1 shows 83% of all removals from the list cite national government action as a key factor reducing the prevalence of child or forced labor. Key government activities include reforming domestic legislation to be stricter on child labor, increasing government enforcement and inspection capabilities, creating binding agreements for local firms and other organizations, and delivering services to marginalized and exploited groups to reduce the demand for child labor. About 50% of the entries that cite governments as key stakeholders mentioned governments partnered with the ILO for program and technical assistance. In two cases, the government was cited as the only stakeholder in the reduction of child and forced labor. National government capacity and regulation clearly has the ability to contribute to improved labor conditions through legislative reform, effective monitoring, and enforcement.

Table 1: Frequency of Stakeholders Cited in Removal of Goods from the List

Stakeholder:	Government	NGOs	Private Firms	Unions	IGOs	DoL Investigators	External Factors
Frequency:	83%	58%	50%	8%	58%	8%	25%

Of course, concerns about poor conditions persist in developing countries. In fact, average labor practice (the average of all labor rights in practice indices from the WorkR dataset) declined from 1994 to 2010 worldwide while average labor law

increased slightly over the same period. Understanding the gap between labor law and labor practice is an important part in developing policies to improve working conditions in developing countries. To explain this gap, we employed regression analysis.

To estimate the relationship between government capacity and labor compliance while controlling for other factors that also are likely to affect compliance, we built a dataset (described in the appendix) and estimated factors that contribute to the gap between labor law and labor practice. When controlling for gross domestic product, national income levels, union density, and variables included to control for other unobserved factors (fixed effects), the main results show that the most significant variable explaining the gap between labor law and labor practice is government capacity. The main point of this empirical analysis is that national governments, and specifically government capacity, play arguably the most important role in improving working conditions for workers in developing countries. Of course, other stakeholders also have roles to play, and these are explored in the next several sections.

IMPORTING-COUNTRY GOVERNMENTS

Due Diligence Legislation (DDL) is a relatively new phenomenon developed by developed-country governments aimed at increasing firm accountability for conditions within their entire supply chains. The belief is that firms should be required to identify and mitigate negative human rights effects arising from their business practices. The European Union and its member states are the leading developers of DDL practices for large corporations founded in or operating within the EU's borders.

The United Nations Guiding Principles on Business and Human Rights (UN Guiding Principles) form the basis for this increased interest in state and firm cooperation on protecting human rights. The UN Guiding Principles are:

1. The States' duty to respect, protect, and fulfill human rights and fundamental freedoms;
2. The corporate responsibility to respect human rights;

3. The need for rights and obligations to be matched to appropriate and effective remedies when breached.

The UN Guiding Principles form the basis for many recent due diligence laws. Current DDL proposals may be less effective than proponents expect for several reasons. First, DDL proposals that focus on exporters miss the majority of the developing-country populations because they would only reach the workers directly engaged with exporting factories that sell to companies with operations in the DDL countries. The World Bank reports that the world average share of employment in manufacturing is just under 23% (<https://data.worldbank.org/indicator/SL.IND.EMPL.ZS>). Only a small fraction of manufacturing firms are engaged in exports (Bernard et al. 2007). Hoekstra (2013) shows that only 14% of an African sample of the World Bank's Enterprise survey covering thirty-seven Sub-Saharan countries export.

Second, as mentioned earlier, current DDL proposals focus on the largest multinational corporations that are already associated with the "best" factories within exporting countries (both in the sense of performance and compliance). It is well established that exporting firms generally pay higher wages and have better conditions than domestic, non-exporting alternatives for comparable workers (Robertson et al. 2009, Schank et al. 2010). Within the exporting sector, factories that supply "reputation-conscious" lead firms have better working conditions than other exporting factories (Oka 2010) and importers reward developing-country factories with more sales when the factories comply with social standards (Distelhorst & Locke 2018). As a result, the marginal benefit of the DDL proposals would be small relative to nation-wide improvements in enforcement of existing labor standards.

Third, current DDL proposals may lack effective enforcement mechanisms that lead to improved outcomes; increased institutional oversight and stronger enforcement could help create stronger compliance from both firms and suppliers in the supply chain (Chambers & Vastardis 2021). Additionally, transparency and information reporting mechanisms need to be improved to maximize the impacts of DDL (Fransen & LeBaron 2019).

Developed-country governments are involved in labor condition improvement through technical capacity development programs. Labor condition improvements are often the distant goal while capacity development programs assist in achieving that goal (Aissi et. al. 2018), but there are many examples of successful efforts to improve national capacity (e.g. US DoL capacity-building programs).

Better Work, an International Labour Organization program, is one example of effective international capacity building. Scholars find a positive correlation between labor practice improvement and Better Work programs (Robertson 2020, Kuruvilla 2021 & Amengual 2017). Better Work focuses on a holistic approach to capacity building, bringing together various stakeholders (governments, brands, factories, unions, and workers) and completing assessments and trainings, advocating, and researching to produce sustainable change. Recent evidence also shows that joining Better Work is associated with increased survival rates for factories and higher exports for countries.

TRADE AGREEMENTS

Regional and bilateral trade agreements are important tools to increase exports and have the potential to improve working conditions. Regional Trade Agreements (RTAs) increased in prevalence post-World War 2 with nearly 400 RTAs in effect by 2022. Many RTAs include labor provisions with the goal of ensuring a certain level of labor compliance for signatories (Melo Araujo 2018, Carrere et al. 2022, Timini 2022). RTAs partially contribute to improvements in labor conditions; RTAs with labor provisions improve wages whereas RTAs without labor provisions show reductions in wages (Martinez-Zarzoso & Kruse 2019). Additionally, increased trade as a result of entering into an RTA leads to improved worker welfare and working conditions (Martinez-Zarzoso & Kruse 2019).

RTAs also have the potential to build key technical capacity. RTAs that include or encourage technical assistance programs can lead to improved labor outcomes as a direct result (Dewan and Ronconi 2018). Indirectly, RTAs with labor provisions can

encourage national governments to adopt other labor-related provisions and inspire changes within government institutions and legislation.

RTAs affect the motivation of governments to close the labor law and practice gap. Recent examples include the EU negotiations with Korea (Lonel 2022) and Vietnam's experience with the Trans-Pacific Partnership (Tran et al. 2017).

To make trade agreements even more effective, enforcement mechanisms could be improved. Strengthening the tools that create compliance will result in stronger labor condition improvements (Bronckers & Gruni 2021). The main advantage of trade agreements is that they directly engage governments that are arguably the most effective actor in improving working conditions and create incentives for economy-wide improvements rather than narrowly-focused factory-specific improvements.

PRIVATE SECTOR

When the lead firms of global value chains source from developing countries, they effectively increase labor demand, which results in either more employment, higher wages, or both. Recent research shows, for example, that increased apparel exports from Bangladesh were associated with a falling wage gap between men and women as the increase in apparel exports were associated with rising wages for women relative to men throughout the economy (Robertson et al. 2020). The increase in labor demand has also been associated with bringing women into the formal labor force, which generates positive effects for the economy (Frederick et al. 2022). These results complement the research cited earlier showing the positive relationship between exporting, wages, and working conditions.

Nevertheless, some continue to raise concerns about the conditions in exporting factories in developing countries and note that the conditions in these factories are worse than those found in developed countries. The UN Guiding Principles highlight the role of the private sector. Companies have the responsibility to respect human rights. Specifically, this means that companies have the responsibility to avoid causing or contributing to

adverse human rights impacts through their own activities, and address such impacts when they occur, and to seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

Many approaches towards the private sector's initiatives to respect labor law and international standards fall under the umbrella term of corporate social responsibility (CSR). CSR is a form of business self-regulation that can improve labor conditions throughout the supply chain. Academic studies illustrate the debate surrounding CSR initiatives. Some studies find no statistically significant effect on labor, health and safety, or environmental compliance (Distelhorst et al. 2015), but others find that voluntary measures are associated with improved compliance that justifies reduced external enforcement (Short & Toffel 2011).

Two key activities remain salient in attempts to improve labor compliance. The first is auditing. Whether done by governments, private firms, or NGOs, auditing is the primary monitoring mechanism used to gauge labor compliance in supplier factories. Currently, auditing is not a strong labor condition improver; increasing audits does not necessarily result in higher compliance (Marx & Wouters 2016 & Sanders et al. 2018).

Increasing the training of auditors and changing the way that auditors conduct their business results in gains to labor compliance (Short et al. 2020). Auditors that form long-term relationships as coaches and consultants that help develop the capacity of factory managers show greater labor compliance (Locke et al. 2009).

These improvements fall broadly under the category of "Modern Human Resource" (MHR) policies. The academic literature clearly shows that, in developed countries, firm performance benefits from improvements in human resource practices because workers increase productivity and reduce turnover. In developing countries, some factories take a "low" road human resources policy and others take a "high" road. The factories that take a "high" road perform much better, even after adjusting for other factory characteristics

(Distelhorst & McGahan 2021). These factories are more likely to be associated with the leading reputation-conscious multinational companies. Additionally, increased labor compliance can lead to increased order volume from buyers (Distelhorst & Locke 2018). Therefore, firms benefit from improved labor compliance. Low performing factories are less likely to be engaged with, and therefore fall under the reach of, leading multinationals (and therefore out of the reach of due diligence legislation).

TRADE UNIONS

Factories with a trade union presence show various improvements over non-unionized factories. Unionized factories have better compliance with wage, human resources requirements, hours of work, and occupational health and safety regulations (Kuruvilla et al. 2021). Factories that have Collective Bargaining Agreements (CBAs) outperform non-CBA factories in those same indicators (Kuruvilla et al. 2021).

The presence of trade unions in other labor improvement processes can help improve their efficacy. For example, including unions in the enforcement and auditing processes of national governments improves auditing effectiveness (Amengual & Fine 2017). Organized labor can assist in creating positive feedback loops in labor compliance, providing significant gains to labor conditions and practices worldwide (Aissi et al. 2017).

Labor policy compliance is higher in countries with strong support for unions (Kuruvilla et al. 2021). Trade unions, however, do show shortcomings relative to other actors involved in improving labor conditions. A study on African trade unions found that many unions were underfunded and understaffed (McQuinn 2018). In some countries, there is a difference between independent and state-associated unions. In other countries, there are many different unions that reflect many different interests. This lack of funding and manpower led many to struggle to form coherent strategies and effectively protect and improve worker's rights (McQuinn 2018).

CONCLUSION

Improving working conditions and labor compliance with national law and international labor standards is a policy priority. Increasing government capacity has a robust, positive association with labor practice across countries. This effect holds across income level, region, and disaggregated labor rights. Increasing government capacity allows all workers in a country to enjoy the benefits of increased labor practice. In contrast, many current programs only target exporting firms. Due Diligence Legislation has a heavy focus on export manufacturers that make up a small portion of the total workforce. Workers involved in the export market tend to have higher wages and improved employment opportunities relative to non-exporters, making them a group that already enjoys improved labor practices (Bernard & Jensen 1999). Such programs that only target exporters will miss the poorest and most vulnerable worker populations.

A reinvigorated trade policy agenda offers the opportunity for foreign governments to encourage national governments to change and enforce laws. RTAs can be used to improve government capacity and change existing legislation. Improving the ability of a government to effectively en-

force labor legislation will result in improvements to worker welfare over time for all labor rights in our dataset. Recent innovations in the USMCA, such as the Rapid Response Mechanism, illustrate the effectiveness of engaging national governments in improving working conditions. RTAs that include provisions targeted at increasing government capacity and that provide commitments to increase inspections or other support will assist in strengthening domestic governments and improving labor conditions for the largest populations within developing countries.

Improving labor conditions is a daunting and complex task, but one that can be achieved through strengthening the institutional capacity of domestic governments.

Acknowledgements

The author thanks Christopher Weech, a Bush School class of 2023 International Relations graduate student, for his outstanding research assistance.

Special thanks to the International Organisation of Employers (IOE) and the USCIB Foundation for their support and collaboration.



REFERENCES

- Aissi, J., Peels, R., & Samaan, D. (2019). Evaluating the effectiveness of labour provisions in trade agreements: An analytical and methodological framework. *International Labour Review*, 157(4), 671-98. [doi: 10.1111/ilr.12125](https://doi.org/10.1111/ilr.12125)
- Amengual, M. (2010). Complementary labor regulation: The uncoordinated combination of state and private regulators in the Dominican Republic. *World Development*, 38(3), 405-414. [doi: 10.1016/j.worlddev.2009.09.007](https://doi.org/10.1016/j.worlddev.2009.09.007)
- Amengual, M., & Fine, J. (2017). Co-enforcing labor standards: The unique contributions of state and worker organizations in Argentina and the United States. *Regulation & Governance*, 11(2), 129-42. [doi: 10.1111/rego.12122](https://doi.org/10.1111/rego.12122)
- Andrews, M., Pritchett, L., & Woolcock, M. (2017). *Building state capability* (First edition ed.). Oxford ; New York: Oxford University Press. Retrieved from <https://external.dandelion.com/download/attachments/dandelion/ids/CH001D6ED47DBCD075FE6C125810800338CA5.pdf>
- Bernard, A. B., & Jensen, J.B. (1999). Exceptional exporter performance: Cause, effect, or both? *Journal of International Economics*, 47(1), 1-25. [doi: 10.1016/S0022-1996\(98\)00027-0](https://doi.org/10.1016/S0022-1996(98)00027-0)
- Bronckers, M., & Gruni, G. (2021). Retooling the sustainability standards in EU free trade agreements. *Journal of International Economic Law*, 24(1), 25-51. [doi: 10.1093/jiel/jgab007](https://doi.org/10.1093/jiel/jgab007)
- Carrère, C., Olarreaga, M. & Raess, D. (2022). Labor clauses in trade agreements: Hidden protectionism? *The Review of International Organizations*, 17(3), 453-83. [doi: 10.1007/s11558-021-09423-3](https://doi.org/10.1007/s11558-021-09423-3)
- Chambers, R., & Vastardis, A.Y. (2021). Human rights disclosure and due diligence laws: The role of regulatory oversight in ensuring corporate accountability. *Chicago Journal of International Law*, 21(2), 323-66. Retrieved from <https://search.proquest.com/docview/2483101614>
- Cradden, C. (2015). Labour organizing and private compliance initiatives: Lessons from the international finance corporation's "performance standards" system. *International Journal of Labour Research*, 7 (1/2), 133. Retrieved from <https://search.proquest.com/docview/1774151673>
- Delautre, G., Echeverría Manrique, E., & Fenwick, C. (2021). *Decent work in a globalized economy: Lessons from public and private initiatives*. International Labour Organization. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_771481.pdf
- Dewan, S. & Ronconi, L. (2018). U.S. free trade agreements and enforcement of labor law in Latin America. *Industrial Relations*, 57(1), 35-56. [doi: 10.1111/irel.12199](https://doi.org/10.1111/irel.12199)
- Distelhorst, G., & Locke, R.M. (2018). Does compliance pay? Social standards and firm-level trade. *American Journal of Political Science*, 62(3), 695-711. [doi: 10.1111/ajps.12372](https://doi.org/10.1111/ajps.12372)
- Distelhorst, G., Locke, R.M., Pal, T., & Samel, H. (2015). Production goes global, compliance stays local: Private regulation in the global electronics industry. *Regulation & Governance*, 9(3), 224-42. [doi: 10.1111/rego.12096](https://doi.org/10.1111/rego.12096)
- Distelhorst, G., & McGahan, A. (2021). Socially irresponsible employment in emerging-market manufacturers. *Organization Science*. [doi: 10.1287/orsc.2021.1526](https://doi.org/10.1287/orsc.2021.1526)
- Fransen, L., & LeBaron, G. (2019). Big audit firms as regulatory intermediaries in transnational labor governance. *Regulation & Governance*, 13(2), 260-279. [doi: 10.1111/rego.12224](https://doi.org/10.1111/rego.12224)
- Frederick, S., Lopez-Acevedo, G., Robertson, R., Vergara Bahena, M.A.. (2022). *From Jobs to Careers : Apparel Exports and Career Paths for Women in Developing Countries*. South Asia Development Forum;. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/36529> License: CC BY 3.0 IGO.

- Giumelli, F., & van Roozendaal, G. (2017). Trade agreements and labour standards clauses: Explaining labour standards developments through a qualitative comparative analysis of US free trade agreements. *Global Social Policy*, 17(1), 38-61. [doi: 10.1177/1468018116637209](https://doi.org/10.1177/1468018116637209)
- Hoekstra, R. (2013). Boosting manufacturing firms' exports? The role of trade facilitation in Africa. IEE Working Papers, No. 197, ISBN 978-3-927276-83-3, RuhrUniversität Bochum, Institut für Entwicklungsforschung und Entwicklungspolitik (IEE), Bochum <https://EconPapers.repec.org/>
- Kuruvilla S., Li, N., & Jackson, J. L. (2021). Private regulation of labour standards in global supply chains: Current status and future directions. In G. Delautre, E. Echeverria Manrique, & C. Fenwick (Eds.), *Decent work in a globalized economy: Lessons from public and private initiatives* (pp. 185-209). International Labor Organization. https://www.ilo.org/global/publications/books/WCMS_771481/
- Kuruvilla, S. (2021). *Private regulation of labor standards in global supply chains*. Ithaca ; London: ILR Press, an imprint of Cornell University Press.
- Kuruvilla, S., Liu, M., Li, C., & Chen, W. (2020). Field opacity and practice-outcome decoupling: Private regulation of labor standards in global supply chains. *Industrial & Labor Relations Review*, 73(4), 841-872. [doi: 10.1177/0019793920903278](https://doi.org/10.1177/0019793920903278)
- Lobao, L., Gray, M., Cox, K., & Kitson, M. (2018). The shrinking state? Understanding the assault on the public sector. *Cambridge Journal of Regions, Economy and Society*, 11(3), 389-408. [doi: 10.1093/cjres/rsy026](https://doi.org/10.1093/cjres/rsy026)
- Locke R, Amengual M, Mangla A. (2009) Virtue out of necessity? Compliance, commitment, and the Improvement of labor conditions in global supply chains. *Politics & Society*. ;37(3):319-351. [doi: 10.1177/0032329209338922](https://doi.org/10.1177/0032329209338922)
- Martinez-Zarzoso, I., & Kruse, H. W. (2019). Are labour provisions in free trade agreements improving labour conditions? *Open Economies Review*, 30(5), 975-1003. [doi: 10.1007/s11079-019-09545-7](https://doi.org/10.1007/s11079-019-09545-7)
- Marx, A. & Wouters, J. (2016). Redesigning enforcement in private labour regulation: Will it work? *International Labour Review*, 155(3), 435-459. [doi: 10.1111/j.1564-913X.2015.00040.x](https://doi.org/10.1111/j.1564-913X.2015.00040.x)
- Mcquinn, M. (2018). Strengths and weaknesses of African trade unions in the neoliberal period with a Sierra Leone case study. Universidade do Porto, Faculdade de Letras.
- Melo Araujo, B. (2018). Labour Provisions in EU and US mega-regional trade agreements: Rhetoric and reality. *International and Comparative Law Quarterly*, 67(1), 233-53. [doi: 10.1017/S0020589317000422](https://doi.org/10.1017/S0020589317000422)
- Oka, C. (2010). Accounting for the gaps in labour standard compliance: The role of reputation-conscious buyers in the Cambodian garment industry. *The European Journal of Development Research*, 22(1), 59-78. [doi: 10.1057/ejdr.2009.38](https://doi.org/10.1057/ejdr.2009.38)
- Pangsapa, P., & Smith, M. J. (2011). Transforming labour standards into labour rights. *The Business of Human Rights*, 55-78. Retrieved from <http://www.econis.eu/PPNSET?PPN=647222124>
- Robertson, R. (2020). Lights On: How Transparency Increases Compliance in Cambodian Global Value Chains. *ILR Review*. 73(4): 939-968. <https://doi.org/10.1177/0019793919893333>
- Robertson, R., Brown, D., Pierre, G., & Sanchez-Puerta, M. L. (2009). *Globalization, wages, and the quality of jobs*. Herndon: World Bank Publications. [doi: 10.1596/978-0-8213-7934-9](https://doi.org/10.1596/978-0-8213-7934-9)
- Robertson, Raymond and Kokas, Deeksha and Cardozo, Diego and Lopez-Acevedo, Gladys, Short and Long-Run Labor Market Effects of Developing Country Exports: Evidence from Bangladesh (March 9, 2020). World Bank Policy Research Working Paper No. 9176, Available at SSRN: <https://ssrn.com/abstract=3551672>
- Ruggie, J. UN guiding principles. Retrieved from <https://scholar.harvard.edu/john-ruggie/un-guiding-principles>

- Sanders, S., Cope, M., & Pulsipher, E. (2018). Do factory audits improve international labor standards? an examination of voluntary corporate labor regulations in global production networks. *Social Sciences (Basel)*, 7(6), 84. doi: [10.3390/socsci7060084](https://doi.org/10.3390/socsci7060084)
- Schank, T., Schnabel, C. & Wagner, J. (2010). Higher wages in exporting firms: self-selection, export effect, or both? First evidence from linked employer-employee data. *Review of World Economics*, 146(2), 303–22. doi: [10.1007/s10290-010-0049-7](https://doi.org/10.1007/s10290-010-0049-7)
- Short, J.L. & Toffel, M.W. (2011). Coming clean and cleaning up: Does voluntary self-reporting indicate effective self-policing?, *Journal of Law and Economics*, 54(3), 609-49. Available at: http://repository.uchastings.edu/faculty_scholarship/1258
- Short, J. L., Toffel, M.W., & Hugill, A.R. (2020). Improving working conditions in global supply chains: The role of institutional environments and monitoring program design. *Industrial & Labor Relations Review*, 73(4), 873-912. doi: [10.1177/0019793920916181](https://doi.org/10.1177/0019793920916181)
- Sjölholm, F., & Takii, S. (2008). Foreign networks and exports: Results from Indonesian panel data. *Developing Economies*, 46(4), 428-46. doi: [10.1111/j.1746-1049.2008.00072.x](https://doi.org/10.1111/j.1746-1049.2008.00072.x)
- Timini, J., Cortinovis, N., & López Vicente, F. (2022). The heterogeneous effects of trade agreements with labour provisions. *The World Economy*, 45(9), 2820–53. doi: [10.1111/twec.13249](https://doi.org/10.1111/twec.13249)
- Tran, A., Bair, J., Werner, M. (2017). Forcing change from the outside? The role of trade-labour linkages in transforming Viet Nam's labour regime. *Competition and Change*, 21(5), 397-416. doi: [10.1177/1024529417729326](https://doi.org/10.1177/1024529417729326)

Appendix: Estimating Government Capacity and the Gap between Labor Law and Practice

There is wide acceptance that governments play a key role in shaping domestic labor conditions. The intent of this appendix is to illustrate the methods used to estimate the empirical relationship between government capacity and labor compliance and working conditions. The goal is to understand how differences across countries in government capacity contribute to the level of labor compliance and working conditions. In addition, it is important to estimate the relationship between government capacity and labor compliance while controlling for other factors that also are likely to affect compliance.

Quantifying government capacity is also a difficult task. Governments are immense entities with various agencies and departments; reducing all of government capability into quantitative data is a challenge. To build our dataset, we used the following sources.

Data

In order to test this hypothesis, the ideal data would contain perfect information on labor conditions around the world as well as precise measures for government capacity and all relevant controls. Data from auditing firms might seem ideal, but academics often criticize audit data (Locke 2013, Marx & Wouters 2016). Some academics criticize audits for being short, having poorly trained auditors, and allowing audit consultancy companies to assist firms in falsifying audit information, which can lead to deceptive conclusions from audit data (Kuruvilla et al. 2020). Others, however, suggest that audits have played a key role in improving working conditions, as in Better Work country cases, and that improvements that have been achieved in global value chains would not have been possible without data that identify key problems.

1. Labor Law and Practice: Our indicators on labor law and practice are sourced from the WorkR dataset. The WorkR dataset covers 10 different labor rights in law and practice from 1994 to 2010 for most countries. The data were primarily sourced from the US State De-

partment Country Reports on Human Rights Practices and coded by hand by the creators of the WorkR dataset. The labor rights they include are association, collective bargaining, forced labor, age, minimum wage, workplace safety, working hours, union rights, substantive rights, and worker's rights. We use these data to create average labor law and practice measures for each country-year.

2. We source our information on government capacity from the World Bank's Worldwide Governance Indicators Database. This database covers 200 countries from 1996 to 2020 with 6 dimensions of governance: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. These data were compiled from over 30 sources including survey institutes, think tanks, NGOs, IGOs, and private firms. We use these data to create average government capacity measures for each country-year.
3. Data for GDP and GDP per capita for each country-year were sourced from the World Bank. Both are in constant USD. We include GDP and GDP per capita to control for prosperity's effects on labor conditions.
4. Data for the Union Density Rate (UDR) were sourced from the Quality of Government Institute at the University of Gothenburg. The variable represents the percent of workers involved in a union in a given country. These data were originally sourced from the ILO; data from the QoG, however, had three times the matches for our dataset compared to the ILO data so we decided to use these QoG data.

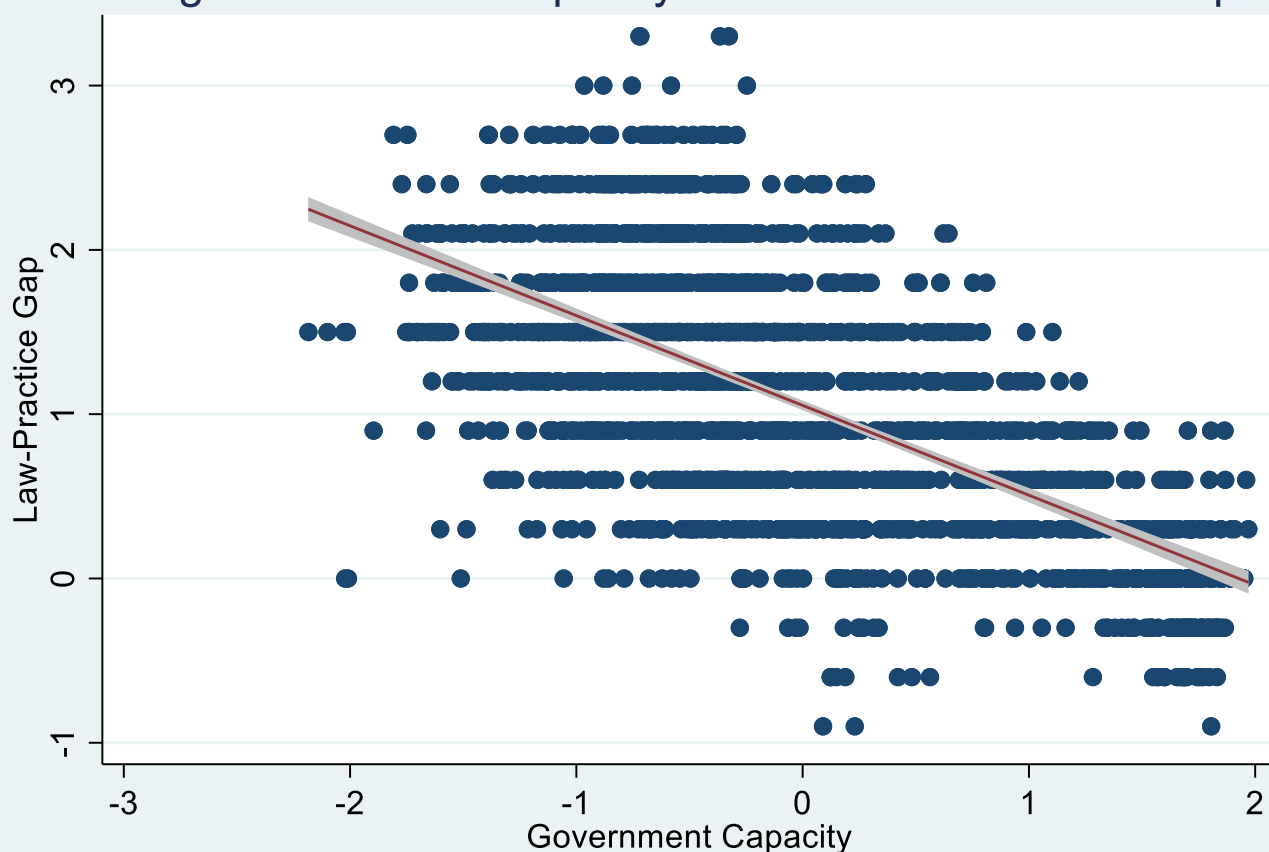
The main results include regressions that estimate the relationship between government capacity and the law-practice gap in labor while controlling for various specifications and additional variables. Including union density greatly reduces the number of observations available but does not change the main result. The main result, sum-

marized in Figure A1, is that there is a strong, negative relationship between government capacity and the gap between labor law and labor practice. That is, as government capacity increases, the gap between labor law and practice shrinks. The empirical results also show that there is very little empirical relationship between government capacity and labor law. The relationship between capacity and the gap is driven by the relationship between government capacity and labor practice. This relationship is consistent with the hypothesis that improvements in government capacity would improve labor practice.

Other control variables included GDP and union density, but neither including nor excluding these changed the main results shown in Figure A1. Including union density reduced the sample and generated a more significant relationship for the countries that remained in the sample.

We also ran several regressions by region and income level, but the same qualitative result consistently emerged. When estimating the relationship between government capacity and specific measures of labor practice (including Freedom of Association, Collective Bargaining, Union Rights, Forced Labor, Minimum Age, Minimum Wage, Workplace Safety, Maximum hours, Substantive Worker Rights, and Worker Rights Index), all had a strong positive relationship with government capacity, with the strongest relationship emerging for freedom of association.

Figure A1: Gov't Capacity and the Law-Practice Gap



MOSBACHER INSTITUTE

The Mosbacher Institute for Trade, Economics, and Public Policy

The Mosbacher Institute for Trade, Economics, and Public Policy supports the research and educational objectives of the Bush School of Government and Public Service at Texas A&M University. The Institute's mission is to address the most pressing economic challenges confronting the United States and global economies by conducting sound, interdisciplinary research; providing educational opportunities for students; and engaging with public and private stakeholders. The Institute is a nonpartisan organization that values open trade policies, data-supported research and policy analysis, government transparency, and economic efficiency.



**Co-funded by
the European Union**

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of The Mosbacher Institute for Trade, Economics, and Public Policy and do not necessarily reflect the views of the European Union.



TEXAS A&M UNIVERSITY
The Bush School
of Government & Public Service

**Mosbacher Institute *for*
Trade, Economics, and Public Policy**

FALL 2022