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**Article**

## Designing labor market regulations in developing countries

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# Designing labor market regulations in developing countries

## Labor market regulation should aim to improve the functioning of the labor market while protecting workers

Keywords: labor market regulation, job security, minimum wage

### ELEVATOR PITCH

Governments regulate employment to protect workers and improve labor market efficiency. But, regulations, such as minimum wages and job security rules, can be controversial. Thus, decisions on setting employment regulations should be based on empirical evidence of their likely impacts. Research suggests that most countries set regulations in the appropriate range. But this is not always the case and it can be costly when countries over- or underregulate their labor markets. In developing countries, effective regulation also depends on enforcement and education policies that will increase compliance.

### KEY FINDINGS

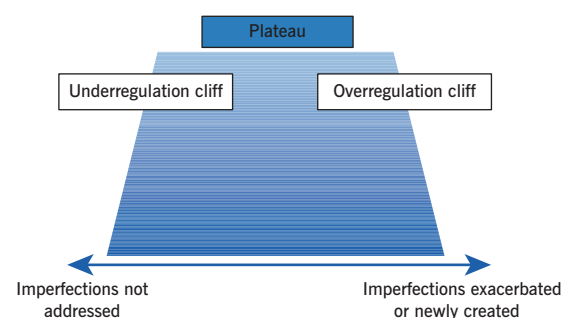
#### Pros

- + Labor market regulations can improve the employment situation of vulnerable workers.
- + Concerns about large negative effects on employment and productivity are not substantiated in most countries.
- + Negative effects can be minimized if regulations are consistent with good practices in the specific country context and if compliance and interactions with other regulations and institutions are considered.
- + Labor regulations can provide incentives for employers to implement productivity enhancing actions like training and technological and organizational innovation.
- + Careful empirical monitoring and evaluation can identify positive and negative effects of regulations and thus improve the design of labor market rules.

#### Cons

- Overly stringent regulations can impede job creation and reduce formal employment, especially for youth and unskilled workers.
- Underregulation does not address problems of worker protection, uneven bargaining power, and inadequate information.
- Compliance can be a challenge for developing countries with large informal sectors and low administrative capacity.
- Monitoring the effects of regulations can be difficult if labor market information is inadequate.
- Decisions on labor market regulations are often dictated by political concerns rather than evidence.

Labor regulations should be set on the "plateau" avoiding over- or underregulation



Source: Based on [1].

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### AUTHOR'S MAIN MESSAGE

The challenge in establishing labor market rules is to avoid the extremes of over- and underregulation. Countries at these extremes pay in both economic and social terms. But in between is a zone where appropriately designed regulations can alleviate market failures and offer protection to workers without imposing major costs on firms or the economy. The appropriate level of regulation is country specific. Evidence from in-country and international analyses helps in setting optimal regulations. Enforcement capabilities and education are especially important for improving compliance in many developing countries.

## MOTIVATION

Labor markets require regulations for the same reasons that all markets do—to mitigate market failures, like imperfect information, and to protect buyers and sellers. However, because it is the services of people that are being bought and sold, regulating the labor market can be contentious. In Italy, an advisor redrawing labor market rules was even murdered in 2002.

Thankfully, disagreements rarely get that intemperate, but debates about reform are often heated, reflecting ideological differences about the role of government and the nature of the social contract between capital and labor. Setting labor market rules is further complicated by the fact that they are shaped by the country's social, cultural, historical, and legal traditions.

Rules defining the minimum wage and job security are important aspects of labor market regulation in all countries, regardless of the level of development. Divergent views are common. One perspective emphasizes that strong regulations can benefit workers, especially the most vulnerable, without heavy costs to employers. A more skeptical view sees more regulation as leading to lower employment and productivity, and hurting the very workers the regulations are intended to benefit.

### Minimum wages and job security rules

*Minimum wages:* The underlying concept of the minimum wage is to set a universal floor. While a single national rate is most common, some countries have different regional, industrial, occupational, or age-related minima. Some types of workers can be completely excluded—agricultural and domestic labor, the self-employed, and family enterprise workers are common examples.

*Job security rules:* Also known as employment protection legislation, job security rules, refer to regulations governing the initiation and termination of employment contracts. These rules determine the degree of job security by restricting the ability of employers to hire workers on an explicitly non-permanent basis or by making dismissal costly. The stringency of these rules can range from protective (restrictions on non-permanent contracts and limited employer dismissal rights) to flexible (unrestricted non-permanent contracting and minimal limits on dismissal).

*Source:* Betcherman, G. “Labor market regulations: What do we know about their impacts in developing countries?” *World Bank Research Observer* 30:1 (2015): 124–153.

Good policy should be defined by its effects, and this is especially important in politically contested contexts. Regulations such as the minimum wage and job security rules can potentially affect employment, earnings, productivity, and other outcomes (see Figure 1 for a comparison of selected labor regulations in several countries). So policymakers need to take into account international experience with the effects of these rules and also empirically assess the likely effects of reforms in their own countries. This can be challenging in developing countries, where labor market information is scarce and where large informal sectors and limited administrative capacity are complicating factors. However, researchers are learning more about the effects of these regulations in developing countries, and this knowledge can help policymakers in designing appropriate rules.

Figure 1. Selected labor regulations in several developing and emerging countries

	Fixed-term contracting			Job security		Minimum wage	
	Fixed-term contracts prohibited for permanent tasks?	Maximum length of fixed-term contracts, including renewals (months)	Third-party notification if one worker is dismissed	Notice period for redundancy dismissal (average for workers with 1, 5, and 10 years of tenure; in salary weeks)	Severance pay for redundancy dismissal (average for workers with 1, 5, and 10 years of tenure; in salary weeks)	Minimum wage applicable to the "typical" worker (US\$/month)	Ratio of minimum wage to value added per worker
Brazil—São Paulo	Yes	24	No	6.6	8.9	373.5	0.4
China—Shanghai	No	No limit	Yes	4.3	23.1	353.3	0.3
Czech Republic	No	108	No	8.7	11.6	599.3	0.3
Dominican Republic	Yes	No limit	No	4.0	22.2	320.1	0.4
Ethiopia	Yes	No limit	No	8.7	10.5	None	n.a.
Georgia	No	30	No	4.3	4.3	15.6	0.0
Ghana	No	No limit	Yes	3.6	46.2	45.2	0.2
India—Mumbai	No	No limit	Yes	4.3	11.4	135.9	0.6
Iran, Islamic Rep.	No	No limit	Yes	None	23.1	327.6	0.5
Lebanon	No	24	Yes	8.7	0.0	435.9	0.4
Mexico—Mexico City	Yes	No limit	Yes	None	22.0	138.7	0.1
Philippines	No	No limit	Yes	4.3	23.1	291.0	0.6
Saudi Arabia	No	48	No	8.6	15.2	None	n.a.
Senegal	Yes	24	Yes	4.3	10.5	152.0	1.0
Serbia	Yes	24	No	None	7.7	217.1	0.3
South Africa	Yes	No limit	Yes	4.0	5.3	282.0	0.4
Sri Lanka	No	No limit	Yes	4.3	54.2	68.7	0.1
Tunisia	No	48	Yes	4.3	17.2	239.8	0.6
Turkey	Yes	No limit	No	6.7	23.1	584.7	0.4
Vietnam	No	72	No	None	24.6	172.6	0.7

Note: "Typical worker" is defined as an average wage-earner, in majority race and religious group, in largest city, and non-union.

Source: <http://www.doingbusiness.org/data/exploretopics/employing-workers#difficultyHiring>

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## DISCUSSION OF PROS AND CONS

When governments change the minimum wage or reform the rules affecting job security, this can have consequences for outcomes that policymakers care about, such as employment, earnings, and productivity. Regulatory changes may also affect different types of workers and firms in different ways. Over the past two decades or so, economists have conducted many quantitative studies of these effects. The original wave of research focused almost exclusively on industrialized countries, but there is now a growing body of literature on developing countries as well.

### Measuring the effects of labor market regulations

Quantitative analysis typically relies on econometric techniques to isolate the effects of regulations such as employment protection legislation and the minimum wage from

the effects of other variables. The older, more traditional, approach is to explain the cross-country variation in outcomes of interest (such as the national unemployment rate) by differences in country labor market rules, controlling for other factors that might affect these outcomes. This approach is still used, but it now shares the stage with methodologies that analyze what happens to these outcomes of interest in a single country where there is either within-country variation in the regulations (e.g. by state) or a change in the regulation, so that before-and-after effects can be observed. Another issue is measuring labor market regulation. This is particularly challenging in the case of job security rules, which are inherently qualitative and multi-dimensional. Researchers have relied on established indices such as the OECD Indicators of Employment Protection and the World Bank's Doing Business Employing Workers data. However, in recent years, a number of new indices have been developed, such as the ILO's EPLex and the Labor Regulation Index produced by the University of Cambridge Centre for Business Research.

### Minimum wages

Much of the evidence in developing countries has examined whether higher minimum wages—by making labor more costly—reduce employment and increase unemployment. Clearly, country context matters a lot and the impact depends on labor market conditions, the minimum wage level, and compliance. Several studies have identified some adverse employment effects [2]. For example, increases in the minimum wage have been found to reduce employment in Brazil, China, Colombia, Costa Rica, Hungary, Indonesia, Nicaragua, and Thailand. However, the effect is generally modest, and some studies find no overall employment impact, for example in Mexico and South Africa.

Not surprisingly, where there are employment effects, they are concentrated in the lower part of the wage distribution, where the minimum wage actually “bites.” For example, a study for Costa Rica found that a 10% increase in the minimum wage was six times more likely to affect formal sector employment for workers earning within 20% of the minimum wage than for formal sector workers overall.

So the effects of the minimum wage—positive and negative—are generally concentrated among young people and unskilled workers (and, in some cases, women), because these groups tend to have lower wages. Positive effects can stem from the higher wages that these workers receive when the minimum wage is raised. However, studies in a number of countries in Asia, Eastern Europe, Latin America, and sub-Saharan Africa have found that raising the minimum wage reduced employment for these low-wage groups.

An important question for developing countries concerns the implications, if any, of minimum wages for the informal sector. Although the minimum wage is not enforced in the informal sector, it can still affect the sector. Economic theory predicts that increasing the minimum wage, by raising relative labor costs in the formal sector, would shift employment to the informal sector. A meta-analysis in middle-income countries finds that the probability of being employed in the informal sector increases as the minimum wage rises [3]. However, while some studies have found that higher minimum wages do shift employment from the formal to the informal sector, other studies have found no increase in informality. How is that possible? One surprising observation from several studies is that increasing the minimum wage often increases wages in the informal sector

as well as in the formal sector—the so-called “lighthouse effect.” The minimum wage is seen as a benchmark wage for unskilled labor throughout the economy, even in the informal sector where it is not binding.

The empirical research, largely from Latin America, shows that higher minimum wages generally reduce earnings inequality by raising wages in the lower part of the income distribution. However, the equalizing effects of raising the minimum wage disappear when it is set fairly high, since this benefits primarily higher wage workers [4].

Advocates often present a higher minimum wage as an antipoverty policy. However, raising the minimum wage might not reduce poverty if a higher minimum wage reduces employment or if workers benefitting from the increases are not in poor households. So poverty reduction strategies require other more targeted instruments besides the minimum wage. In most countries, policymakers can expect that raising the minimum wage will shift more of the national income to labor.

### Job security rules

Employment effects are also an open question in the case of job security legislation. A collection of studies analyzing the employment effects of changes in employment protection in several Latin American and Caribbean countries finds inconclusive results, both for cross-country regressions and within-country analyses [5]. For some countries, the relationship between the strictness of employment protection laws and employment is significant and negative (Argentina, Colombia, and Peru), but for others no significant relationship is found (Brazil and three Caribbean countries).

In general, negative employment effects have been most prevalent in industries with high turnover. Much of the analysis of the employment impact of job security legislation in developing countries has concerned Latin American countries. This issue has also received substantial attention in India where it has been the subject of considerable controversy. Many researchers have found that stringent layoff rules have constrained formal sector employment growth but others have seriously questioned the data and methods used to arrive at these findings.

For developing countries, an important consideration is whether employment protection legislation has different effects on formal and informal employment. Conventional dual-sector theories predict that more costly job security rules would shift production from the formal to the informal sector. While not all studies have come to this conclusion, most have found that more protective regulations are associated with modestly lower formal sector employment and some increase in informal employment [6].

Job security rules do not have the same effects on all types of workers. Not surprisingly, effects are most favorable for workers covered by these protections—typically, prime-working-age males and better-educated workers are overrepresented in this group. Workers in uncovered jobs gain no benefit from the protections and can even be hurt if some employers are reluctant to hire formal workers when job security rules are strong. Youth, women, and the less-skilled are overrepresented in this group.

Rules discouraging temporary contracts and making dismissals costly lengthen both job tenure and unemployment duration. These two effects, together, explain the common

finding of modest or insignificant overall employment effects of stricter employment protection laws. At the same time, the pace of labor reallocation slows when job security protections are strong, resulting in a less dynamic labor market, with smaller flows between jobs and between employment and non-employment.

Does the strictness of employment protection legislation have implications for productivity? The results are mixed for developed countries, which have been studied most often. The results are also inconclusive for some limited analyses for developing countries. One study finds that increased employment protection has a significant negative impact on total factor productivity growth (of around -1% annually) where the rule of law is strong, but no effect where the rule of law is weak (as it is in many developing countries) [7]. Another study concludes that stricter employment protection does not robustly affect labor productivity, although it does affect output, primarily through a decline in new firms [8].

These results reflect the diverse, and often opposing, ways in which employment protection legislation may affect productivity. By slowing labor reallocation, strict job security rules can limit the potential efficiency gains from the movement of workers from low- to high-productivity sectors and firms. However, higher productivity can result where firms benefit from the experience of longer-tenure workers or when they adjust to lower flexibility by investing more in capital or in the training of the existing workforce.

### **Setting regulations on the “plateau” and avoiding the “cliffs”**

Overall, the empirical evidence on the effects of labor regulations is mixed and, in some ways, inconclusive. To summarize what is known: minimum wages and job security rules have clear distributional effects, most obviously by narrowing earnings inequality, at least in the case of minimum wages. Increases in the minimum wage and the degree of protection provided by job security rules often lead to some shifts in jobs from the formal to the informal sector. They can also shift the composition of formal employment away from groups such as youth, the less-skilled, and in some cases, women. Effects on efficiency are less evident. Negative employment effects of higher minimum wages and stricter employment protection have been found in some countries but not all and when they are observed, the magnitude of the effect appears to be modest. Studies on output and productivity effects do not reach strong conclusions either way, though more research is needed in developing countries.

The results regarding efficiency effects (on employment and productivity) may come as a surprise to those who base their intuitions on textbook models. How can policies that raise the price of labor not always lead to fewer jobs? And how can policies that slow labor reallocation not inevitably have negative consequences for productivity? Three factors come into play in accounting for these results:

First, firms and workers can make different types of adjustments when faced with changes that raise the price of labor or alter the balance between flexibility and security. For example, employers can respond to higher minimum wages by cutting back on employment or moving some jobs “off the books,” but they can also take another route, such as substituting more skilled workers for less skilled ones, or adjusting other labor cost components. When reforms to job security rules reduce flexibility, employers can



invest more in training or other productivity enhancing measures. They may reduce these investments when rule changes increase their options for a more flexible workforce. When minimum wages rise, low-wage jobs may decline in many situations, but in others the change can induce more workers into the labor market and, under certain conditions, lead to higher employment.

Second, the modest efficiency effects observed in developing countries must take into account the large informal sectors, which limit the coverage of regulations, and weak compliance where the rules do apply. In the case of minimum wages, most developing countries have non-compliance rates (i.e. the share of wage workers earning less than the statutory minimum) in the 20–50% range [9]. Certainly, weak enforcement of bad rules should not be recommended for regulating the labor market. However, while improvements in coverage and enforcement would alter the effects of labor regulations in developing countries, the findings are not that different in developed countries, where compliance is much higher [10].

Third, most countries appear to understand the risks of labor regulations at the strong and weak extremes, so they usually set rules in a range where many of the potential negative effects are avoided. Within this range most of the effects of labor market regulations are redistributive, while the effects enhancing efficiency roughly cancel out those undermining it. When countries operate in this range—called a “plateau” by the World Bank in its 2013 World Development Report on jobs [1] (illustration on p. 1)—labor market regulations can (partially) meet their intended goal of addressing labor market imperfections without serious consequences for efficiency.

While the empirical literature suggests that most countries operate on this plateau, this does not mean that policymakers never set regulations that lead to undesirable outcomes. That occurs when regulations are at the edges of the plateau—on the “cliffs,” in the World Bank’s metaphor (illustration on p. 1). Most familiar to economists is the cliff where overly protective job security rules or too high minimum wages become an obstacle to employment or productivity growth. For example, several sub-Saharan countries have minimum wages that are higher than the average wage or the average value added per worker [11].

The other cliff may be less familiar but should be of equal concern for policymakers seeking good regulation. That cliff is characterized by minimum wages or job security rules that do not exist, are too lax, or are too weakly enforced. For example, 8% of the ILO’s 186 member countries, mostly lower-income countries, have no minimum wage at all. Countries on this cliff do not address the labor market imperfections that motivate rule-setting in the first place, such as imperfect information or uneven bargaining power between employers and employees. The challenge, then, is to set regulations that mitigate these imperfections without falling off one cliff or the other.

### ***Locating the “plateau” and the “cliffs”***

What kinds of information and analysis are needed for policymakers to determine whether their regulations are on the plateau or on a cliff? There is no clear-cut answer but evidence can provide important inputs into decisions about labor market rule-setting that will avoid the under- or overregulation traps. For example, while most countries



involve social partners in the setting of minimum wages, quantitative analysis that takes into account variables such as trends in GDP, productivity, employment, and informality can help ground decisions about minimum wage adjustments in the country's economic reality, or even be used as a formula for making adjustments.

There are informational and analytical challenges in determining the contours of the plateau. Other factors may be having an effect as well as the regulation under review. For example, if the introduction of more protective job security rules is followed by higher unemployment, that might not mean that the reform has had a negative impact if the economy has been slowing at the same time.

Another challenge is to assess the effects of a regulation over a long enough time. Studies too often focus on short-term effects of half a year to a year, when the real effects may take longer to emerge. Some research has shown that the longer-term effects of the minimum wage, both positive and negative, can be stronger than the contemporaneous ones [12]. Another challenge is to consider all of the important effects that rule-setters should be taking into account. Employment, wages, and productivity get most of the attention from analysts, while more difficult-to-measure outcomes such as economic insecurity and fairness are not assessed, even though they are clearly important.

These challenges can be addressed to some extent. Gathering information from a variety of sources can help in understanding the effects of labor market regulations. Household, firm, and administrative data can be used to track how outcomes of interest differ before and after regulatory reforms are introduced. In countries where regulations are determined by states or provinces, variations by jurisdiction can be exploited to identify effects. Different econometric techniques can be used to isolate the effects of regulatory changes by controlling for other factors that might influence the outcomes of interest.

Qualitative information can also provide useful insights. Although the contours of plateaus and cliffs are context-specific, benchmarking with similar countries can provide guidance on whether minimum wages or job security rules are within a reasonable range. Insights can also be gained from subjective perceptions of employers and workers. For example, enterprise surveys, such as the World Bank's Investment Climate Assessments, ask employers to assess how labor regulations (and other factors) affect their operations.

While these surveys are limited by their subjectivity, they do capture perceptions based on the actual effects of regulations. Comparative perceptions can be found through cross-country studies, such as the World Economic Forum's Global Competitiveness Report, which includes manager opinion surveys. The importance workers attach to job security and decent pay can be identified through national opinion surveys, and internationally comparable estimates are available through the World Values Survey and similar data-collection efforts.

The ultimate test of whether regulations are on the plateau is whether the costs of the rules are reasonable and whether reforms would have a substantial positive effect on the outcomes that regulators care about. Two questions can help evaluate this:

First, is there evidence that employers or workers are trying to overcome or bypass the regulations? One obvious indicator is the level of informal employment in the labor market. However, care must be taken in interpreting this finding. Higher than expected informality could be due to employers trying to avoid the costs of compliance, which would signify that the country is on the overregulation cliff. However, if the informality

is the result of workers having little incentive to work in the formal sector because there is no advantage in wages or job security, then the country might be on the underregulation cliff.

Second, is there evidence that firms that are inherently more likely to be heavily affected by the regulations are experiencing worse outcomes than firms for which the rules are less relevant? As a case in point, when job security legislation is very protective, industries that are naturally more volatile, with high turnover, are more likely to grow slowly, while more stable industries might exhibit no significant ill effects.

Of course, valid empirical assessments of a country's labor market regulations depend on the availability of reliable and relevant data. Ideally, countries would possess regularly generated and representative data on workers and firms in both the formal and informal sectors. Panel data, which follow workers or firms over time, are especially useful in assessing the effects of regulatory changes. Having good data is only the first step. The data must also be accessible to analysts, and there must be channels for conveying the results of analysis to the policymaking process.

## LIMITATIONS AND GAPS

The data and analytical requirements for assessing labor market regulations can be difficult for developing countries to meet. Basic statistical concepts such as “employment” and “unemployment,” established in the context of formal, wage labor markets, might not accurately describe labor market conditions in developing countries. Collecting representative data is inherently difficult in developing countries because of the large informal sectors. Data that can be used to monitor more intangible outcomes, like economic insecurity and social cohesion, are particularly scarce. And many countries lack the administrative and technical capacity to implement high-quality surveys or to conduct sophisticated analyses, although technical assistance is often available from donors and international organizations.

It is also important for analysis of labor regulations in developing countries to include enforcement and compliance. Most research focuses on the rules as they exist on paper (*de jure*) but this can be misleading when the reality on the ground is very different because of incomplete coverage and non-compliance. In fact, there is an inverse relationship between the strength of regulations and the degree of enforcement. When compliance is taken into account, economic and employment effects of regulations often turn out to be insignificant [13]. In countries with poor enforcement, compliance can be improved by re-examining the regulations themselves to ensure they are appropriate and not too complicated; increasing the resources allocated to enforcement; raising penalties for non-compliance; and using education and information campaigns to improve awareness of the importance of labor market rules.

Even when good empirical analysis can be conducted, political dynamics too often influence decisions on regulatory reform. Minimum wages and job security are contentious issues, with strong—and usually opposing—positions taken by labor and social organizations, on the one hand, and business, on the other. Where political parties base their constituency on these groups, this dynamic can be transmitted directly into the political process. This can be a difficult environment in which to implement evidence-based policymaking.

## SUMMARY AND POLICY ADVICE

The challenge in establishing labor market rules is to avoid the extremes of over- and underregulation. The appropriate level of regulation, which depends on the country context, lies between these extremes and can alleviate market failures and offer some protection to workers without unduly burdening businesses or imposing major costs on the economy.

However, positions that are often lobbied for in the political process may be more extreme. If policymakers accede to these demands, the result can be various negative economic and social effects. This can be the case for proposals that advocate both very strong and very weak regulation. While these may serve the immediate interests of their sponsors, they are unlikely to be in the wider social interest.

Because of this political nature of rule-setting in the labor market, it is important for policymakers to base decisions on minimum wages, job security rules, and other regulations on empirical evidence to the furthest extent possible. The majority of the evidence on the effects of minimum wages and job security rules suggests that most countries have set these regulations in the appropriate range.

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## Competing interests

The IZA World of Labor project is committed to the IZA Code of Conduct. The author declares to have observed the principles outlined in the code. Version 2 of the article updates Figure 1, adds another “Pro” and another “Con,” reviews the literature, introduces a new emphasis on compliance, expands the “Limitations and gaps,” and includes new references: Kuddo (2018), [3], [6], [9], [10], [11], [13].

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