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Measuring Effective Labor Regulation in the Less Developed World: Recent Advances and Challenges Ahead

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ABSTRACT

Measuring Effective Labor Regulation in the Less Developed World: Recent Advances and Challenges Ahead*

This paper reviews recent efforts in social science to analyze labor enforcement in low-and-middle income countries (LMIC) and inform policy debates. Despite the existing limitations, the empirical evidence suggests that: 1) Enforcement is quite low in LMIC; there are fewer inspectors and inspections, lower penalties, and less trust in the judiciary compared to developed countries. 2) Increasing enforcement produces more compliance with little job destruction, although there is substantial debate and heterogeneity across countries. 3) Countries with more protective labor codes tend to enforce less. 4) Countries that become more open to trade also tend to enforce less. However, trade agreements with special clauses protecting workers can promote higher labor enforcement. 5) Inspection agencies in LMIC tend to focus their efforts on formal firms, leaving informal firms out of the radar which implies that the most vulnerable workers are usually excluded. 6) The constituency base of the government shapes labor enforcement, wherein labor-based governments devote more resources to inspection, although this is a debated issue. 7) Labor unions help promote enforcement, although in LMIC they can displace public inspections from small informal firms to larger formal firms because there is where labor unions members work. 8) Autonomous and professional bureaucracies do more labor enforcement presumably because they internalize the long-run benefits of enforcing the law and allow inspectors to accumulate experience.

JEL Classification: J88, K42, O43, P48
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1 – Introduction

The main objective of this paper is to take stock of recent efforts in social science to conceptualize and measure labor enforcement in low-and-middle-income countries (LMIC). We think this is important for two main reasons. First, social scientists have long recognized that regulations that are not enforced have little impact on the behavior of workers and employers. In the field of Economics, for example, both neoclassical and institutionalist theories posit that labor regulations affect the demand and/or the supply of labor only insofar as they change real working conditions. De jure regulation may differ greatly from the de facto norms and practice that govern actual working conditions and determine the implicit contracts between workers and employers (Ashenfelter and Smith 1979; Killingsworth and Heckman 1986; Pencavel 1986). The sociology of labor markets posits a similar concern for real inequalities and power asymmetries in labor relations (Kalleberg and Sorensen 1979). Thus, theory stresses that the relevant concept to study is effective labor regulation; that is, the combination of both de jure regulation coupled with enforcement efforts.

Second, it is a well-known fact that most employees in LMIC do not receive the benefits to which they are legally entitled because of employer noncompliance. For example, the share of employees whose employer did not contribute to social security on their behalf was 71.6% in low-income countries, and 51.2% in middle-income countries in 2019 (ILO 2023). Other studies provide similar findings (Williams and Schneider 2016). Employees who are excluded from access to social security are also more likely to be excluded from other legally mandated labor rights such as minimum wages, sick leave, and paid vacations (Bhorat et al. 2021; Gindling et al. 2015; Rani et al. 2013; Ronconi 2010). Furthermore, these informal employees are also more likely to work in unhealthy and unsafe conditions (Abdalla et al. 2017; Alfers and Rogan 2015).

Therefore, enforcement matters both from an academic and a policy perspective. Yet, while much comparative research has been conducted about de jure regulations – particularly since the production of leximetric datasets and the contributions of Botero et al. (2004) and Armour et al.
little is known about public enforcement. This paper contributes towards filling the gap. We think it can serve as a complement to Simon Deakin’s contributing discussion on the use of quantitative methods in Labor Law research (Deakin 2018).

The next section discusses measurement issues. We then exploit a recent dataset (Kanbur and Ronconi 2018) that provides measures of labor inspection resources and activities, of fines, and of the performance of the judiciary for almost all countries in the world (i.e., 197 countries). We then summarize the findings that emerge from the data and the empirical literature in eight bullet points. Finally, we conclude.

2 – Measuring Public Enforcement

Labor market regulations that bindingly constrain the behavior of either employers or workers will have little impact on outcomes absent enforcement. To the extent that regulation increases costs to either party, enforcement coupled with sanctions is needed to deter non-compliance. Regarding deterrence, one can draw upon the burgeoning literature on the economics of crime and the seminal work of Gary Becker for theoretical guidance. Becker (1968) models offending as a choice, positing that the likelihood of committing a crime involves a rational consideration of the benefits and costs, and that factors that in conjunction determine the expected cost of committing an offense will impact this calculus. In its most simple presentation, the expected cost of an offense equals the dollar value of a sanction (or the equivalent variation tied to a non-monetary sanction) multiplied by the probability of being detected and sanctioned. More complex presentations of the theory account for time preferences, the potential that offenders are myopic, and the possibility that potential offenders are unaware of actual sanctions (Lee and McCrary 2017).

Empirical research on criminal deterrence suggests that the likelihood of apprehension (Chalfin and McCrary 2018) and the swiftness of the sanctions (Davidson et al. 2019) appear to deter offending, while evidence pertaining to sanction severity is mixed (Chalfin and McCrary 2017). The policy variation studied for sanction severity often involves policies that make sentences for serious crimes even stiffer (for example, adding time on to lengthy prison sentences). Many read

2 There are several studies that discuss the large gap between law-in-the-books and law-in-practice in LMIC. See, for example, Fenwick and Kalula (2005), Marshall and Fenwick (2016).
this stylized summary of research on the topic to indicate that detection and policing have larger impacts than very severe sanction. In other words, two different sanctioning regimes that yields similar expected value of punishment may yield differential deterrence to the extent that one is relatively more likely to combine a high probability of detection with a relatively modest sanction (Nagin 2013).

The relevance of this literature to labor market regulation and compliance is self-evident, though there are some important differences that one might consider. First, private sectors employers are driven by the motivation to profit. It is very much in the interests of an employer to learn the likelihood of being detected and the consequences if caught when one flouts labor law and regulation. Hence, one might hypothesize that employers exhibit greater responsivity to sanctions severity holding the probability of detection constant, relative to what one observes when studying violent and property crime.

Second, the consequences associated with violating labor market regulation may extend beyond the official state sanctions. In high compliance environments, non-compliant employers may suffer reputational damage if non-compliance is detected and exposed, a factor that may impact demand for their goods and services. Of course, the effects of such “damage to brand” may be miniscule in settings where most employers disregard specific labor market rules.

Third, the employee usually knows the identity of her/his employer. Thus, the victim of a labor regulation violation usually knows who the perpetrator is. This is not the case in most property crimes. Therefore, the scope for private enforcement in labor cases is larger compared to other offenses. Many low-wage workers, however, are not aware of their rights, do not have access to the judiciary, and/or fear retaliation from the employer (Weil and Payles 2005).

The objective here is to measure state actions aimed at achieving compliance with labor laws and regulations. Given that sanctions are typically spelled out in de jure regulation, enforcement efforts or lack thereof will determine which regulations and to what extent have any impact on the nation’s labor market. In other words, while codified penalties are articulated in official policy, government inspections, access to the judiciary, and public campaigns that provide information to

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3 By “labor laws and regulations” we refer to individual employment standards, labor relations, and social security.
workers about their rights, and more generally, the work of labor inspectors and judges constitute enforcement actions that ultimately determine policy effectiveness.

A practical limitation to studying enforcement is the lack of easily available data. As of January 2024, ILOSTAT, the leading source of labor statistics, includes data about labor inspectors and inspections for 83 countries, mostly developed. Furthermore, ILOSTAT does not include any information about penalties, access to the judiciary, or workers’ awareness about their rights. Neither does the World Bank nor other international organizations. Thus, we rely on data we collected that covers labor inspectors and inspections, penalties in case of violation of the minimum wage, and workers’ trust in the judiciary. The data covers 197 countries and territories, and is obtained from various sources: Governments’ websites, ILO’s reports, the Bureau of International Labor Affairs of the US Department of Labor, and the Bureau of Democracy, Human Rights, and Labor of the US Department of State, the ILO Working Conditions Laws Database, and the World Values Survey. The dataset is fully described in Kanbur and Ronconi (2018).

Table 1 – Measures of Public Enforcement

<table>
<thead>
<tr>
<th>Income level</th>
<th>No. Labor Inspectors</th>
<th>No. Labor Inspections</th>
<th>Financial Fine (USD)</th>
<th>Workers’ trust in the Judiciary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income</td>
<td>1.25</td>
<td>10.3</td>
<td>128</td>
<td>35.4</td>
</tr>
<tr>
<td>Lower-middle income</td>
<td>5.38</td>
<td>372.2</td>
<td>264</td>
<td>35.2</td>
</tr>
<tr>
<td>Higher-middle income</td>
<td>9.84</td>
<td>623.9</td>
<td>1,360</td>
<td>26.9</td>
</tr>
<tr>
<td>High-income</td>
<td>12.23</td>
<td>1,378.0</td>
<td>2,194</td>
<td>36.9</td>
</tr>
</tbody>
</table>

Note: The number of Inspectors and Inspections are per year and 100,000 workers. Workers’ trust in the judiciary is the share of workers (%) who report that they have “quite a lot” or “a great deal of confidence” minus those who have “no confidence at all”. Financial fine refers to the medium fine in case of violation of the minimum wage. All details in Kanbur and Ronconi (2018).

Table 1 presents descriptive statistics by level of economic development. High-income countries have more labor inspectors, conduct more inspections, impose higher financial fines, and their workers have more trust in the judiciary compared to LMIC. Some differences are large, such as

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4 There is, regrettably, little data about the human capital and equipment of labor inspectorates. This shortcoming makes difficult to interpret cross-country comparisons.
the number of firms inspected (relative to the labor force), which is almost 140 times higher in high-income compared to low-income countries.\textsuperscript{5}

3 – Correlates of Labor Enforcement

Social scientists, many from the Global South, have been attempting to understand the causes and consequences of labor enforcement in LMIC. This section summarizes this developing literature in eight bullet points. We mostly focus on quantitative studies. It is an opinionated survey that does not attempt to exhaustively cover all the existing evidence. We titled this section “correlates” of labor enforcement, instead of “causes and consequences” because we want to stress that data and methodological limitations make the efforts to estimate causal effects particularly challenging.

3.1- Enforcement and Compliance with Labor Regulations

Cross-country correlations, controlling for GDP per capita and other observables, indicate that countries that devote more resources to labor inspection have higher rates of compliance with labor regulations (Kanbur and Ronconi 2018). Individual country studies –that tend to have higher internal validity than cross-country correlations– usually find a similar positive effect. One of the first qualitative studies is Pires (2008). The author explores 24 cases where labor inspectors visited firms that were not complying with regulations in Brazil. He conducted in-depth interviews with inspectors, business owners, managers, workers, and representatives of trade unions and finds that inspectors have been able to promote compliance by combining punitive and pedagogical inspection practices.\textsuperscript{6}

Most of the other studies are quantitative. Ronconi (2010) exploits variation in labor inspection resources over time (1995-2002) and across Argentine provinces, taking advantage that labor inspection is mostly decentralized at the provincial level.\textsuperscript{7} Using electoral years as instrumental variable, he finds that the reduction in labor inspections that occurred during the 1990’s correlates

\textsuperscript{5} The responsibilities of inspectors also vary across countries. Kanbur and Ronconi (2018) attempt to confront this measurement challenge by using, as a proxy of labor enforcement, the number of inspectors per worker \textit{per regulation}.

\textsuperscript{6} See also the qualitative study covering Indonesia (Santoso 2018).

\textsuperscript{7} See Navarro (2016) for a description of the labor inspection system in Argentina; and Perelmiter (2022) for a qualitative study on labor inspectors’ notions of fairness in Buenos Aires.
with a reduction in compliance with various labor regulations. A similar strategy is followed by Almeida and Carneiro (2012), who exploit variation in labor inspection across Brazilian cities and uses distance from the city to the nearest labor inspection office as an instrumental variable. Gindling et al. (2015) evaluate the impact of a public campaign to increase compliance with the minimum wage in Costa Rica. They compare changes in workers’ registration status before and after the campaign using panel data and find that the campaign effectively increased compliance.

While all the above studies find that more enforcement produces higher compliance, there are two quantitative studies that do not find any effect: Bhorat et al. (2012) for South Africa and Viollaz (2018) for Peru. The later study suggests that when labor regulations vary according to the size of the firm, as in Peru, firms can respond to higher enforcement by reducing employment levels to qualify into a lower legal category, where they take advantage of lower fines and less stringent regulations.⁸

3.2- Enforcement and Job Destruction

Whether labor enforcement affects efficiency (usually observed through changes in employment) is a highly controversial topic in economics. Strong and opposing views exist between neoclassical and institutionalist economists. Theoretically, the effect varies depending on the presence (or not) of labor market failures. Thus, finding that more inspections reduce employment is interpreted as evidence that the neoclassical model is an accurate description of the labor market; while finding that more inspections does not reduce employment is interpreted as evidence of important failures in the labor market (such as monopsony, that is, too much power among employers).

The empirical evidence is mixed. Some studies suggest that enforcing labor regulations reduces efficiency and employment, such as Gimpelson et al. (2010) for Russia and Samaniego de la Parra and Fernández Bujanda (2024) for Mexico, although the latter study focuses only on the effects of inspections on registered firms. Other studies, however, find no negative employment effects such as Fagernäs (2010), Gindling et al. (2015), and Ronconi (2007). The paper by Fagernäs (2010) is important since it covers the case of India—as the influential Besley and Burgess’ (2004) study—

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⁸ Gomez-Garcia et al. (2023) attempts to measure the effects of occupational safety and health inspectors on work accidents in Ecuador. They exploit variation across provinces from 2015 to 2019 and find no significant correlation. A major limitation is that the accidents data only covers the formal sector, where less than half of the labor force works.
but including measures of enforcement. Interestingly, she finds that the evidence is not robust to confirm a negative relationship between pro-worker judicial change and formal work.\textsuperscript{9} Furthermore, Soundararajan (2019) finds that, in Indian states with higher labor inspections, an increase in the minimum wage is \textit{positively} correlated with employment and wages; while in Indian states with fewer labor inspections, the effects on employment and wages are null.\textsuperscript{10}

Kanbur and Ronconi (2018: 331) follow a similar strategy and include measures of labor enforcement to econometrically replicate another influential paper in policy debates – that is, the Botero et al. (2004) cross-country study. They find that the negative correlations between \textit{de jure} measures of labor regulation and labor market outcomes “no longer hold when a measure of effective labour regulation is used”.\textsuperscript{11}

Several studies focus on Brazil, and the findings are mixed. Almeida and Poole (2017) find negative effects; but Meghir et al. (2015: 1544) develop and calibrate a model with search frictions, simulate increases in enforcement, and find that it “leaves unemployment virtually unchanged and reallocates workers to the formal sector increasing overall welfare.” Moreover, Pires’ (2008) qualitative study shows that labor inspectors in Brazil have been able to improve workers’ rights without harming firms’ competitiveness (and in some cases, even enhancing it).\textsuperscript{12} All these studies, however, confront causality concerns due to the endogenous nature of labor enforcement.

Levine et al. (2012) compared 400 randomly inspected firms in California with 400 firms that were eligible, but not chosen for inspection. They find significant improvements in health and safety that do not come at the cost of employment or firm survival. We think this is the most solid evidence due to the quality of the data and the randomness of treatment, but regrettably it does not

\textsuperscript{9} This is one of the few quantitative studies that analyzes labor courts in LMIC. Another is Kaplan et al. (2008), who analyze a random sample of procedures filed between 1990 and 1998 in two tribunals in the Mexican federal labor court system.

\textsuperscript{10} Sarkal (2016) also exploits time-state variation in India and finds that labor inspections positively correlates with the use of temporary contract workers in the organized manufacturing sector.

\textsuperscript{11} The Besley and Burgess (2004) study has 2,024 citations in Google Scholar, and Botero et al. (2004) has 3,336 citations as of January 2024. See Storm and Capaldo (2019) for a discussion about the influence of these two studies on labor reforms in LMIC.

\textsuperscript{12} Coslovsky (2014) examines how labor inspectors and prosecutors intervened in four beleaguered industries in Brazil and find very similar results.
refer to a less developed country, and only covers occupational safety and health inspections. Since the US labor markets are usually considered to be among the most dynamic and competitive, it is plausible to speculate that disemployment effects are also likely to be nil in less competitive labor markers, such as those that characterize LMIC.

Moreover, many small firms in the developing world are not well informed about labor regulations and, in some cases, do not maximize profits (Leibenstein 1978). Under such a context, there is more room for labor inspectors to improve compliance without reducing the firm’s sales and/or profitability. Doing that requires inspectors with the discretion, and skills, to determine which style of inspection (i.e., pedagogical, or punitive) is more appropriate in each case (Pires 2008). There is, however, a trade-off in giving discretion to inspectors. They could use the discretion to treat uninformed employers differently than exploitative employers; but they could also use it for petty corruption, such as asking for a bribe in exchange for turning a blind eye to labor violations. We return to this issue below.

3.3 - Employment Protection Legislation (EPL) and Enforcement

Labor and development economists, interested in measuring the effects of effective labor regulation on various outcomes (e.g., employment, wages, etc.), have usually focused on variation on de jure policy due to the lack of enforcement data in LMIC (Botero et al. 2004; Heckman and Pages 2004; Besley and Burgess 2004). Assuming that the level of protection/stringency of the law-in-the-books is a good proxy of the level of protection/stringency of effective labor regulation could be reasonable when comparing developed countries, but not so when including LMIC. In other words, is it correct to assume that state intervention in the labor market is more stringent/protective in Bolivia or Niger, for example, where the labor law on books is relatively stringent/protective but enforcement is very low, than in Canada or New Zealand, where the

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13 Ndhlovu and Ndhlovu (2023) collect qualitative data based on interviews with individuals in Zimbabwe, including employers and labor inspectors. One of the central findings is that most employers and employees lack knowledge of labor regulations.

14 In Public Administration, an important topic is how inspectors (or “street-level bureaucrats”) behave during the policy implementation process. Hassan et al. (2023) empirically explore styles of labor inspection and willingness to implement in Malaysia; Perelmiter (2022) explores the case of Argentina.

15 Diallo and Ronconi (2024) show that countries in francophone West Africa usually have very protective/stringent labor codes and at the same time extremely low levels of enforcement.
opposite is true? Moreover, Kanbur and Ronconi (2018) show that countries with more stringent/protective labor codes tend to enforce less, which imply that estimates based on variation on the letter of the law are severely biased.

There is very little research, however, analyzing the evolution over time within countries in both EPL and labor enforcement. Theoretically, the temporal correlation is ambiguous. On the one hand, a positive link is expected since a government that believes that protective labor regulations are welfare-enhancing would increase both de jure protections as well as enforcement. On the other hand, electorally strategic governments could, under certain circumstances, increase EPL and at the same time reduce enforcement to satisfy its different constituencies. A key insight is to note that enforcement could be less visible to voters (but not to the inspected firm) compared to de jure reforms of the labor law. Moreover, these links could vary according to the political system, the politicization of the bureaucracy, and the distribution of faculties between different levels of government. The political economy of effective labor regulation in LMIC is heavily underdeveloped. We return to this issue below.

3.4 - Openness, Trade Agreements and Enforcement

There is strong debate about the social costs and benefits of globalization. Opponents of free trade see globalization as another weapon that capital can use to exploit workers and raise inequality; while free trade enthusiasts see trade restrictions, such as the effective implementation of labor standards, as distortions that can interfere with the efficiency benefits of free trade (Elliot and Freeman 2003). Within this broad discussion, the labor enforcement empirical literature has mostly attempted to answer the following two questions: First, does economic globalization produce a “race to the bottom”, wherein governments in LMIC reduce labor law enforcement to compete and attract foreign capital? Or does it produce a “climbing to the top” wherein multinational corporations (MNC) and Global North consumers pressure LMICs governments to improve labor standards? Second, does adding social clauses and labor standards in trade agreements work?

16 For example, Lyutov and Voitkovska (2021: 271) argue that policymakers, in post-Soviet countries, think that “directly depriving workers of their labour rights may be politically sensitive and result in major protests, an alternative way of achieving the deregulatory goal would be to lower the level of enforcement of the existing labour legislation.”
Since the collapse of the Rana Plaza building in Bangladesh, that killed more than 1,000 garment factory workers supplying global brands, several initiatives emerged to improve working conditions in LMIC. One of the main initiatives is labor codes of conduct, wherein MNCs in global value chains monitor labor practices of all the actors within their associated chain. Several qualitative studies empirically explore whether this form of private enforcement effectively improves labor standards in LMIC. The results vary considerably. Some studies argue that labor codes of conduct have produced important positive effects on workers in LMIC (Coslovsky and Locke 2013; Short et al. 2020); others argue that they had negative effects (Narula 2019); and others that they made, most of the time, no difference (Anner 2017; Oka 2010).

There is less research quantitatively exploring how public enforcement reacts to globalization in LMIC. Ronconi (2012) examines a panel of Latin American countries during the 1990s and 2000s and finds evidence consistent with the race to the bottom hypothesis, wherein governments reacted to higher trade openness by reducing labor inspections. Regrettably, the inspection data does not allow exploring whether there is variation in the level of enforcement across labor regulations. This could be important because, as shown in Messerschmidt and Janz (2023), governments in LMIC tend to follow international pressure and improve de jure labor standards, “but only for those rights that do not incur direct costs to foreign investors, such as collective bargaining rights”. In contrast, governments reduce de jure labor standards that bear immediate costs for firms, such as overtime pay.

Competition can also occur across subnational jurisdictions. This is a relevant subject for federal countries, where the power to legislate and/or enforce labor standards are partially at the subnational level. One of the few studies that addresses this question is Li et al. (2019), who analyze minimum wage fixing and enforcement during 2004–2012 in China. The authors find strong evidence of spatial interdependence in minimum wage standards and enforcement among main cities in China.

The second question is whether adding social clauses and labor standards in bilateral or regional trade agreements works. This is important because international organizations have a limited role
in monitoring standards. Furthermore, the two main promoters of including labor standards (i.e., European Union and the United States), use different enforcement strategies: the European Union uses dialogue and soft measures while the United States uses sanctions in the form of withholding trade privileges (Grynberg and Qalo 2006). Raess (2022) reviews the literature and finds that labor provisions strengthen the labor administration and inspection in the partner countries. An example is the US-Cambodia trade agreement that included technical assistance and capacity building for enhancing the enforcement capability of Cambodia’s government, as well as direct monitoring and inspections of all garments factories by ILO personnel (Berik and Rodgers 2010).

3.5 - Enforcement Targeting

It is a well-known fact that in LMIC labor violations are more prevalent in informal/unregistered firms compared to formal/registered firms; and in smaller compared to larger firms. Labor violations are also significantly higher in some sectors of economic activity, such as construction and domestic work. Moreover, most less developed countries also exhibit substantial variation in violations across geographic regions. Given this reality, it is expected that a well-functioning labor inspectorate will target the limited resources in those firms/sectors/regions where violations are more prevalent. From a policy perspective, it is important to empirically test whether this is the case. Finding that the resources are not well allocated would suggest that the enforcement problem in LMIC is not only about insufficient enforcement resources but also an inefficient implementation. A similar point has been raised by David Weil in the US context (Weil 2018).

There is, regrettably, little data about the distribution of labor enforcement across various characteristics impeding a complete test of the previous hypothesis. Several pieces of evidence, however, suggest that enforcement efforts in LMIC are focused on large formal/registered firms, often where labor violations are the least likely to occur. First, qualitative country studies indicate

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17 See Charnovitz (2022) for a discussion of ILO’s role in labor enforcement considering a fundamental tension in its creation, that is, the trade-offs between creating a supra-national organization to regulate labor markets and country’s sovereignty.

18 Other studies include Kim (2012), Postnikov and Bastiaens (2014), and Dewan and Ronconi (2018).

19 Some studies, such as McGuinness (2000:21) for Mexico, attribute existing flaws in labor enforcement “to limited economic resources rather than a lack of political will on the part of the Mexican government, corruption on the part of government inspectors, or inefficacy at the enforcement level.”
that the labor inspectorate only targets registered firms. One example is Pujiastuti et al. (2023) who explore Indonesia and find that the public inspection agency decides its activities based on data reports that are only submitted by registered firms. Second, aggregate statistics obtained from government websites suggest a similar phenomenon. For example, the average size of an inspected establishment in Burkina Faso is 21.5 employees while most establishments usually have between 2 and 5 employees (MFPTPS 2021). Third, according to the Informal Sector Enterprise Survey, 1 out of 4 owners of unregistered firms in Asia, Africa, and Latin America, report that one of the reasons they do not register their business is because of the inspections that would take place if registered (https://www.enterprisesurveys.org/en/informal-businesses). Fourth, the World Bank Enterprise Survey data (that only covers registered firms), indicate that “[labor] inspections are less likely to occur among firms with a larger share of low-skilled workers, and that operate in industries with more tax evasion” (Almeida and Ronconi 2016: 468). That is, public inspection agencies in LMIC are not focusing their efforts where labor violations are more likely to occur.

Bribery and corruption among labor inspectors is another reason that would imply that the problem is more complex than simply lack of enforcement funding. There is, however, very little reliable data about the magnitude of the phenomenon. Kini (2015) is one of the few studies we are aware of, but only covers one case in the mining sector in Burkina Faso. Piore and Schrank (2008: 9) speculate that corruption among labor inspectors in Latin American countries is “less common or consequential than is generally believed”. However, Idubor and Oisamoje (2013: 162) speculate that, in Nigeria, corruption “is perhaps the biggest problem in occupational health and safety violations”. Finally, Hall (2000) and Coloso (2023) interview labor inspectors in Cambodia and Philippines, respectively. Inspectors usually admit that corruption is widespread and that receiving gifts from business owners is common.

3.6- Political Ideology and Enforcement

We devote the next three, and last sub-sections, to discussing the political economy of labor enforcement in LMIC. Political scientists show that political legacies, local interest groups, and their elected representatives played a key role in shaping labor codes, particularly in Latin America.

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20 Yo’el and Anshori (2019) find similar results in a qualitative study in Java, Indonesia.
More specifically, they find that labor-based parties are more likely to introduce pro-labor legislation when they are in power. But, what about enforcement?

The available quantitative evidence is mixed. Panel data for 18 Latin American countries during the 1990s and 2000s suggest that, on average, left-oriented and more democratic governments tend to increase labor inspections (Ronconi 2012). Using a similar period, and a larger sample of Latin American countries (26 instead of 18), Vadlamannati and Tamazian (2017) find that left-oriented governments are more likely to introduce pro-labor laws. The authors do not analyze enforcement but do analyze compliance; and find that left-oriented governments neither increase nor reduce compliance with collective labor rights. Finally, a study focused on Brazil (a country where the national government is responsible for labor inspection), using a close-election regression-discontinuity design at the municipal level, concludes that mayors from the Workers’ Party (PT) slow down labor inspections (Feierherd 2022).

The results of the first two studies are not difficult to reconcile. Note that when left-oriented governments increase labor inspections, they are increasing the expected costs that firms face in case of violating labor laws. But left-oriented governments also increase the expected benefits that firms face in case of violating the law because they introduce more protective/stringent regulations. It could be that both effects cancel each other, and the net impact of left-oriented governments on labor violations is insignificant.

3.7- Labor Unions and Enforcement

The inspiring work of David Weil and other Global North scholars explores the links between organized labor and enforcement. Labor unions in the United States, because they are relatively close to workers who suffer labor violations, are an important actor promoting compliance with workers’ rights. Therefore, researchers called for granting workers’ organizations the possibility of partnering with the government to detect labor violations (Weil 1991, 2004; Fine and Gordon 2010).

Rosado Marzan (2010: 506) describes the labor inspectorate in Chile, where the center-left governments that ruled the country from 1991-2010 revive the inspectorate after “Pinochet’s rule left the institution in tatters”.

Warnecke and De Ruyter (2012: 398) examine the effects of the decentralization that occurred in India in the 1990s on labor enforcement and find that: “In the case of the Indian province of Kerala, governments of a leftist persuasion have taken active steps to improve worker rights and facilitate the spread of decent work.”
The expectation is that co-enforcement will improve compliance. But does the same logic apply to LMIC?

Matthew Amengual’s qualitative work in Argentina and Indonesia suggest a positive answer. He conducted extensive fieldwork in several industries and provinces in Argentina, and argues that, by establishing linkages between labor inspectors and labor unions, enforcement can be made possible, and state capacity extended (Amengual 2014; Amengual and Fine 2017). Furthermore, through a study of the Better Work program in Indonesia’s garment industry, he finds that the participation of transnational regulators and local labor unions produce reinforcement (not displacement) of public enforcement (Amengual and Chirot 2016).

Another important qualitative work analyses the case of Brazil in the 1990s, a period of market-oriented reforms. The authors find that “labor unions, labor inspectors, and labor prosecutors have reinvented themselves during the reform period and have reinforced each other so they can protect workers even when employers operate under tight market constraints” (Coslovsky et al., 2017: 78). Studies that also indicate a positive link between labor unions and public enforcement in other regions of the less developed world include: Hasting (2019), who examines organized labor’s role in improving working standards in the production of wine in South Africa; and Lyutov and Voitkovska (2021), who describe the strong decline in public labor inspection and labor union strength in post-soviet countries.

We think these are important contributions that attempt to find a practical solution to the problem of low public labor enforcement in LMIC. But the lack of an identification strategy implies that the results should be interpreted as interesting correlations. Furthermore, there are reasons to be less optimistic and to speculate that labor unions’ involvement displaces public enforcement, at least partially.23 This is because labor unions usually care first about enforcing the rights of their

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23 The case of China is special. Zhuang and Ngok (2014: 579) argue that: “Trade unions only represent workers when there is little risk of accentuating their dual - but contradictory - identity as both state apparatus and labour organization and hence conflicting with the State ... Most of the time, although they are authorized by laws and regulations to monitor the enactment of labour regulations, grassroots trade unions dare not - and in some cases even refuse to - assist labour inspectors.” Cooney (2007) discusses the weaknesses of other components of enforcement in China such as the labour inspectorate, and the formal dispute resolution processes.
members, and in LMIC, these are relatively high-skilled workers. In Argentina, for example, labor unions’ strong influence over the provincial public inspection agencies implies that public inspectors mostly visit large formal construction sites (where workers are usually unionized), at the expense of leaving small informal construction sites out of the radar. This can have a negative unintentional effect: The most vulnerable construction workers end up heavily exposed to occupational risks because employers know that public inspectors do not enforce regulations in the informal sector.

One of the few metrics we are aware of, shows that in Latin American countries, public labor inspectors are 30% more likely to visit unionized compared to non-unionized formal firms (UNDP 2021). The data only covers formal firms. Considering that informal firms are non-unionized and are rarely inspected, the bias in labor inspectorates towards visiting unionized firms is presumably much larger in the region if the whole population of firms is considered. Thus, our interpretation of the evidence is that, while labor unions tend to promote labor enforcement in LMIC, they may be inadvertently directing enforcement resources towards formal sector firms, and away from small informal firms where labor violations are more prevalent.

3.8 - Weberian Bureaucracy and Enforcement

Descriptive evidence shows that most workers in LMIC (both employed and unemployed, both formal and informal) overwhelmingly support protective labor regulations such as minimum wages and severance payment in case of unfair dismissal (Ronconi et al. 2023). Why, then, do we observe relatively little public enforcement (and large violations of workers’ rights) in LMICs democracies?

Dewey and Ronconi (2023) attempt to provide an answer to this puzzle. They show that there is a positive correlation across-countries between the extent of autonomy and professionalism of the civil service, and public labor enforcement. That is, countries with a Weberian bureaucracy (which are few in LMIC) make more efforts to enforce labor laws. The correlation is robust to the inclusion of several controls, such as GDP per capita, and the use of instrumental variables. The authors

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24 UNDP (2021) indicates that in Latin American and Caribbean countries trade union density is 21.5% among workers with tertiary education or more, 12.2% among workers with secondary education, and only 8.6% among workers with primary education or less.
speculate that two mechanisms are driving the relationship. Politicized bureaucracies underinvest in labor inspection because elected officials: (1) have high turnover and do not accumulate inspection experience; and (2) have short-term horizons and do not internalize the social benefits of enforcement (such as formal job creation and enhancement of the rule of law) because they take time to materialize.

The case of Brazil appears to illustrate this hypothesis. First, the Brazilian labor inspectorate is among the most professional and autonomous systems in LMIC. “The labor inspectors are hired through a public and competitive examination system, held at the national level, and promoted based on criteria objectively established by law. Currently, all labor auditors have university degrees.” (Bignami and Serrano Barbosa 2015: 273). Second, as the social studies reviewed above suggest, the labor inspection system has been relatively effective and efficient in improving working conditions in Brazil (Pires 2008; Coslovsky 2014).

Another example is the Dominican Republic (DR). The country introduced, during the 1990s, a textbook model of Weberian administrative reform to the labor inspectorate. As pointed out by Schrank (2009: 103), since the reform, labor inspectors in the DR “are recruited by means of a competitive examination, granted secure tenure, and paid accordingly. And they have developed an esprit de corps that augments their sense of corporate coherence.” This has resulted in a significant increase in the number of inspections, and more importantly, in an adequate use of discretion to “balance society’s demand for protection with the economy’s need for efficiency.” (Schrank 2009: 91).25

4 – Conclusion

This paper reviews recent efforts in social science to analyze enforcement in low-and-middle income countries (LMIC) and inform policy debates. The empirical literature has three main shortcomings: First, it covers quite a few countries, particularly in Africa and Asia. Second, it says very little about potentially important aspects such as the use of penalties, the distribution of

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25 There are other views. For example, Amengual (2014: 4), when discussing the case of Argentina, speculates that “In contrast to standard expectations, lack of independence in these cases can promote, rather than undermine, state action. This finding suggests that research on labor inspection should be reoriented from a narrow focus only on building independent inspectorates that are autonomous, and towards understanding how ties form between regulators and their allies, as well as how to reform enforcement bureaucracies”.

enforcement across firms’ and workers’ characteristics, and the extent of corruption during the enforcement process. Third, most of the evidence exploring the causes and consequences of enforcement is plagued with endogeneity concerns. Many of these challenges could be partially overcome by collecting comparable measures of enforcement across countries and over time.

Despite the existing limitations, the empirical evidence suggests that: 1) Enforcement is quite low in LMIC; there are fewer inspectors and inspections, lower penalties, and less trust in the judiciary compared to developed countries. 2) Increasing enforcement produces more compliance with little job destruction, although there is substantial debate and heterogeneity across countries. 3) Countries with more protective labor codes tend to enforce less. 4) Countries that become more open to trade also tend to enforce less. However, trade agreements with special clauses protecting workers can promote higher labor enforcement. 5) Inspection agencies in LMIC tend to focus their efforts on formal firms, leaving informal firms out of the radar which implies that the most vulnerable workers are usually excluded. 6) The constituency base of the government shapes labor enforcement, wherein labor-based governments devote more resources to inspection, although this is a debated issue in political science. 7) Labor unions help promote enforcement, although in LMIC they can displace public inspections from small informal firms to larger formal firms because there is where labor unions members work. 8) Autonomous and professional bureaucracies do more labor enforcement presumably because they internalize the long-run benefits of enforcing the law and allow inspectors to accumulate issue expertise.
References


