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Research Report

Minimum wage: Global challenges and perspectives

Policy in Focus, No. 42

Provided in Cooperation with:

International Policy Centre for Inclusive Growth (IPC-IG)

Suggested Citation: Soares, Sergei (Ed.) (2018) : Minimum wage: Global challenges and perspectives, Policy in Focus, No. 42, International Policy Centre for Inclusive Growth (IPC-IG), Brasilia

This Version is available at:

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Policy in Focus

A publication of
The International Policy Centre for Inclusive Growth

Volume 15, Issue No. 2 • September 2018



Minimum wage: global
challenges and perspectives

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Policy in Focus



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Editor's note: We would like to express our sincere appreciation to all the authors for their generous and insightful contributions, without which this issue simply would not have been possible.

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Editorial

The increase in inequality over the last few decades in most of the world has been a constant source of concern for policymakers and analysts. Inequality can hinder economic growth, reduce well-being and increase poverty. It also fuels social unrest and reduces social cohesion. Great attention has been given to the role of fiscal redistribution (or lack thereof) in the inequality debate, but perhaps mechanisms that involve money passing directly from one economic agent to another, rather than through the hands of the State, deserve more attention. In a time of weakened labour unions and decreasing income mobility, can the minimum wage once again shine as a market-friendly and effective policy tool?

Since its creation 124 years ago, the popularity of the minimum wage among policymakers and the public at large has risen and fallen. Most countries have introduced wage floors, but many have done so only to have their real value be eroded by inflation. A few countries have abolished minimum wages altogether (sometimes only to recreate them later). Compliance has sometimes been high and sometimes low.

Legislating a floor on wages has long been an attractive way to reduce inequality and ensure social justice.

It usually does not require significant fiscal outlays, it is simple and very easy to explain politically, and it is a market approach to reducing inequality (as opposed to tax and transfer). The minimum wage is related to the idea of fairness and avoids the never-ending disputes over what type of person is 'deserving' of government

transfers. On the other hand, the ease with which the minimum wage can be raised has undoubtedly led to its abuse by populist policymakers. In many countries, legal wage floors have been set so high that they become fictional rules with scant relation to the labour markets they purport to regulate.

The minimum wage and its effects have been studied thoroughly, but the conclusions as to its effectiveness as social policy from this extensive body of literature are far from consensual. The economics of the minimum wage have always been complicated, with mixed evidence. Does it cause unemployment? Does it lead to more informality? Political and ethical issues cannot be disentangled from economic ones. How high should the minimum wage be? Setting this value often represents an economic and moral conundrum.

This issue of *Policy in Focus* is devoted to the minimum wage, the reasons for its existence and why now may be a good time to rethink its relationship with social policy. It features articles by leading experts and scholars on minimum wage contexts more broadly in Latin America, Europe, Asia and sub-Saharan Africa, and on more specific country contexts such as in the United States, China and France. We hope it will be a timely contribution to the timeless debate on the minimum wage and its effects worldwide, and that it will help spark further discussion.

Sergei Soares

Minimum wages: recent trends and policy design issues

Patrick Belser and Ding Xu¹

Minimum wages are back at the top of the policy agenda. After being widely cast as a counterproductive ‘job killer’ and an unwelcome source of labour market rigidity in the 1980s and early 1990s, statutory wage floors have made a return to the forefront of social policy debate. Since the late 1990s, many countries—both developed and developing—have either adopted or strengthened existing minimum wage systems. The UK introduced a national minimum wage in 1999 and was followed by Ireland, numerous former transition economies of Eastern Europe and, perhaps most significantly, by Germany in 2015—a country which has traditionally relied on a system of collective agreements rather than on state intervention.

The UK recently signalled its intention of progressively increasing the value of the minimum wage up to the level of a living wage by 2020. The minimum wage was reactivated in many emerging and developing economies around the world, including the BRICS countries. Brazil started to gradually increase the federal minimum wage after 2005; the Russian Federation adopted a system with new regional rates in 2007 and recently implemented a two-stage increase to raise the level up to the subsistence minimum; India is considering a legal reform to extend the coverage of its Minimum Wage Act from workers in established (‘scheduled’) occupations to the entire population of wage workers; China adopted a system with provincial minimum wages in 1994 and further strengthened its implementation through a set of reforms in 2004; and South Africa just announced the introduction of a new national minimum wage in 2018 to complement the existing ‘sectoral determinations’ adopted after the end of apartheid. There are even more examples of countries which have strengthened their minimum wage systems, including Cambodia, Cape Verde, Costa Rica, Malaysia and Myanmar. Most recently, Qatar has announced the introduction of a minimum wage.

What explains this sudden phenomenon? Two factors can be highlighted. First, the growing evidence from academia and national minimum wage institutions shows that minimum wages have not generally resulted in the type of massive job destruction feared by some of its most outspoken critics. As expressed by Belman and Wolfson (2014), “support for the minimum wage is premised on its improving the lives of those most vulnerable in the labour market. If the minimum wage leads to job losses for many of the same people, serious questions arise with respect to its relative benefits and costs”. The evidence of massive job losses has not materialised. Although the range of estimates varies widely across the literature, a large proportion of recent studies and meta-studies (quantitative studies of studies) find employment effects that are too small to be observable in aggregate employment or unemployment statistics, except where the minimum wage is set at very high levels (see for example Belman and Wolfson 2014; Doucouliagos and Stanley 2009; or Broecke Forti and Vandeweyer 2017). It is true that methodologies are hotly debated, and some healthy level of controversy remains in the literature. However, many policymakers and their advisers now view the minimum wage as a useful tool for achieving social justice if it is carefully managed.

A second element in the revival of the minimum wage is the failure of past reforms in many countries to deliver inclusive growth. Instead, wage and income inequality have either increased or remained very high in most developed and developing countries around the world. In South Africa, an extreme example, the lowest paid 50 per cent of wage earners still obtain only about 12 per cent of the total wage bill, while the top 10 per cent receive close to half of the economy’s total wages (ILO 2016).² It is now widely recognised that excessive inequality is not only bad for social cohesion but also for economic growth. In this context, governments have looked for policies to raise the wages and incomes

of the bottom half of the population, and Sustainable Development Goal (SDG) 10 has called for “fiscal, wage and social protection policies” to progressively reduce inequality. ILO Member States are calling for wage policies that deliver a “just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection” (ILO 2008).

In most countries, the policy debate has thus moved on from the question of whether a statutory minimum wage is desirable, to the question of how a minimum wage system should best be designed and operated, taking into account national preferences and circumstances. Exceptions include the Scandinavian countries, where there remains broad agreement that wage floors are best set through collective bargaining between workers and employers. This is arguably a better solution, which takes into account the different capacities of employers to pay wages in different industries. Unfortunately, in most countries—particularly developing ones—the coverage of collective agreements is largely insufficient to provide wage floors to a broad majority of workers. Their governments are, therefore, operating statutory minimum wages in addition to those set through collective agreements. The next section discusses some key issues of policy design.³

Policy design issues

- **Who should set the minimum wage?** Good practice indicates that governments should set minimum wages after a genuine process of consultation and social dialogue with representatives of workers and employers, listening to their arguments and, as much as possible, taking stock of their concerns. This can be accomplished under the framework of a national minimum wage commission or of an existing tripartite social dialogue commission, as in many countries. When both employers and workers are included in the negotiation process, it is likely to lead to more balanced outcomes and, ultimately,

higher levels of compliance. Of course, negotiations and consultations can be difficult, as views are sometimes far apart, but including the voices of experts or others who can represent the general interests of the country can help find an adequate middle ground.

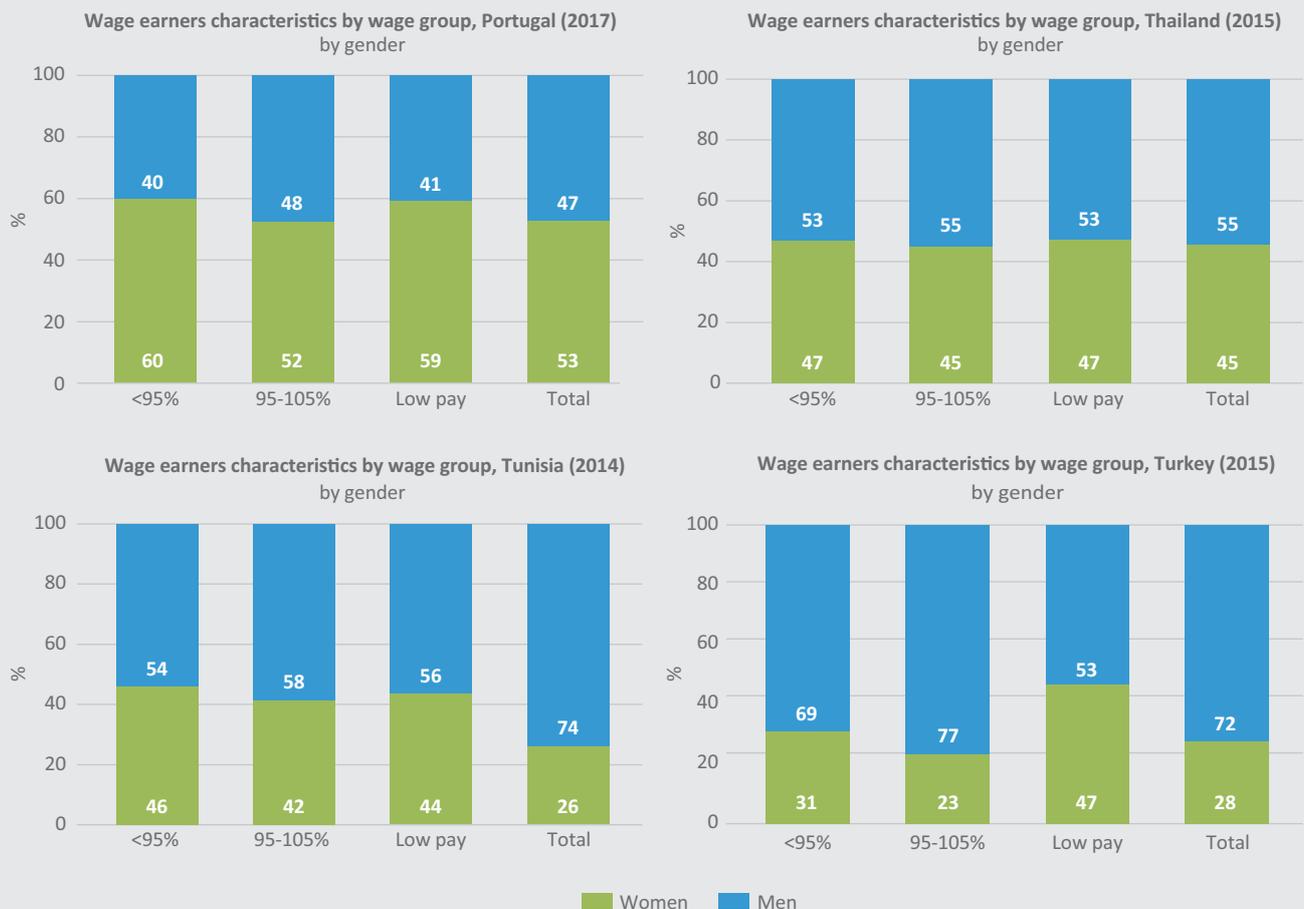
- **Who should have a right to the minimum wage?** For minimum wage laws to protect the most vulnerable workers, they should not inadvertently exclude groups such as domestic workers, casual workers, piece rate workers or home-based workers. While enforcement will always remain a challenge for these groups, as well as for wage workers in the informal

economy more generally, in too many countries these low-paid groups remain unprotected by minimum wage laws. Interesting developments in this regard include the growing number of states in India which have recently extended minimum wage coverage to domestic workers, or the decision of the Constitutional Court of the Former Yugoslav Republic of Macedonia to rule as unconstitutional the exclusion of piece rate workers. In Uruguay, the minimum wage was introduced in 1969, but excluding domestic workers, who were incorporated in 1991. In Chile, the minimum wage for domestic workers was 75 per cent of the general rate until 2011, when it was

progressively brought up to the same level. Public-sector pay scales should also be consistent with minimum wages. Where this is not the case, there is an understandable feeling that the State is imposing a costly measure on the private sector that it is not willing to impose on itself.

- **How many rates should there be?** Some countries have a single national rate or some differentiated but unique regional rates. This is usually the case in large and/or decentralised countries. Brazil, for example, has a federal rate and some higher rates in a few richer states. Other countries have multiple rates which can vary by industry, occupation

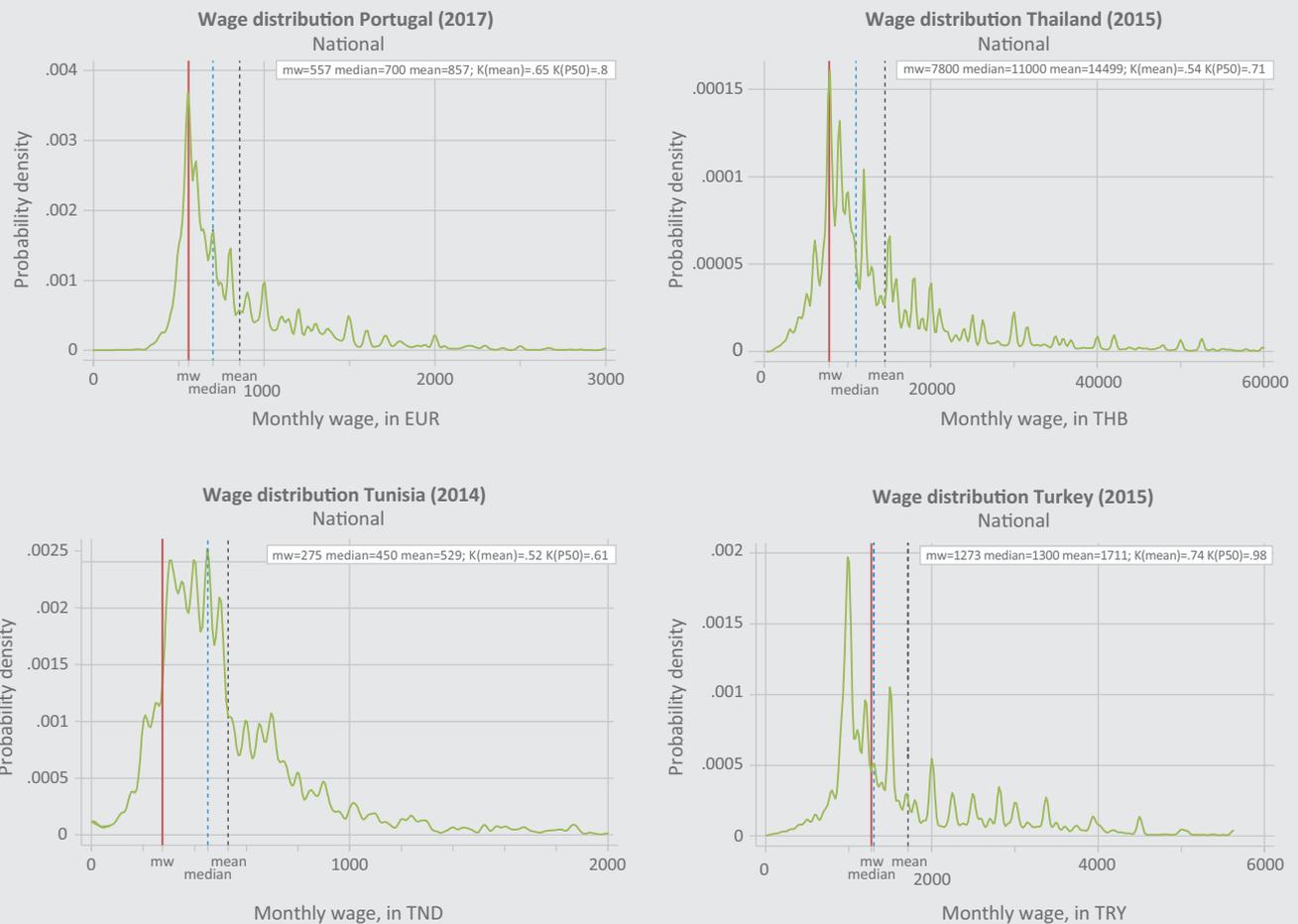
FIGURE 1: Over-representation of women among minimum wage and sub-minimum wage earners



Note: '<95%' represents workers earning less than 95 per cent of the minimum wage; '95-105%' represents workers earning between 95 per cent and 105 per cent of the minimum wage; 'low pay' is defined as workers earning less than two thirds of median earnings.

Source: ILO calculation. Labour Force Survey (2017) from the National Statistical Office of Portugal; Labour Force Survey (2015) from the National Statistical Office of Thailand; Labour Market Panel Survey (2014) from the Economic Research Forum and Institute of National Statistics of Tunisia; Labour Force Survey (2015) from the Turkish Statistical Institute.

FIGURE 2: Wage distribution: Portugal, Thailand, Tunisia and Turkey



Note: The 'K-density' graph shows the kernel-based empirical distribution of monthly wages of all wage employees. The last two ratios in the upper right bar are the Kaizt index. $K(\text{mean})$ is the ratio of the nominal legal minimum wage to the average wage; $K(P50)$ is the ratio of the nominal legal minimum wage to the median wage.

Source: ILO calculation. Labour Force Survey (2017) from National Statistical Office of Portugal; Labour Force Survey (2015) from the National Statistical Office of Thailand; Labour Market Panel Survey (2014) from the Economic Research Forum and Institute of National Statistics of Tunisia; Labour Force Survey (2015) from the Turkish Statistical Institute.

or both. This is more frequently the case in countries with weak systems of collective bargaining and where the minimum wage attempts to mimic or substitute for the outcomes of industry-level collective bargaining. While there are many good reasons to have multiple rates, it should be noted that too many rates tend to result in confusion about applicability and in poor compliance. Both Mexico and Costa Rica, for example, have tried to reduce the number of their rates. Mexico managed to progressively eliminate different regional rates, while Costa Rica reduced its number of occupational rates. Finally, lower rates for trainees or

workers during a probationary period are preferable to lower rates for young people, which are more difficult to reconcile with the principle of non-discrimination. Similarly, one should be attentive to prejudice leading to lower rates in women-dominated sectors or occupations. Figure 1 shows that women are often over-represented among low-paid workers.

- **At what level should the minimum wage be set, and how often should it be adjusted?** There is obviously no standard formula to determine the optimal level of a minimum wage, not least because wage distributions and

economic and social circumstances vary from country to country. Also, as previously stated, some countries have multiple rates to determine. Even so, three general principles can be followed. The first is to follow a balanced approach, considering the needs of workers and their families as well as economic factors. The second is to follow an evidence-based approach, relying on agreed criteria, adequate statistics and a system of monitoring and evaluation of the effects. The third is to establish a mechanism of regular adjustments, preferably every year or two, to ensure some predictability of the system. If there is a gap between

the minimum wage and the needs of workers and their families, medium-term strategies can be adopted, with successive adjustments to progressively eliminate the gap—a process which will of course be easier under sustained economic growth.

A useful starting point for evidence-based social dialogue is an analysis of the distribution of wages, as illustrated in Figure 2 (see page 9) with data for four countries: Portugal, Thailand, Tunisia and Turkey. From these simple charts we can compute the ratio of the minimum wage to the median wage (ranging from 0.61 in Tunisia to 0.98 in Turkey), as well as the percentage of workers paid less than the minimum wage, paid around the minimum wage or paid up to 25 per cent above the minimum wage (which includes workers whose wages might increase as a result of spill-over effects when the minimum is raised). Comparing minimum wages to the more widely available figure of mean (rather than median) wages, Figure 3 shows that there remains an enormous diversity across countries and some room for more balanced wage levels in many.

- **How to maximise compliance?**
High rates of non-compliance, where they exist, have negative consequences not only for workers and their families, whose rights are violated, but also for compliant employers, as it gives non-compliant enterprises an illegitimate cost advantage. Within countries, there are usually significant differences

in rates of non-compliance across different groups of the population. Non-compliance is often more widespread in rural than in urban areas, and in the informal than in the formal economy. Women are also frequently more likely to be underpaid than men, as are disadvantaged ethnic or social groups. To design, put in place and pursue sound strategies and measures for compliance and enforcement, it is important to analyse the extent and patterns of non-compliance and run information and awareness-raising campaigns, empower workers to claim their rights, undertake targeted labour inspections and inflict sanctions that function as a deterrent to non-compliance.

Conclusion

It is often claimed that minimum wages target poor people badly. This is indeed true, as many poor households have no members working as a paid employee, and some minimum wage workers are from non-poor households. It is thus no surprise that although many studies identify poverty-alleviating effects with minimum wages, some find that this effect is either very small or even non-existent.

However, even in such circumstances, the minimum wage usually plays an important role in supporting the incomes of those in the lower part of the income distribution—even when they do not lift households above an arbitrary poverty line. As pointed out by Belman and Wolfson (2014),

“ Statutory wage floors have made a return to the forefront of social policy debate.



Photo: Simone D. McCourtie/World Bank. Woman working in a factory, Turkey, 2009 <<https://goo.gl/s82M8M>>.



Photo: ILO/Phaywin. Porcelain factory, Thailand, 2012 <<https://goo.gl/NRUHBx>>.

“ The minimum wage usually plays an important role in supporting the incomes of those in the lower part of the income distribution.

what truly matters is whether minimum wages improve the lives of low-income households and whether they are better off as a result. The literature shows that this is usually the case, but the extent to which a minimum wage succeeds in achieving these objectives and in reducing inequality depends first and foremost on whether it is well designed and operated. ●

Belman, Dale, and Paul J. Wolfson. 2014. “The New Minimum Wage Research.” *Employment Research* 21(2): 4–5.

Broecke, Stijn, Alessia Forti and Marieke Vandeweyer. 2017. “The effect of minimum wages on employment in emerging economies: a survey and meta-analysis.” *Oxford Development Studies*, 45:3, 366-391, DOI: <[10.1080/13600818.2017.1279134](https://doi.org/10.1080/13600818.2017.1279134)>. Accessed 8 August 2018.

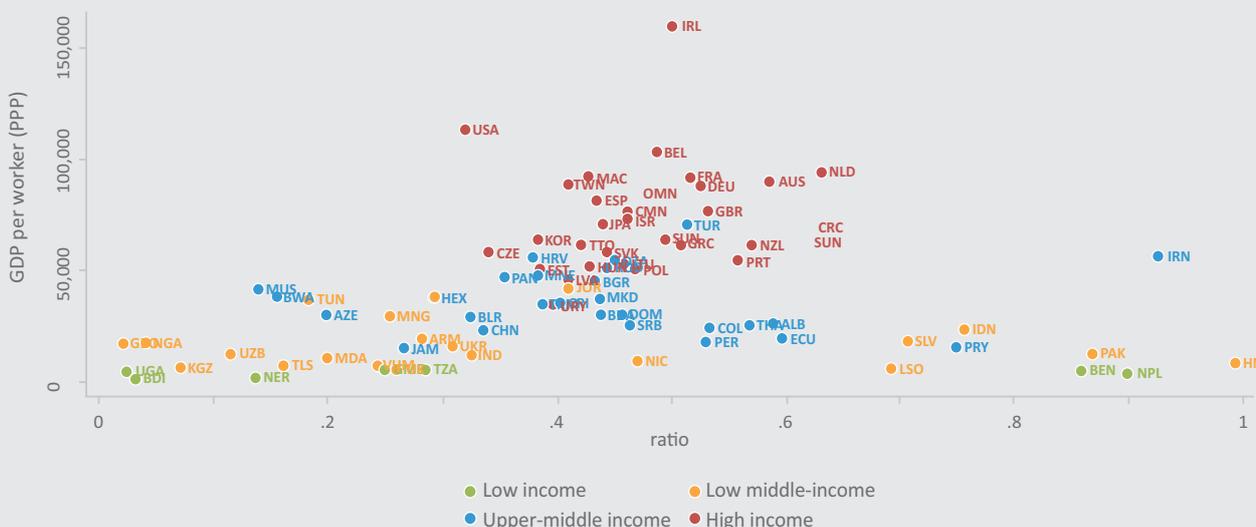
Doucouliaqos, Hristos, and Tom D. Stanley. 2009. “Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis.” *British Journal of Industrial Relations*, vol. 47(2), 406-428. London: London School of Economics.

ILO. 2008. *Declaration on Social Justice for a Fair Globalization*. Geneva: International Labour Organization. <<http://bit.ly/2AVTo1l>>. Accessed 8 August 2018.

ILO. 2016. *Global Wage Report 2016/17: Wage inequality in the workplace*. Geneva: International Labour Organization, Table 2, 42. <<https://bit.ly/2M8TdEr>>. Accessed 8 August 2018.

1. International Labour Organization (ILO).
2. Data refer to 2013.
3. A more extensive discussion of these policy design options can be found in the ILO minimum wage policy guide, available online at <<https://goo.gl/fxwEgH>>.

FIGURE 3: Ratio of the minimum wage to mean wages and productivity



Source: ILO calculation. ILO Global Wage Database; ILO Global Employment Trends (GET).

The effects of minimum wage policy on wage inequality—evidence from Latin America

Sergei Soares¹ and Joana Silva²

The minimum wage and its effects on employment and wage inequality are among the most-studied subjects in labour economics. Overall, results are mixed concerning both the magnitude and the direction of such effects, but one conclusion that can be drawn is that the level of the minimum wage matters. For example, the effects of minimum wages may be larger in Latin America than in the USA because the minimum wage itself in the former is often higher relative to the median wage and is increasing rapidly.³ Conversely, the effects are potentially smaller in Latin America than in Europe, where the minimum wage is also high but the enforcement of legislation is much stricter. Similarly, macroeconomic conditions may also be important. A rising minimum wage in a rapidly growing economy may help distribute the fruits of growth more evenly across workers by lifting the earnings of unskilled workers without sizeable employment losses. On the other hand, a rising minimum wage in a context of low growth may backfire, because employment losses among unskilled workers may outweigh wage gains.

Minimum wage levels vary considerably by country. In a few countries, such as Mexico, the minimum wage is simply too low to be effective. In others, such as Colombia and Paraguay, it is so high that enforcement is impossible. In a few, such as Brazil or Chile, the minimum wage is relatively high and relatively binding. It is in these countries that its analysis is particularly relevant. In countries where the minimum wage bite is high, there is a larger risk that further minimum wage increases will either adversely affect employment rates or push vulnerable workers (such as unskilled workers, young people and women) either into informal-sector jobs or out of the labour force entirely. On the other hand, places where the bite is high are exactly those where the minimum wage could have important distributional effects.

Compliance with minimum wage laws is as varied as the rate at which the minimum

wage has increased. In particular, the existence of an informal sector makes all minimum wage analysis quite complex and dependent on the cross-wage elasticity showing how informal-sector employment reacts to formal-sector wages. This means

that the interplay between the formal and informal sectors as well as imperfect enforcement make the analysis of the effects of the minimum wage on wage inequality more complex in Latin America than in developed countries.⁵

BOX 1: Minimum wage institutions

The Constitution

The constitutions of almost all Latin American countries mention the minimum wage. The only exceptions are the minimalist Jamaican Constitution and those of Chile, Ecuador and Haiti, which mention a ‘fair wage’ but not a minimum wage set by the State. Looking at constitutions, labour laws and minimum wage laws across the region, a typical rationale for a wage floor is along the lines of ‘to allow the worker and his family to live a materially, morally and culturally dignified life’.

Setting the minimum wage

Within Latin America, ‘national’ minimum wages coexist with State-sanctioned wage bargaining through three different models:

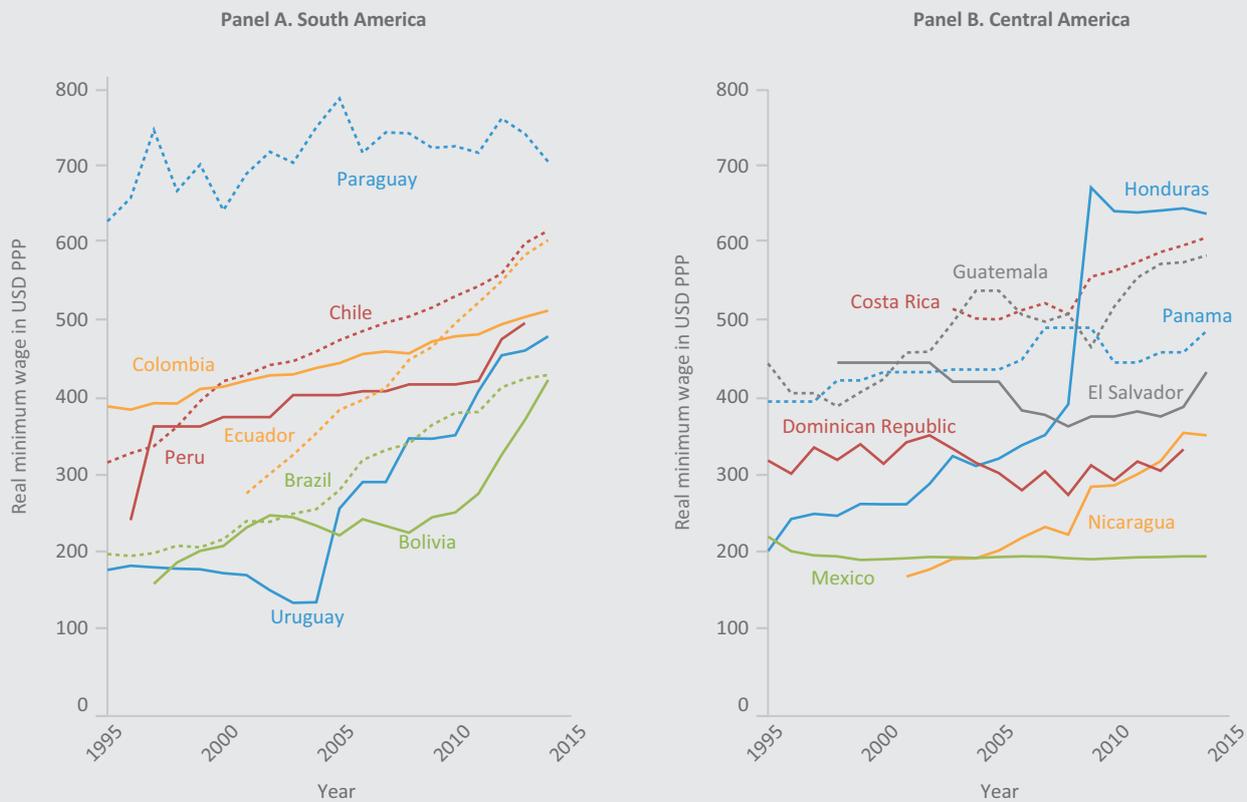
- Some countries, such as Brazil and Chile, have a single national minimum wage, and employers and employees negotiate wages, either individually or through their respective organisations, with little state involvement. In the past, the State was involved in collective bargaining—and some countries, such as Peru, still have such provisions on the books—but today wages by sector are negotiated between employers and their employees. In Brazil, some states have legislated state wage floors that are higher than the national minimum wage.
- Argentina, Ecuador, and Uruguay follow a second model that includes both a national minimum wage and strong state involvement in collective bargaining through wage councils. The wage floor, however, is kept separate from State-supervised or State-sanctioned collective bargaining.
- In most of Central America the two issues come together, making for a plethora of minimum wages within each country. For example, Panama’s latest law (2016) has 109 categories and about 20 different minimum wages; Costa Rica has 13 different sectoral minimum wages; Honduras has about 42; and El Salvador has 2 agricultural and 3 non-agricultural minimum wages. The Dominican Republic has wages not by sector (except for agriculture and security guards) but by company size. Nonetheless, there is a trend towards convergence. Panama, for example, still sets wages for over 100 sectors, but successive laws have assigned the same minimum wage to different sectors. In El Salvador and Guatemala, only a few sectors currently have special minimum wages, mostly pertaining to agriculture and manufacturing.

Despite the many within-country variations, including some that persist in South America, the overall trend is clear—towards a single, unified minimum wage for all. However, this unifying trend is evolving faster in some dimensions and country aggregates than in others.

The usual mechanism for setting the wage floor is through a tripartite wage council (comprising workers, employees and government) that suggests the new minimum to the labour ministry, which then makes the final decision.

Two notable exceptions to all of the above are Argentina and Brazil, which are polar opposites in this regard. In Argentina, the National Council of Employment, Productivity and the Minimum Wage is a bipartite commission of employers and employees with legal power to set the wage floor. The executive does not get involved, except to convene the council.⁴ In contrast, Brazil has no such commission whatsoever, and the wage floor is currently set by a law approved by Congress.

FIGURE 1: Real minimum wages, 1995–2015



Note: All minimum wages are expressed in US dollars PPP. Because none of the Central American countries have a unified minimum wage, the lowest urban minimum in each country is selected as the representative minimum wage.

Source: Official country data for minimum wages.

The wage floor over the last two decades

In much of Latin America, minimum wages have doubled or tripled over the last decade or two. In Bolivia, Brazil, Chile, Ecuador and Uruguay, the minimum wage has at least doubled over little more than a decade. In Colombia, the rate of increase has been much more modest, and in Paraguay it has not increased in real terms since about 2003. Panel A of Figure 1 shows that although workers in countries that already had high minimum wages in 1995 have seen modest increases at best, the workers in economies where the floors were low have seen high minimum wage increases.

In Mexico and Central America, the pattern is less clear. Costa Rica, El Salvador, Guatemala and Panama had minimum wages that were on the higher side in terms of purchasing power parity (PPP) US dollars. Honduras, Nicaragua and, particularly, Mexico had minimum wages on the

lower side (the vast majority of workers in Mexico have a wage significantly above the minimum wage). Workers in Guatemala, Nicaragua, Panama and, particularly, Honduras have seen the legal minimum wage increase rapidly. Workers in Mexico, however, have seen little change in the legal minimum wage, and workers in the Dominican Republic and El Salvador have seen the legal minimum rise and then fall such that its value in real terms has changed little since 1995 (Figure 1, Panel B).

Looking at the minimum wage as a percentage of the median wage, we can divide Latin America into two groups of countries: one in which this indicator has clearly increased and one where this indicator has trended downwards since 2002–2003. In Bolivia, Paraguay and Peru, the minimum wage has merely kept up with median wage growth, and in Colombia it has been falling since 2001, as shown in Figure 2,

Panel A (see page 14). In contrast, Panel B shows that in Argentina, Brazil, Chile, Ecuador and Uruguay the wage floor has risen considerably faster than median wages.

Notice that, at the end of the commodity boom, the ratio of the minimum wage to the median wage has shown some convergence towards values between 0.6 and 0.8, with considerably less variation than in 1995. These values are higher than in most high-income countries, where the wage floor fluctuates between 0.37 and 0.6 of the median wage. Around the world, countries outside Latin America cluster around 0.4.

What does the literature say?

As we stressed in the introduction, there has been much study of the distributive effects of the wage floor. Many of these studies were conducted on the minimum wage and its effects before most Latin American minimum wages began their

ascent at the end of the past century and the first decade of this one.

The literature on Brazil analysing the period before high minimum wage growth, summarised in Ulyssea and Foguel (2006), shows that increases in the minimum wage led to modest reductions in employment and reduced the wage dispersion among those who remained employed. However, Ferreira, Firpo, and Messina (2017) and Silva, Almeida, and Strokova (2015) found that in a context of low growth and stagnation of average income between 1995 and 2002, the rising minimum wage was associated with higher levels of non-compliance with the law, resulting in increasing inequality.

Bravo and Contreras (1998) and Saavedra and Torero (2000) found small negative employment effects and reductions in inequality for Chile and Peru, respectively.

In Mexico and Uruguay, the minimum wage was so low (relative to the median wage) that it is either virtually non-binding or only relevant in the first decile of the wage distribution. The discussion mirrors that in the USA: the minimum wage has had small effects on inequality or poverty because of its low level and variations.

At the other extreme, Arango and Pachón (2004) and Hernández and Pinzon (2006) found that in Colombia the minimum wage was so high that increasing it would have no positive effects on either inequality or poverty.

Finally, the literature on the Central American countries—with their multiple minimum wages by industry, region, category and even educational attainment—had a different analytical approach. Gindling and Terrell (2004; 2006) report that in Costa Rica and Honduras, high minimum wages for unskilled workers combined with not-so-

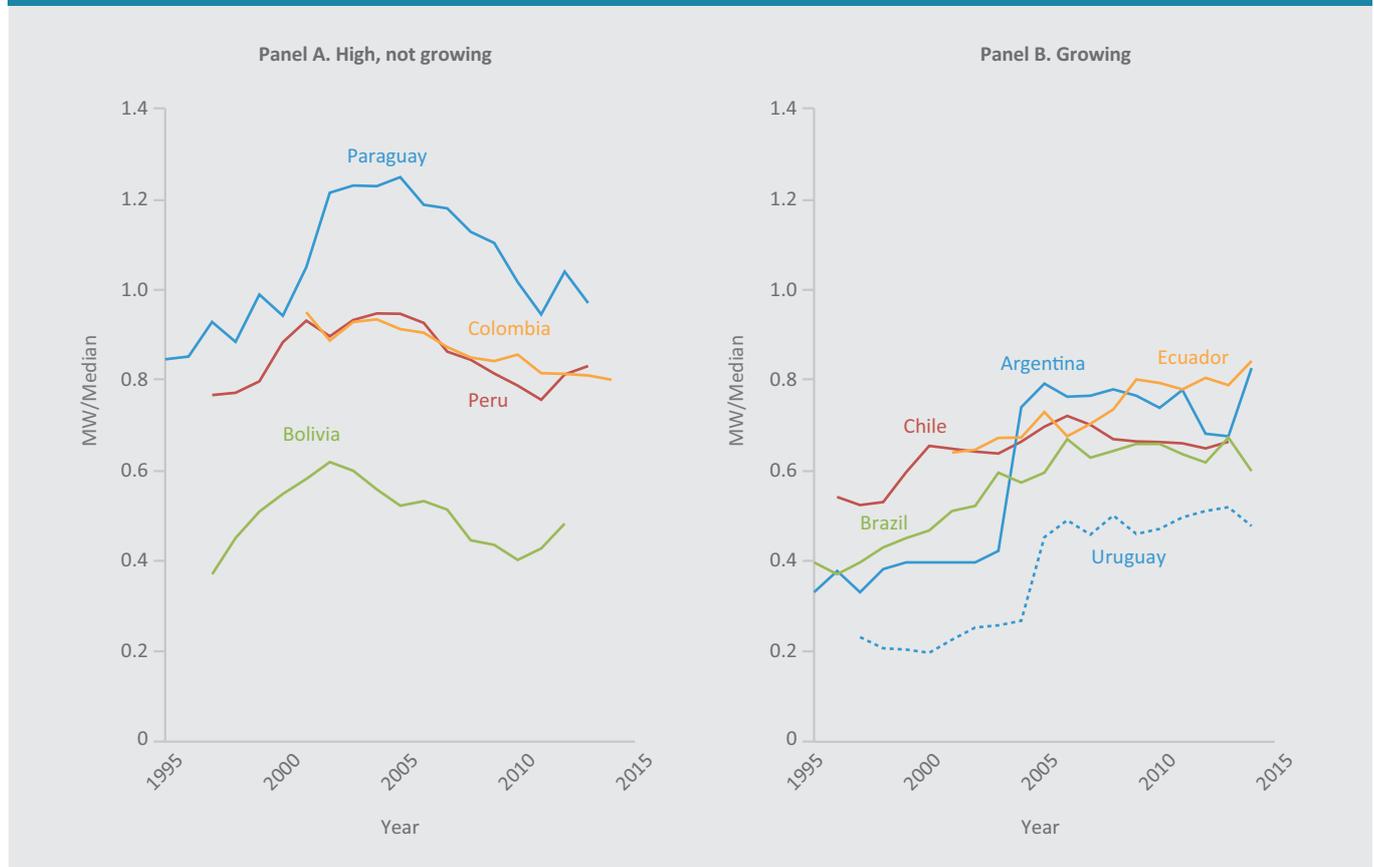
high minimum wages for skilled workers may have reduced wage inequality.

In addition, the literature has shown that in much of Latin America, before the large increases of the 21st century, the minimum wage was too low to be binding in the formal sector, and much of its bite occurred among informal workers.⁶ The minimum wage also appeared to create numeraire effects that echo higher up the wage distribution.⁷

In sum, the literature on the period before high minimum wage growth largely concluded that, despite its effects on increasing unemployment, it has had equalising effects. However, much of the wage distribution is unaffected either because they are far above the wage floor or because of non-compliance.

Relatively few studies have been undertaken concerning the minimum wage during the boom years.

FIGURE 2: Minimum wages as a percentage of median wages, 1995–2015



Source: Calculations based on official country data for minimum wages in Latin America. Median wages from Socio-Economic Database for Latin America and the Caribbean (SEDLAC), Universidad Nacional de la Plata (CEDLAS) and the World Bank <<http://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/>>.



Photo: Josue Isai R. Figueroa/Unsplash. Construction workers, Alajuela, Costa Rica.

“ In Costa Rica and Honduras, high minimum wages for unskilled workers combined with not-so-high minimum wages for skilled workers may have reduced wage inequality.

Maurizio (2014) found that in Argentina the increase in the minimum wage transformed it into a relevant institution not only in the formal sector but also, increasingly, in the informal sector.

Likewise, in Chile, the minimum wage continues to increase the wages of affected workers, with small unemployment effects, leading unambiguously to an increase in wage equality, as shown by Grau and Landerretche (2011).

On the other hand, Alves et al. (2012) reported that in Uruguay the large minimum wage increase in the 2000s had insignificant unemployment effects and reduced wage inequality only slightly between 2004 and 2006.

In Brazil, as shown by Ferreira, Firpo, and Messina (2017) and Corseuil, Foguel, and Hecksher (2015), a rapid raise in the minimum wage during the boom period had equalising effects. This happened because employers could increase the wages of workers earning near the wage floor, implying an improvement in the compliance rate of employers and increasing wages for workers near the low end of the distribution.

In sum, the effects of the minimum wage on wage inequality depend on its level and whether it is binding—aspects that will be discussed further below.

The general conclusion is that an increasing minimum wage, despite pervasive incomplete compliance and

ever-present but small employment losses, still has a wage-equalising effect. Measured unemployment effects are, for the most part, modest (Bell 1997; Lemos 2004), but effects on informality may be important (Lotti, Messina, and Nunziata 2016).

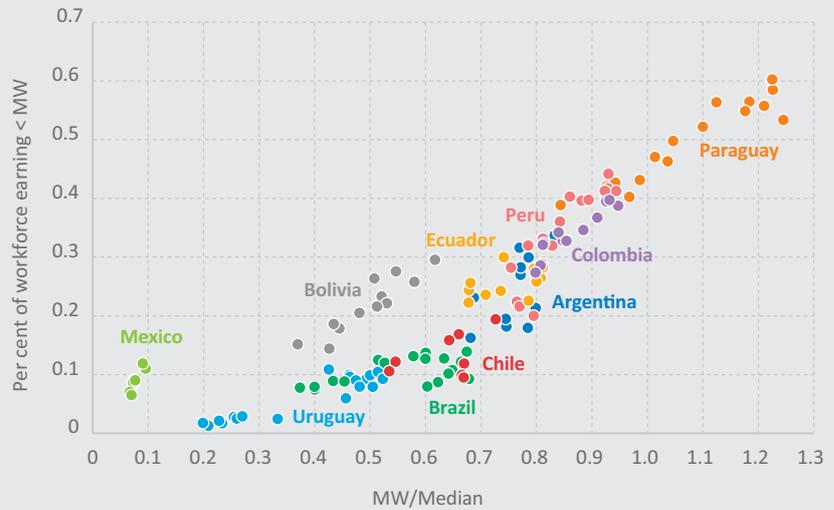
Extent and evolution of minimum wage compliance

To analyse compliance, we plot the percentage of workers who earn less than one minimum wage against the ratio of the minimum wage to the median wage.⁸ We look only at countries which have a single wage floor. Figure 2 shows that Paraguay and, to a lesser extent, Colombia and Peru have minimum wages that are quite high. Needless to say, Figure 3 (see page 16) shows that compliance is low in all three countries, and 40 per cent or more of the population earn less than the minimum wage.

The graph shows a negative correlation between the minimum wage (as compared to the median) and compliance. Except for Bolivia and Mexico, all other countries fall on the same curve. This curve shows two regions in which the minimum wage compliance trade-off is almost linear. From zero to 70 per cent of median wages, a 10 per cent increase in the minimum-to-median ratio increases non-compliance by about 0.7 percentage points. From 70 per cent onwards, the same relative increase would reduce compliance by 1.5 percentage points. This relationship is confirmed in regression analysis controlling for growth in gross domestic product (GDP) and country fixed effects.

“ Wage floors cannot be increased too far without a heavy price to pay in terms of non-compliance.

FIGURE 3: Ratio of minimum to median wages and non-compliance with the minimum wage, 1995–2014



Note: Mean wages are for full-time employers, employees and self-employed workers aged 15–65. 0 and 99th percentile income are not included. Each dot represents a country in a given year, colour-coded to approximate the colours of each country’s national flag. ‘Less than one minimum wage’ is defined as less than 0.95 of the minimum wage, to allow for some reporting error.

Source: Calculations based on official country data for minimum wages in Latin America; median wages from Socio-Economic Database for Latin America and the Caribbean (SEDLAC), Universidad Nacional de la Plata (CEDLAS) and the World Bank <<http://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/>>.

Any analysis of the advantages and drawbacks of increasing the wage floor in Latin America must take into consideration the negative relationship between the level of the minimum wage and compliance. To determine whether increasing the minimum wage is a desirable policy, the literature concerning Organisation of Economic Co-operation and Development (OECD) countries pits the unemployment effects against the compression of the earnings distribution of those who remain employed. However, in the developing world—and Latin America is no exception—this is a flawed approach because of imperfect compliance. When analysing the impact of raising wage floors in Latin America, one must analyse those whose incomes increase with the minimum wage, those who become unemployed and those (many) who simply see the minimum wage pass them by with few effects on their earnings.

Therefore, wage floors cannot be increased too far without a heavy price to pay in terms of non-compliance. But can any more be said about the circumstances in which it is possible to minimise the negative affects? Does increasing the minimum wage make

more sense during economic booms such as the recent commodity boom?

This can be investigated through cross-country regressions, the results of which are shown in Table 1. The percentage of the labour force earning less than one minimum wage is the dependent variable, and the minimum-to-median ratio as well as GDP and GDP growth are the explanatory variables. For each of the five model specifications, the effect of the minimum-to-median ratio on non-compliance is almost constant: an increase of 10 per cent in this ratio leads to an increase of about 3 to 4 percentage points in non-compliance. This is much higher than the implicit estimates from Figure 3, which were around 0.7 for minimum-to-median ratios of less than 70 per cent and about 1.5 for minimum-to-median ratios above 70 per cent.

The graph and the regression results show, of course, different things. The graph results do not control for anything other than the minimum-to-median ratio, while the regressions control for GDP growth as well as country effects. The advantage of this is that the regression results clearly show

that GDP growth allows for lower effects of non-compliance from similar increases in the minimum wage. An increase of 1 percentage point in GDP growth decreases non-compliance by 0.24 percentage points for South America. The implication is that if GDP is growing at 5 per cent annually, for example, the ratio of the minimum wage to the median could increase by up to 3 per cent with no adverse effects on the percentage of individuals earning less than the minimum wage. Given that the economy was growing during most of the period shown in Figure 3, this suggests that the two approaches may show the same thing.

Table 1 also shows coefficients for Central America. In this case, perhaps because of the fundamentally different nature of minimum wages in Central America, neither GDP level nor GDP growth seem to affect non-compliance with the minimum wage.

If a conclusion can be reached, it is that a minimum-to-median ratio of about 70 per cent is the limit after which minimum wage increases begin to incur heavy costs in terms of compliance. This limit is somewhat elastic and may be pushed upwards by high GDP growth, but wage floors cannot be increased indefinitely in countries with large informal labour markets. ●

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TABLE 1: Regression results

Dependent variable: Percentage of labour force with earnings < 1 minimum wage					
Variables	(1)	(2)	(3)	(4)	(5)
South America					
Minimum–median	0.37	0.32	0.35	0.36	0.34
Log GDP per capita	-0.03				-0.03
GDP per capita growth		-0.24			-0.20
Country dummies	Yes	Yes	Yes	No	Yes
N	128	121	128	128	121
R ²	96%	96%	96%	96%	96%
Central America					
Minimum–median	0.38	0.41	0.41	0.27	0.37
Log GDP per capita	0.04				0.05
GDP per capita growth		-0.02			-0.08
Country dummies	Yes	Yes	Yes	No	Yes
N	114	112	114	114	112
R ²	77%	77%	77%	67%	71%

Note: Coefficients in **green** are significant at 1 per cent, in **roman** at 15 per cent, and in **red** not significant.

Source: Calculations using Labor Database for Latin America and the Caribbean (LABLAC) <<http://lablac.econo.unlp.edu.ar/eng/index.php>>.

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1. Institute for Applied Economics Research (*Instituto de Pesquisa Econômica Aplicada*—Ipea).
2. World Bank.
3. After falling by almost 40 per cent in real terms between 1968 and 1990, the federal minimum wage in the USA remained more or less constant up to 2007. Despite eventual increases to keep up with inflation, it was broadly constant and quite low compared to the median wage.
4. It should be noted that in recent years the minimum wage has often been increased by decree without convening the Council.
5. For a discussion of the role of informality on wage inequality in Latin America, see Messina and Silva (2018).
6. Maloney and Nuñez-Mendez (2004); Neri, Gonzaga, and Camargo (2000).
7. Throughout the region, it is common to use the minimum wage as a more general unit of account or numeraire—for instance, in quoting wages or monetary contracts in general. The numeraire effect refers to the bunching of wages at round multiples of the minimum wage, because the statutory minimum wage is often used as the numeraire—or base measure of value—for wage negotiations. See also Messina and Sanz-de-Galdeano (2014).
8. 'Less than one minimum wage' is defined as less than 0.95 of the minimum wage, to allow for some reporting error.

“ Wage floors cannot be increased indefinitely in societies plagued by informal labour markets.

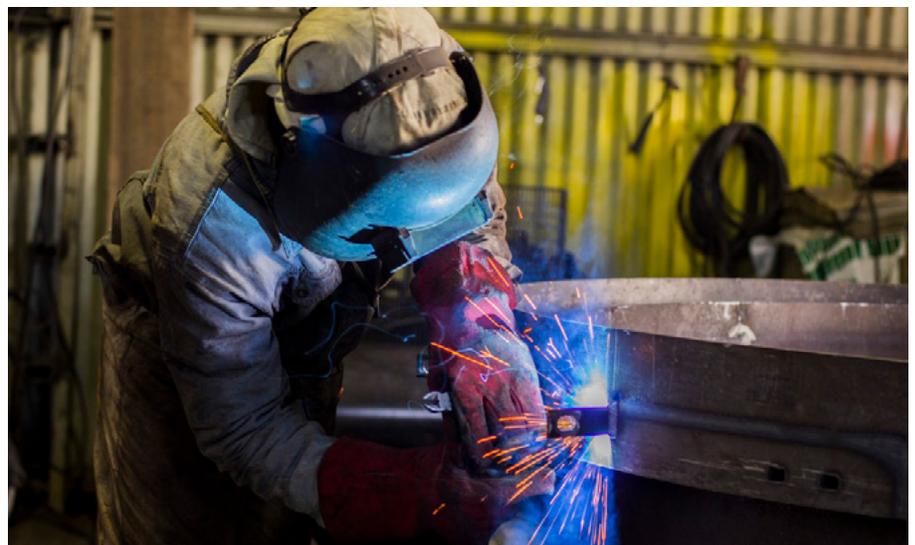


Photo: Eduardo Cabrera/Unsplash. Welder working, La Pintana, Chile.

Can the minimum wage reconcile opposing interests? Pending challenges and proposals for improvement

Andrés Marinakis¹

At the turn of the 20th century, very few countries could boast a minimum wage. In those that could, it was generally rather limited in scope. Aiming to forestall exploitation, the UK established wage councils for certain jobs. Australia and New Zealand instituted minimum wages in several industries and regions. In the USA six states had laws mandating a minimum wage, and in Canada four provinces had a minimum wage. France and Norway set minimum wages for the textile industry.

The 1919 Treaty of Versailles, which created the International Labour Organization (ILO), laid out, among its general principles, payment to the employed of a wage adequate to maintain a reasonable standard of living and the notion that men and women should receive equal remuneration for work of equal value.² Later, the Preamble to the ILO Constitution referred to “the provision of an adequate living wage” (ILO 1919).

The first international convention on the matter was adopted in 1928 (No. 26, Minimum Wage-Fixing Machinery Convention). Convention No. 131 (Concerning Minimum Wage-Fixing, with Special Reference to Developing Countries) was adopted in 1970, becoming an international touchstone. Its third article outlined the following elements to consider in determining the level of minimum wages:

- the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups; and
- economic factors, including the requirements of economic development, productivity

levels, and the desirability of attaining and maintaining a high level of employment.

These aspects distil the essential challenge involved in setting minimum wages: how to reconcile the needs of workers with the economic viability of companies and a smoothly operating labour market.

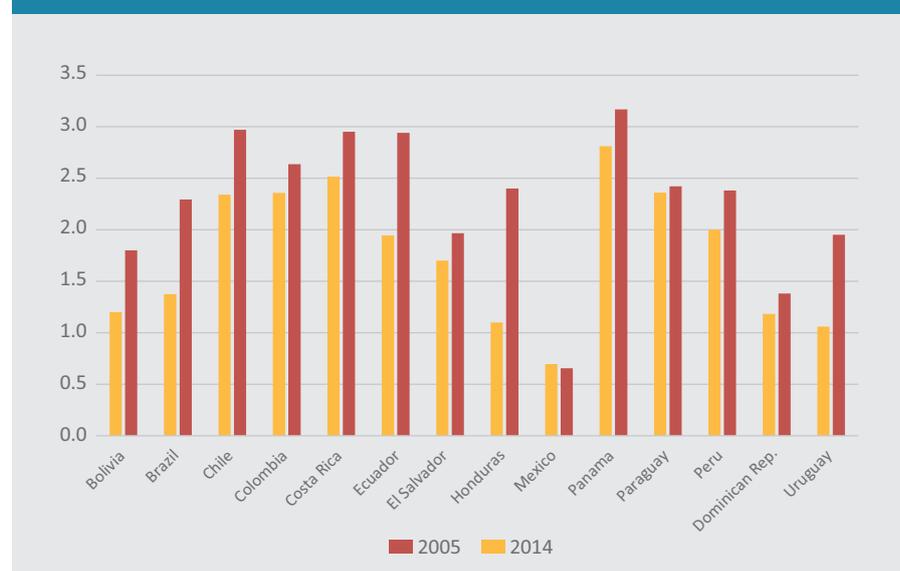
At present, more than 90 per cent of the world’s countries have minimum wage laws, so these policies are widely implemented (ILO 2006). Minimum wages were recently introduced in Malaysia (2013), Cape Verde (2014), Germany (2015) and South Africa (2018). All countries in Latin America have minimum wage systems that have been in place for decades now. In light of this recent statistical information, this article analyses the extent to which countries in the region have managed to reconcile opposing interests, and it provides a series of proposals to better enforce this instrument of social protection.

Is the minimum wage enough? Is it enforced?

To answer these questions, the situation of urban wage workers employed at private companies from 2005 to 2015 will be analysed, based on data from national household surveys.³ This period was part of a cycle of sustained economic growth (although it slowed down in the later years) and real minimum wage increases in the vast majority of countries throughout the region. However, the size of these increases varied considerably according to the baseline wage (extremely low in some countries and very high in others, with respect to market wages), as well as institutional factors and policy objectives in each country.

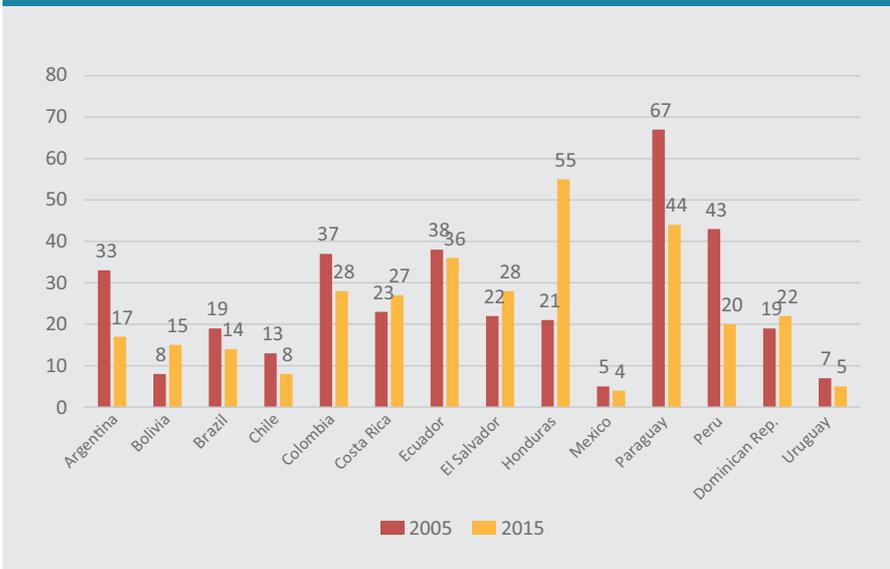
To explore whether the minimum wage is sufficient, the urban per capita poverty line, calculated by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), is used as the single reference criterion for all countries.⁴

FIGURE 1: Minimum wage and per capita poverty lines, 2005 and 2014



Source: ILO (2017a).

FIGURE 2: Minimum wage non-compliance in private enterprises



Source: ILO (2017a).

This line is evidently below that which would result from a basic needs basket. It does, however, serve as a valid benchmark, because, as stated in the Minimum Wage-Fixing Recommendation (No. 135), it ought to be used as a policy instrument to eliminate a country's poverty.

Of the 14 countries analysed, 12 saw the minimum wage rise. The exceptions are Mexico and Paraguay, where it remained largely unchanged (see Figure 1, page 19). Bear in mind that these improvements took place against a backdrop of economic growth.

Because poverty lines are expressed in per capita figures, it is necessary to consider household size. According to estimates from 2011, families in Latin America had an average of 3.8 members per household. It is known that lower-income families tend to have more members, and, given that the minimum wage policy is meant to protect the lowest wage earners, it would seem appropriate to use this segment as a reference. The average family size in the poorest 50 per cent of the population in 2011 was 4.3 people.⁵ In any event, in all countries, one minimum wage would not be enough to lift an average-sized family out of poverty.

Real minimum wage gains between 2005 and 2015 were reflected in better

coverage of workers' needs, expressed through the poverty line. To assert that these gains truly benefited the lowest-earning wage workers, it is important to ensure that there has not been a parallel rise in non-compliance of such magnitude that it would offset any improvement in income for minimum wage earners.

To estimate the level of minimum wage non-compliance, we turn to the household surveys in each country and compare hourly wages in the urban private sector with the hourly minimum wage.⁶ It is worth highlighting that the estimates have a margin of error, which could result from both the information provided on labour income and the reported number of hours worked. Therefore, they should be taken as an indication of the magnitude of the problem. Additionally, as estimates are for the beginning and end of the period analysed, they indicate trends in each country as a result of the minimum wage policy and other policies related to its enforcement.⁷

Figure 2 summarises the minimum wage non-compliance rate in urban private-sector companies across 14 countries throughout the region in 2005 and 2015.⁸ Although wage gains were observed in half the countries, the data show that failure to comply with the minimum wage is a serious problem in the region, as

“ Despite recent progress, minimum wages are generally still too low to meet the needs of workers and their families and exhibit high levels of non-compliance.

half the countries have non-compliance rates exceeding 20 per cent. However, it should be stated that a low level of non-compliance should not always be seen as a sign of efficient enforcement but could also be the result of an excessively low minimum wage. This was the case for Mexico during the entire period.

Nevertheless, it is worth pointing out that several countries managed to progressively increase the minimum wage while simultaneously improving compliance. Such was the case for Uruguay, Brazil and Chile. On the other hand, the impact of the sharp increase in Honduras in 2009⁹ was weakened by escalating non-compliance.

The data presented demonstrate that despite recent progress, minimum wages are generally still too low to meet the needs of workers and their families and exhibit high levels of non-compliance. Therefore, we might conclude that this policy instrument is still far from effectively reconciling the needs of workers with economic and labour market factors. However, several countries have shown that the systematic implementation of progressive increases to the real minimum wage throughout a period of sustained growth,

together with improvements in institutional capacity to enforce it, can render it an effective instrument to reduce poverty.

Key elements in improving minimum wage performance

The first significant obstacle to the greater effectiveness of a minimum wage policy is that, even though it has been tried in many countries for many decades, it is frequently implemented as a short-term policy. This instrument commands disproportionate attention when the time comes to make adjustments, and fades from visibility and interest soon after. Under such a short-term perspective, it is nearly impossible to reconcile opposing interests that are quite distant from each other. The data demonstrate that the current minimum wage is not enough for those who receive it, and, in some cases, there is a high level of non-compliance. Changing this scenario would require a progressive policy over many years, with purchasing power gradually increasing and compliance improving at the same time. The likelihood of sustainably improving the minimum wage becomes greater as more social actors are able to acknowledge this situation and agree on a joint medium- and long-term strategy.

The long-term process must start by determining what would be a basic needs basket for a country at a given point in time, based on consumption habits and the composition of the standard family. If there is a gap relative to the current minimum wage, there must be a proposal to progressively close it, understanding that it will not be a linear process. To that end, it would be especially important to capitalise on sustained growth cycles. It is clear that to be effective, the process of increasing minimum wages must be supported by improved compliance.

The institutional structure underpinning this process would be a three-party space, in which stakeholders actively participate and are given a full voice by their governments, periodically convening and regularly revising minimum wages (most commonly once a year). This commission ought also to have a technical

secretariat able to develop a report before adjustments are made based on previously agreed general criteria, as well as on situational factors, which should be part of every analysis.

The minimum wage system should be as simple as possible and cover all wage workers. Using the minimum wage as an indexing tool for other prices in the economy is not advisable, whether for public-sector benefits (such as minimum pensions or conditional cash transfers), income tax collection (progressively according to wage brackets) or private prices (leases, mortgages). Fear of negative fallout for public finances or inflation as a result of raising the minimum wage could lead to the real minimum wage being merely maintained or even being devalued, as was the case in several countries (such as Uruguay from 1990 to 2004 and Mexico from 1995 to 2005).

A minimum wage strategy should be based on comprehensive knowledge of the rights and responsibilities of each of the parties, which is why it may be crucial to carry out awareness-raising campaigns. These campaigns should be complemented by agile, efficient and deterrent labour inspection, which will necessitate an overhaul of administrative and disciplinary processes.¹⁰ Finally, it is important to keep records of these initiatives to regularly evaluate progress. ●

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1. Senior Expert on Labour Market Policies and Institutions, International Labour Organization (ILO) Santiago. The author would like to thank Patrick Belser and Fabio Bertranou for their feedback.
2. Treaty of Versailles, Article 427: <<https://bit.ly/2OWLcRu>>.
3. Other reports have examined the situation of domestic workers (ILO 2017b) and rural wage earners (ILO 2014b).
4. 2014 poverty lines from the CEPALSTAT database: <<http://interwp.cepal.org/sisgen/ConsultaIntegrada.asp?idIndicador=2190&idioma=i>>.
5. Both averages calculated based on the country data contained in the appendices of Marinakis and Bueno (2014).
6. For further details about the estimation methodology, see ILO (2017).
7. Ashenfelter and Smith (1979) already studied this impact in the USA by the end of the 1970s. Weil (2005) expanded the approach, including not only public oversight but also private monitoring.
8. Estimates include all private-sector urban wage earners. Non-compliance means anyone earning an hourly wage below the legal minimum. This criterion is different from that used by the Organisation for Economic Co-operation and Development (OECD). The OECD estimates the number of wage workers earning the minimum wage or less for a series of countries. However, it does not consider anyone working at companies with 10 or fewer employees, as the European Union income survey does not include them (OECD 2015). For these two reasons, the data are not comparable with the estimates shown here.
9. The minimum wage increased by 117 per cent in real terms during that year.
10. See Marinakis and Bueno (2014).

Multiple minimum wages in Central America

T. H. Gindling¹

Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua have multiple legal minimum wages set by industry, occupation, skill level and company size (see Table 1). The number of different minimum wages ranges from 3 in Guatemala to over 34 in Honduras. Even these numbers may underestimate the complexity of the legal minimum wage structure; in Costa Rica the Ministry of Labour publishes a list of over 345 specific occupations that map into 14 different minimum wage values.

These multiple minimum wages can reach high into the wage distribution. Costa Rica, for example, sets a minimum wage for workers with a *licenciado* (a five-year university degree) that falls into the top decile of the wage distribution (Gindling and Terrell 2007). Legal minimum wages can be substantially higher for some workers than others. The ratio of the largest to smallest legal minimum wage ranges from 2.15 in Costa Rica to 1.03 in Guatemala (see Table 1).

Multiple minimum wages are not unusual; approximately 50 per cent of countries around the world set legal minimum wages by occupation, industry and/or company size (Rani, Belser, and Ranjbari 2013). Single minimum wages provide a floor for workers with the lowest productivity or with the least bargaining power. They are also linked to the idea that minimum wages should be used to reduce the number of working poor people—specifically, that the minimum wage should be sufficient to satisfy the basic needs of workers and their families, no matter where they live or work. Justifications for multiple minimum wages include the ability to adjust for differences in the cost of living, for industry sectors where employers have a higher ‘capacity to pay’ and can afford higher minimum wages, for workers with different productivity levels, and to encourage firms to train young or inexperienced workers in entry-level jobs (ibid.).

Multiple minimum wages can allow governments to maximise the wages of all workers and reduce inequality between the lowest- and highest-paid formal-sector workers (Gindling and Terrell 2004). They can also substitute for collective bargaining in countries where unions are weak. This is the case in Central America, where unions are often strong in the public sector but very few private-sector employees belong to unions. Of the five Central American countries, only in Costa Rica do collective bargaining agreements cover more than 3 per cent of workers (Hayter and Stoevska 2010).

Minimum wages in Central America are set through tripartite negotiations within national wage councils, which include approximately equal representation from employers (generally from the Chamber of Commerce), unions and the government. Although in most countries legal minimum wages do not apply to public-sector employees (who are paid according to a different wage schedule), the unions represented in the minimum wage councils overwhelmingly represent public-sector employees. Public-sector unions are concerned with private-sector minimum wages both because they seek to protect all workers and because private-sector minimum wages are often used as a guide for setting public-sector wages. For example, in Honduras the wages of some public-sector workers are set as multiples of the minimum wage (Gindling and Terrell 2009).

Compliance with legal minimum wages occurs mostly in the formal sector. Self-employed workers are not covered by legal minimum wage laws, and many informal-sector employees earn less than the legal minimum wage. As self-employed and informal employees tend to earn lower wages than formal-sector employees, this implies that legal minimum wages in Central America do not protect many of the least-skilled and lowest-paid workers. Rather, the multiple minimum wage structures in Central America can be thought of as a way in which formal private-sector employers and formal-sector labour unions, with the government acting as arbitrator, can negotiate the wage structure for different industries, occupations and company sizes in the formal sector, within an environment where collective bargaining is very weak in the private sector.

For researchers studying the impacts of legal minimum wages on the labour market, the structure of minimum wages in Central America presents two important advantages. First, multiple minimum wages provide substantial variations in minimum wage levels both between workers and over time. Second, the large number of self-employed workers, who are not directly affected by changes in the minimum wage, can be used as a control group. In our research on minimum wages in Central America, we compare employment and wage outcomes of wage and salaried employees (the treatment

TABLE 1: Structure of legal minimum wages in Central America

Country	Number of minimum wage categories	Description of minimum wage categories	Ratio of highest to lowest minimum wage
Costa Rica	>14	by occupation and skill level	2.15
El Salvador	10	by industry	1.55
Guatemala	3	by agriculture, non-agriculture and exports (<i>maquila</i>)	1.03
Honduras	>34	by industry, company size, location, exports (<i>maquila</i>), apprentice	1.44
Nicaragua	9	by industry	1.81

Source: Ministry of Labour minimum wage regulations for 2017–2018 for Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.



Photo: Jorge Quinteros. Self-employed artisan from Arte Guavete, Puerto Rico, 2013 <<https://goo.gl/aHddbE>>.

“ Higher minimum wages reduce formal-sector employment and shift employment into self-employment and informal wage employment.

group, which is affected by changes to minimum wages) to employment and wage outcomes of the control group (self-employed workers).

We have found that minimum wages in Central America tend to be set near the median wage for workers in each category, and that increases in the minimum wage tend to raise the wages of workers near the middle of the wage distribution (Gindling and Terrell 2007; 2009; Alaniz, Gindling, and Terrell 2011).

While we have not found that higher minimum wages reduce total employment, we have found that higher minimum wages reduce formal-sector employment and shift employment into self-employment and informal wage employment (Gindling and Terrell 2007; 2009; Alaniz, Gindling, and Terrell 2011). This occurs partly through formal-sector employees losing employment, but also through the creation of fewer new formal-sector jobs when minimum wages increase (Alaniz, Gindling, and Terrell 2011). Further, the workers who lose formal-sector jobs are disproportionately young, female and less skilled. We estimate that a 10 per cent increase in real minimum wages reduces formal-sector employment by 1 per cent in Costa Rica, 5 per cent in Honduras and 5 per cent in Nicaragua (Gindling and Terrell 2007; 2009; Alaniz, Gindling, and Terrell 2011).

As previously noted, compliance with legal minimum wages is far from universal in Central America. Self-employed workers—

in some countries representing almost 50 per cent of the workforce—are not formally covered by legal minimum wages (how can you force a self-employed worker to pay him/herself the minimum wage?). Even among employees, who are all legally covered in all Central American countries, many earn less than the legal minimum wage. We have estimated that 44 per cent of employees in small companies in Costa Rica, 34 per cent in Nicaragua, 30 per cent in El Salvador and 62 per cent in Honduras earn less than the minimum wage. Even among larger, presumably formal-sector companies, non-compliance is substantial. Among large companies (100 or more employees), 23 per cent of employees in Costa Rica, 11 per cent in Nicaragua and 5 per cent in El Salvador earn less than the minimum wage (Gindling, Oliva, and Trigueros 2010; Gindling and Trejos 2010; Alaniz, Gindling, and Terrell 2011; Gindling and Terrell 2009; Ham 2015).

Improving compliance with legal minimum wages is likely to have a larger impact on the wages of low-wage workers than increasing the level of minimum wages. One way to improve compliance could be to simplify the minimum wage structure. Given the complexity of minimum wage systems in Central America, it is often difficult for a company, employee or labour inspector to determine the minimum wage that applies to a specific worker. As noted in a recent International Labour Organization (ILO) report, a national minimum wage or a small number of regional minimum wages is “easier to

operate, communicate and enforce”, while more complex systems require more institutional capacity in the Ministry of Labour, a capacity level that often does not exist (ILO 2018).

Compliance can also be improved while maintaining a complex minimum wage structure. For example, in 2010 the Costa Rican government instituted a comprehensive programme to improve compliance with legal minimum wages, the National Campaign for Minimum Wages. There were three broad mechanisms implemented to achieve this goal: (1) publicity to “create a level of consciousness among employers and workers regarding the importance of complying with the minimum wage”; (2) encourage workers to report employers who pay less than the minimum wage (to support this measure the Ministry of Labour expanded a call centre with a call-in complaint line); and (3) an increase in the number of labour inspections targeting minimum wage violations. Coincident with these three mechanisms, the Ministry of Labour implemented a new computer-based information system to keep track of violations of labour regulations (Gindling, Trejos, and Mossaad 2015).

In our evaluation of the National Campaign for Minimum Wages, we found that it led to an increase in compliance with minimum wage laws in Costa Rica, and that after the campaign the mean earnings of those affected (those earning less than

the minimum wage in 2010) increased by approximately 10 per cent more than the earnings of those not affected (those who had been earning more than the minimum wage). The campaign led to the largest increases in the wages of the most vulnerable: women, younger workers and less-educated workers. Further, we found no evidence that the campaign had a negative impact on the formal-sector employment of workers whose wages increased. Rather, the campaign actually increased formality. Although inspections mainly targeted minimum wage violations, we also observed an increase in compliance with a broader set of labour standards, such as payment of social security contributions, overtime pay, paid sick leave and paid vacations (ibid.).

Legal minimum wages can protect workers with the least bargaining power, including youth, women and those who are least skilled. Minimum wages best protect the most vulnerable workers if there is broad compliance and effective enforcement. In our research, we have found significant non-compliance in Central America, where increases in legal minimum wages mostly affect formal-sector employees. While legal minimum wages in Central America provide a mechanism by which formal-sector employers and unions can engage in a type of collective bargaining over wages in an environment of weak unions in the private sector, they have little effect on the wages of lower-paid informal-sector or self-employed workers. Further, we found that increases in the level of the minimum

“ Legal minimum wages can protect workers with the least bargaining power, including youth, women and those who are least skilled.



Photo: Maria Fleischmann/World Bank. Urban worker in Guatemala City, Guatemala, 2009 <<https://goo.gl/wjrKmu>>.



Photo: Photolibrarian. Workers at a banana plantation, Puerto Viejo de Sarapiquí, Costa Rica, 2012 <<https://goo.gl/wtsdZH>>.

“ Compared with raising the level of the minimum wage, improving compliance may be a more effective way to improve the earnings of the lowest-paid workers.

wage shifts employment from higher-paying formal-sector employment to the lower-paying informal sector. This suggests that, compared with raising the level of the minimum wage, improving compliance may be a more effective way to improve the earnings of the lowest-paid workers. Consistent with this, we found that a programme in Costa Rica designed to improve compliance with legal minimum wages not only led to higher wages for employees, with no negative employment effects, but also increased the proportion of employees in formal employment. ●

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Minimum wage effects on jobs and poverty: evidence and policy debate in the USA

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The USA is embarking on an experiment of using high minimum wages to try to increase workers' incomes and reduce poverty. Figure 1 shows state minimum wages exceeding the federal minimum as of 1 January 2018. There are now 29 states (plus the District of Columbia) with minimum wages above the federal minimum wage level, with an average difference across states of 30.2 per cent. As a result, the federal minimum wage now provides a floor for an increasingly narrow set of states, concentrated in the south (see Figure 2). Moreover, California, Massachusetts, New York, Seattle and Washington, DC have legislated either current or future minimum wages of USD15; other localities may follow, and a change in the national political alignment could result in a USD15 national minimum.²

Some economists claim with confidence that a USD15 minimum wage will not result in job losses (e.g. Reich 2016). Conversely, others argue that it will lead to huge job losses (e.g. Even and Macpherson 2017). These divergent views are also reflected in the media. For example, in a 24 June 2018 Google search on the words '\$15 minimum wage idea', the first entry (from *Forbes*) was titled 'A Statewide \$15 Minimum Wage is a Bad Idea',³ and the sixth entry (from *The American Prospect*) was titled 'Why a \$15 Minimum Wage is Good Economics'.⁴

I regard such confidence as badly misplaced, for two reasons. First, one might think that we know pretty much everything about the employment effects of minimum wages in the USA, given the scores of papers that have been written about them. However, despite the scores of studies, the development of richer data and the development of more-refined empirical techniques, the debate among researchers about the employment effects of minimum wages—concerning not just the magnitude but the broader question of whether a higher minimum wage reduces employment—remains intense and unsettled.

Second, even if one has a strong view of what the US literature says about the employment effects of *past* minimum wage increases, the literature on past increases may provide much less guidance in projecting the consequences of the high minimum wages that are now emerging, which will entail much larger increases than those studied in the prior literature. Predicting the effects of minimum wage increases of many dollars, based on research studying much smaller increases, is inherently risky. For example, the far greater proportion of workers affected could substantially constrain the ability of employers to adjust along other margins and hence mitigate potential job losses.⁵

In this article, I first summarise the evidence on the employment effects of minimum wages in the USA, with a focus on recent research.⁶ I then turn to the more limited evidence on the more critical policy question: do minimum wages reduce poverty or help low-income families?⁷ In discussing both issues, I also speculate about the potential effects of a national USD15 minimum wage.

Key points are as follows:

- The evidence on the unemployment effect of minimum wages is contested,

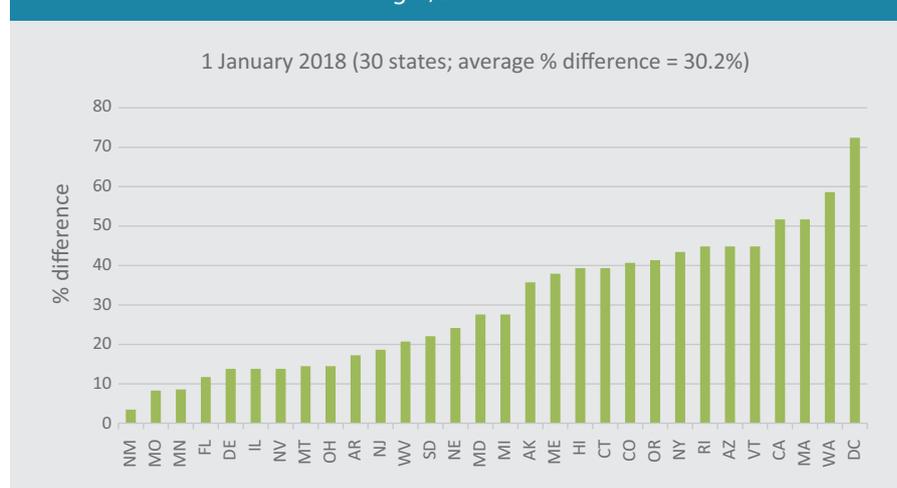
but overall the evidence indicates that minimum wages reduce employment of the least-skilled workers. Earlier estimates suggested an 'elasticity' of about -0.1 to -0.2 (for example, a 10 per cent increase in the minimum wage reduces employment of low-skilled workers by 1 per cent to 2 per cent). Some recent research, however, points to larger adverse effects.

- There is little evidence to suggest that minimum wages reduce poverty or help low-income families on net. Some evidence points in this direction, but most estimated effects are small, not robust and seldom statistically significant.

Employment effects

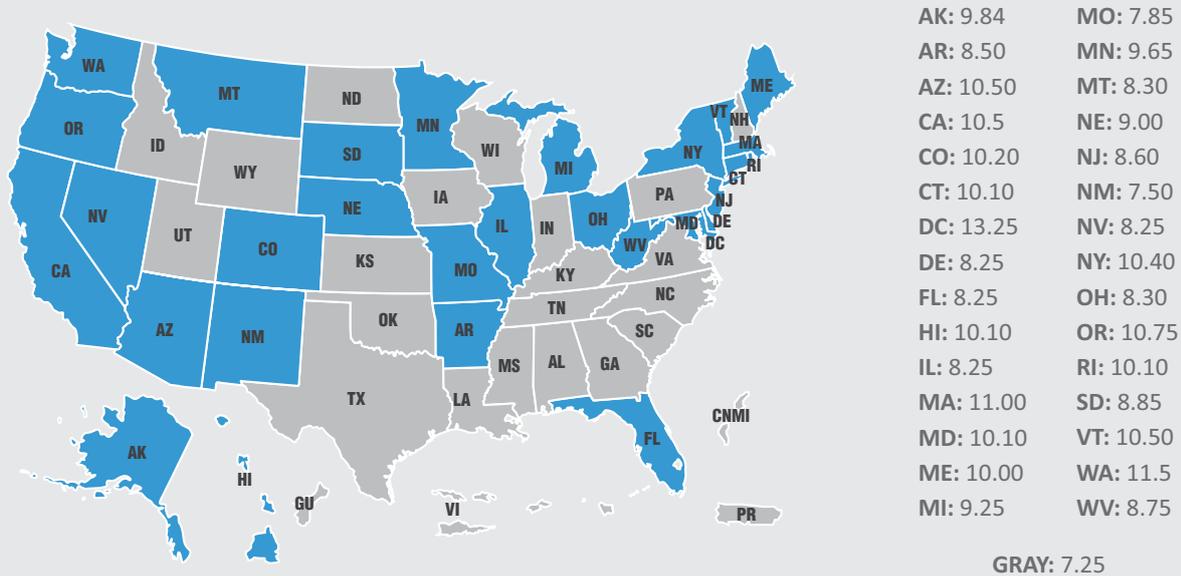
The most compelling research on the employment effects of the minimum wage began to emerge in the early 1990s, when many states began raising their minimum wages above the federal minimum. This cross-state variation helps researchers disentangle the effects of minimum wages from other aggregate influences on employment of low-skilled groups, such as teenagers. The lack of subnational variation in most other

FIGURE 1: Percentage differences between state and federal minimum wages, 2018



Source: Author's elaboration.

FIGURE 2: States (and territories) with a higher minimum wage than the federal minimum wage, 1 January 2018



Note: In states shaded light grey, the federal minimum wage prevails for workers covered by the Fair Labor Standard Act. The state minimum wage is higher in the other states.

Source: US Department of Labor (2018).

countries makes it more difficult to estimate the effects of minimum wages. Neumark and Wascher (2007) surveyed evidence from more than 100 studies from this new generation of research, most for the USA. This 'narrative' survey attempted to identify the most reliable studies and to summarise the evidence from them. It concluded that the strong preponderance of the evidence pointed to disemployment effects of the minimum wage. Nearly two thirds of all the studies surveyed gave consistent evidence of negative (although not always statistically significant) effects of minimum wages, while only eight gave a relatively consistent indication of positive employment effects. Among the 33 deemed most credible evidence, 28—or 85 per cent—pointed to negative employment effects. Moreover, disemployment effects of minimum wages were strongest when researchers focused on the least-skilled workers most affected by minimum wages.

Two recent meta-analyses challenge this conclusion (Doucouliagos and Stanley 2009; Belman and Wolfson 2014), suggesting that averaging across studies points to an estimate near zero. However, averaging across estimates from studies of minimum wage effects, as meta-analyses do, is

problematic. First, the population studied varies, and this and other factors can influence how binding the minimum wage is, generating variation in estimated effects that there is no reason to simply average. Second, meta-analyses often assign more weight to estimates that are more statistically precise (e.g. Belman and Wolfson 2014), even though the most rigorous empirical methods are likely to be less precise because of more rigorous research designs—exactly what we see in many of the new studies discussed below. Yet the studies using the most rigorous methods—if valid—are the ones that should receive the most (if not all the) weight. Thus, we should pay attention to the best studies; even if researchers do not yet agree on which studies are best, it is more meaningful to try to resolve this question than to mechanically average across existing estimates in the literature.

Since that review, there has been a wave of studies using new research strategies. Based on alternative research designs, Allegretto, Dube, and Reich (2011) and Dube, Lester, and Reich (2010) speculate that state minimum wages tend to increase in states and years when labour market conditions for less-skilled workers were in decline relative to other states, generating a spurious

negative relationship between minimum wages and low-skilled employment. They also assert that restricting comparisons to nearby states, when minimum wages increase in one state but not the others close by, solves this problem, because nearby states were subject to the same shocks that may be spuriously correlated with minimum wage increases. Using these 'close comparisons', both studies find disemployment effects that are near zero. Allegretto, Dube, and Reich study teenagers, while Dube, Lester, and Reich study restaurant workers. However, most existing work is on teenagers, so the former's conclusions provide the more important contrast to past research.

Neumark, Salas, and Wascher (2014a; 2014b) re-analysed these studies, disputing many of their conclusions.⁸ Moreover, three studies using three different approaches to the problem of labour market shocks correlated with minimum wage increases (Baskaya and Rubinstein 2015; Clemens and Wither 2016; Powell 2016) find strong disemployment effects of minimum wages, with elasticities ranging from about -0.3 to -0.5 for teenagers, and near -1 for the very lowest-wage workers (Clemens and Wither 2016). For several reasons (see Neumark

and Wascher 2017), I find these other studies more convincing, and believe the close-controls method may obscure the disemployment effects of minimum wages.

Regardless, the key empirical takeaway is that the exceptions in recent work that find no evidence of employment effects generally come from one specific way of estimating the employment effects of minimum wages—focusing on geographically proximate controls—and several other methods in the most recent research, which also confront the same potential limitation of prior research, find disemployment effects. At a minimum, even if one has somewhat different views about these alternative studies, blanket statements such as “There’s just no evidence that raising the minimum wage costs jobs, at least when the starting point is as low as it is in modern America” (Krugman 2015) are simply untrue.

While there is a great deal of uncertainty about the employment effects of a USD15 minimum wage, one thing we do know is that it would impact far more workers than the current minimum wage, especially in lower-wage states and lower-wage areas of states. For example, Holtz-Eakin and Gitis (2015) estimated, based on 2014 data, that 55.1 million workers would have been directly affected by raising the federal minimum wage to USD15 by 2020.⁹

I have serious concerns that imposing this kind of minimum wage on such a high share of workers (in many regions)

would lead to disemployment effects much greater than merely a proportional response to the minimum wage increase based on past elasticities. The evidence on past increases is based on relatively low minimum wages in the USA, affecting small shares of workers. But a much higher share of workers affected is likely to limit employers’ ability to mitigate the effects of the higher wage floor through other means—including lower non-wage benefits and substitution towards capital or higher-skilled labour—as well as limiting potentially offsetting effects that minimum wage advocates sometimes suggest, such as higher morale and lower turnover.

Distributional effects

A more critical policy question is how minimum wages affect poor and low-income families—a question that gets obscured in the seemingly never-ending debate about employment effects of minimum wages. For example, some job losses from higher minimum wages do not in any way imply that poor or low-income families are not, on net, helped by a higher minimum wage, although research that finds job losses is often interpreted as necessarily implying that minimum wages are a bad idea.¹⁰ Two separate questions underlie the answer: How do minimum wages affect low-wage workers? And how are the effects distributed across lower- and higher-income families?

Regarding the first point, minimum wage employment elasticities for teenagers or other low-skilled groups are often

“ While there is a great deal of uncertainty about the employment effects of a USD15 minimum wage, it would impact far more workers than the current minimum wage, especially in lower-wage states and lower-wage areas of states.



Photo: Erin Nekervis. Women going to work, Chicago, USA, 2007 <<https://goo.gl/8V2KdK>>.



Photo: Metropolitan Transportation Authority/Patrick Cashin. Men working in a subway station construction, New York, USA, 2014 <<https://goo.gl/BkKdhZ>>.

“ Minimum wages are less likely to increase incomes of poor families, because the policy targets low-wage workers, not low-income families.

characterised as ‘small’ or ‘modest’, which one might interpret to mean that employment elasticities in the range of -0.1 to -0.2 are much smaller than the critical value of -1 , meaning that earnings gains from higher wages will far offset the earnings declines from job losses (e.g. Freeman 1996). However, this is not the correct way to translate the elasticity estimated from most studies into the implications of minimum wage increases for workers. Most studies do not focus solely on affected workers, which means the job losses they estimate could be much higher as a percentage of workers who could potentially benefit from the higher minimum wage. In addition, elasticities estimated in the usual minimum wage studies overstate the wage gain, because they are computed in terms of the legislated increase in the minimum wage, whereas typically some affected workers are already earning more than the old minimum wage (but less than the new minimum wage), so the size of the average wage increase for affected workers will be smaller than the minimum wage increase itself. Neumark and Wascher (2008) show that it might be quite reasonable to think that the elasticity adjusted for these factors is close to -1 or even larger (in absolute value). Indeed, this is consistent with the elasticity near -1 that Clemens and Wither (2016) find for directly affected workers, and with recent evidence on the effects of the Seattle minimum wage (Jardim et al. 2017). The implication is that minimum wages may have little impact on the earnings of affected workers, on average.

Moreover, minimum wages are less likely to increase incomes of poor families, because the policy targets low-wage workers, not low-income families. In the USA, the link between low wages and low family income is quite weak, for three reasons. First, over half (57 per cent) of poor families with heads of households aged 18–64 have no workers (calculations based on 2014 CPS data). Second, some workers are poor because of low wages rather than low hours; in the same data, 46 per cent of poor workers have hourly wages above USD10.10, and 36 per cent have hourly wages above USD12. And third, because teenagers are highly over-represented in the minimum wage workforce, many low-wage workers are not in poor families. As a result, back-of-the-envelope calculations suggest that when the minimum wage increases, assuming no job losses, far more of the increase in income goes to families in the top half of the income distribution than to families living below the poverty line (Lundstrom 2017).

Before-and-after studies that directly estimate the distributional effects of minimum wages are more decisive. There are far fewer such studies than there are studies of employment effects. However, most of the existing research finds no statistical evidence of reductions in poverty from a higher minimum wage (Neumark and Wascher 2008).¹¹ One exception is Dube (2017), who finds—using the same close-controls strategy as Allegretto, Dube, and Reich (2011)—that minimum wages strongly reduce poverty.¹²

“ If job losses rise disproportionately with a much higher minimum wage, more workers in poor families would likely lose their jobs.



Photo: JAXPORT/Meredith Fordham Hughes. Truck driver, Jacksonville, USA, 2012 <<https://goo.gl/KCdQPn>>.

However, it is not surprising that the same close-control method in which there are no disemployment effects generates evidence of poverty reduction: if there are no job losses, a higher minimum wage has to reduce poverty. Other recent work suggests that results from Dube's approach are fragile.

Nonetheless, there are some open questions about the effects of minimum wages on poverty. Most of the point estimates of the effects of minimum wages on poverty are in fact negative, suggesting that it may be more likely than not that the distributional effects are in the direction of reducing poverty; a lack of statistically significant evidence does not imply that there is no effect.¹³ At the same time, looking across the employment and poverty results, one cannot appeal to a set of studies that fail to find a statistically significant negative effect of minimum wages on poverty to bolster the claim that minimum wages reduce poverty, while also appealing (more selectively) to a set of estimates of the effect of minimum wages on employment that are generally negative but statistically insignificant to argue that the minimum wage does *not* reduce employment. Finally, evidence in Neumark and Wascher (2011) indicates that a combination of a higher state minimum wage and more generous state-earned income tax credit (EITC) leads to higher employment and positive distributional effects for single women with children.

Might the distributional effects of a *much* higher minimum wage be different?

Again, I can only speculate. With a much higher minimum wage, the back-of-the-envelope calculations suggest that minimum wages are even less efficient at targeting poor people, because as we climb higher in the wage distribution, fewer workers are in poor families. On the other hand, a higher absolute number of poor families would be helped. Moreover, the existing 'before-and-after' evidence may not carry over to much higher minimum wages, because with a larger share of workers affected, there may be less substitution away from the somewhat higher wage earners affected by a higher minimum wage, and these workers may be more likely to be heads of households. One possibility is that the beneficial distributional effects would be manifested somewhat higher in the family income distribution—not so much near the poverty line, where whether a family has a worker may be critical—but perhaps more likely near 1.5 or 2 times the poverty line, where the wage plays a more predominant role. On the other hand, if job losses rise disproportionately with a much higher minimum wage, more workers in poor families would likely lose their jobs. ●

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1. Distinguished Professor of Economics at University of California, Irvine (UCI) and Director, Economic Self-Sufficiency Policy Research Institute.
2. A USD15 federal minimum wage was part of the Democratic Party's platform in the 2016 elections.
3. This was in reference to Virginia. See Millsap (2017).
4. See Bernstein and Spielberg (2015).
5. For a discussion of some of these other margins, see Schmitt (2015).
6. See Brown, Gilroy, and Kohen (1982), Card and Krueger (1995) and Neumark, and Wascher (2007; 2008) for earlier reviews.
7. Another policy issue I do not cover here concerns the longer-term effects of minimum wages on low-skilled workers and disadvantaged neighbourhoods. See Neumark and Nizalova (2007), Neumark and Shupe (2018) and Neumark, Asquith, and Bass (2018).
8. There is a further exchange in Allegretto et al. (2017) and Neumark and Wascher (2017).
9. Despite this, Michael Reich and his co-authors typically project little if any job loss. For example, Reich et al. (2016) predict that a USD15 minimum wage in San Jose and Santa Clara County phased in by 2019 would cost 960 jobs in San Jose, and only 80 fewer jobs over the broader region. However, their estimates are based on a model that is calibrated to "be consistent with the very small effects that researchers find for the smaller pre-2015 increases in federal and state minimum wages" (Reich et al. 2016, 20). As my earlier discussion of the research literature indicates, this 'calibration' embeds a slanted reading of the evidence on past minimum wage increases.
10. See, for example, Rosen (2016).
11. Another issue is who bears the costs. A recent simulation study (MaCurdy 2015) calculates the price effects of an increase to the minimum wage and characterises its effects as akin to a sales or value-added tax that is even more regressive than a standard sales tax.
12. In the recent Congressional Budget Office (CBO 2014, 11) study of the effects of a higher minimum wage, the approximate elasticity of the number of poor people with respect to the minimum wage is –0.05. Dube's estimated elasticity of the poverty rate with respect to the minimum wage in his preferred specifications is –0.24 to –0.36.
13. See additional evidence and discussion in Neumark (2016), including evidence (although it is not robust) that a higher minimum wage may reduce poverty among single mothers with children—a group targeted by anti-poverty policies.

Minimum wage: some elements of the debate in Europe and in France¹

Gilbert Cette²

A national minimum wage (NMW) is often considered useful for several reasons: (i) it empowers employees who have little or no negotiating power; (ii) it sets a wage floor and thereby contributes to social norms; and (iii) after a certain level, it increases the incentives for labour supply. A large majority of developed countries—27 of the 35 countries of the Organisation for Economic Co-operation and Development (OECD), for example—have an NMW in place. This process has accelerated over the last two decades, with NMWs being implemented in Australia (1998), the UK (1999), Ireland (2000), New Zealand (2000), Mexico (2006) and Germany (2015).

The issue of the NMW has been subject to heated debates in certain countries and at certain times. In this article we present some elements of these debates, first focusing on Europe and then on France.

Elements of the debate in Europe

An NMW exists in 22 of the 28 countries of the European Union (EU). The exceptions are Austria, Cyprus, Denmark, Finland, Italy and Sweden.

It is worth noting that in several of these six countries, including Denmark, Finland, Italy and Sweden, social partners—including workers' unions—are clearly opposed to the implementation of an NMW. Such opposition might be expected from employers' unions, but not so clearly from workers' unions. In fact, it stems from their feeling that an NMW would weaken their role in collective wage bargaining and could contribute to de-unionisation. They consider that minimum wages should be decided at the branch level, through collective bargaining. This position is also shared by workers' unions in other non-EU countries, such as Norway. Workers' unions in Germany have also been opposed to an NMW, but their position has progressively changed in the face of large-scale de-unionisation observed since the country's reunification. The implementation of an NMW can be considered, at least partly,

as a symptom of collective bargaining deficiencies and the weaknesses of workers' unions and even social partners.

In the European debate, some have recently proposed the implementation of a European minimum wage (EMW).³ In this context, an EMW is thought to contribute to building the EU's social dimension. Of course, as development levels vary widely among EU countries, the level of the EMW would also need to differ in the various countries but would be fixed using a common rule—for example, it could correspond to the same proportion of the median wage in each country.

We find that this proposal is not really relevant for several reasons. First, as mentioned above, in some European countries social partners—including workers' unions—are opposed to an NMW and would thus also be opposed to an EMW. Second, the country level of an EMW fixed through a common EU rule would differ from the current level of the NMW, which could be a source of political and/or technical difficulties. Third, in four EU countries (Belgium, France, Luxembourg and Slovenia) the NMW is not only revalued through discretionary government decision-making but also through country-specific rules (see below). As a result of these current specificities, the implementation of an EMW would be politically complex. There are other useful areas to consider in reinforcing the EU's social dimension, such as social security aspects or the significant constraints on worker mobility within Europe from different pension, health and unemployment insurance organisations.

Elements of the debate in France

The French NMW was created in 1950 and was originally named the *Salaires Minimum Interprofessionnel Garanti* (SMIG). It underwent substantial reform in 1970, following the social unrest of 1968, and was renamed the *Salaires Minimum Interprofessionnel de Croissance* (SMIC). The SMIC is uniform (i.e. it is the same for the entire country, whereas the SMIG had different regional values) and

homogeneous for all adults. In particular, there is no specific minimum wage for young adult workers, as is the case in Belgium, the Netherlands and the UK, despite the difficulties of integrating young people into the workforce.

The revaluation rule of the French NMW is very specific. In 23 of the 27 OECD countries that have an NMW in place, revaluation is a totally discretionary decision by the government, sometimes based on the advice of a specific Minimum Wage Commission (in Australia, Germany, Ireland and the UK, among others). In three of the four remaining OECD countries (Belgium, Luxembourg and Slovenia), the NMW is indexed to inflation, with the possibility of a discretionary decision. In France, the annual revaluation is even more constrained: the SMIC is automatically indexed to inflation plus half of the purchasing power growth of a wage index, and the government may add an additional discretionary top-up (the *coup de pouce*). Therefore, there is a circular relationship between the SMIC and the average wage: an increase in the SMIC mechanically pushes up the wage distribution, and an increase in the average wage pushes up the SMIC through the revaluation rule.⁴ Cette and Wasmer (2010) have shown that as a result of this revaluation rule, there are risks of high SMIC volatility in the event of sudden inflation or disinflation. Several studies have shown that compared with other NMWs, the SMIC is highly binding.⁵

The SMIC is one of the highest-valued NMWs, and the ratio of the (net) SMIC to the median (net) wage is higher in France than in other countries that have an NMW. To avoid the detrimental impact of a high NMW on the employment of low-skilled workers, left- and right-wing governments in France since the early 1990s have implemented and continuously developed social policies involving substantial tax cuts that target low wages. The annual cost of these policies is more than 1 per cent of gross domestic product (GDP), twice the cost of negative income taxes (*Revenu de Solidarité Active* and *Prime d'Activité*—PA).



Photo: Jan Buchholtz. Men working in construction, Cap-d'Ail, France, 2014 <<https://goo.gl/4Pvng5>>.

“ Left- and right-wing governments in France since the early 1990s have implemented and continuously developed social policies involving substantial tax cuts that target low wages.

As is the case with other NMWs, the SMIC is ineffective in tackling poverty, as it does not target poor people. Only 23 per cent of people receiving wages at the level of the SMIC are poor. The 2017 report by the French Minimum Wage Commission showed that, for the same net cost to public finances, an increase in the PA negative income tax would be more efficient in decreasing poverty than an increase in the SMIC (which generates public finance costs through different channels) and has no detrimental impact on labour demand for low-skilled workers, in contrast to an increase in the SMIC. The PA can be targeted at specific subsets of poor people, such as low-income families with children, to prioritise combating child poverty—which is particularly egregious. Furthermore, the report recommends changing the SMIC revaluation rule, to bring it closer to the revaluation processes of other NMWs in OECD countries, and to mainly use the PA as an instrument in the fight against poverty. However, due to the relatively technical nature of this debate, a large majority of French workers' unions and many people from civil society at large remain convinced (or at least seem convinced) that an increase in the SMIC is a well-adapted policy for decreasing worker poverty.

Conclusion

France will probably keep its original NMW, with a particular revaluation rule, for the foreseeable future. This comprises part of its structural problems, which contribute to high unemployment

among low-skilled workers and to low competitiveness. What the French debate illustrates clearly is that the minimum wage is a heated, emotional subject. Controversial arguments mix scientific and political approaches and points of view. Almost everyone has some opinion on this issue, and scientific analyses have no more value in the debate than an opinion based on emotional convictions. For these reasons, this field is one of the most problematic in terms of implementing useful structural reforms. ●

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1. This article makes use of analysis based on *Groupe d'Experts sur le SMIC* (2017).
2. Associate Professor at the University of Aix-Marseille and President of the *Groupe d'Experts sur le SMIC* (French Minimum Wage Commission). The views expressed in this article are those of the author and do not necessarily reflect those of any institution.
3. See Müller and Schulten (2017); Brischoux et al. (2014); Fernandez-Macias and Vacas-Soriano (2013). Also see on this topic the analysis by Seeliger (2018).
4. For estimates of this circular relationship, see Cette, Chouard, and Verdugo (2011); and Gautier, Fougère, and Roux (2016).
5. See, for instance, Aghion, Algan, and Cahuc (2008); and Cahuc, Cette, and Zylberberg (2008).

Minimum wages in India: current status and future prospects

Biju Varkkey¹ and Rupa Korde²

The main purpose of the minimum wage is to protect workers by safeguarding their incomes and providing them and their families with a decent standard of living. This protection is especially necessary for low-skilled workers and those engaged in work without social or legislative protection. The minimum wage helps shield the most vulnerable workers from exploitation (Jones 1997; Melo et al. 2012), and it is often considered an effective way to reduce wage inequality and combat poverty in developing countries (ILO 2016), by providing workers with a minimum level of income (Alaniz, Gindling, and Terrell 2011).

The minimum wage policies and legislation of a country play a critical role in protecting workers (Varkkey 2015; Varkkey, Korde, and Singh 2016) and also help correct income imbalances caused by rapid globalisation in not only economic markets but also labour markets, smoothing the adjustment process (Heckman and Pages 2000; Alaniz, Gindling, and Terrell 2011). Labour laws and reforms aim to reduce existing inequality and attempt to redistribute income, especially to the low-paid workers in the labour market, so at least their minimum survival needs are met (Rani and Rajbar 2013). In this regard, India's minimum wage legislation has been envisaged as an effective way to tackle poverty and inequality.

In most developing countries such as India, the minimum wage system is a subject of endless debate. Because of its complex structure, it often faces criticism from all sides: social, political and legal. While multiple issues plague the Indian minimum wage system, the core of the problem lies in the complications associated with the criteria for setting the minimum wage and its associated processes (Varkkey, Korde, and Singh 2016).

The Indian economy is growing at a phenomenal rate, with a projected growth in gross domestic product (GDP) of 7.4 per cent in 2018 and 7.8 per cent in 2019 (IMF 2018).

India has been termed the fastest growing economy in the world, and its development plans have spurred positive sentiments in the global market (Economic Times 2018). Despite this very high rate of growth, multiple challenges remain in protecting workers—particularly in the large informal sector—and in providing them with a minimum wage. This can be attributed to the loopholes in the existing minimum wage policies and legislation and to implementation difficulties. Yet another crucial problem faced while setting minimum wages is determining their optimal level. Minimum wages can be ineffective if they are set too low, and there is a risk of inflation and unemployment if set too high, the brunt of which is faced by workers in the informal sector, since social protection is practically non-existent (Dawn 2017).

Furthermore, there are administrative issues such as delays in the revision of rates and ensuring compliance (ILO 1990; Varkkey 2015). Non-compliance happens more in rural areas than urban ones and affects the informal sector more than the formal sector. In addition, there is a higher probability of women being paid less than men (ILO 2016), even though Article 39(d) of the Constitution of India guarantees equal wages and equal treatment (Varkkey, Korde, and Parikh 2017). Thus, although it may be perceived that the minimum wage is an effective instrument, it has failed to be effective in practice.

India was among the first of the Asian countries to enact minimum wage legislation (Minimum Wage Act 1948), soon after its independence. The informal sector in India has benefited from the legislation to some extent, but numerous challenges and hurdles in determining levels, enforcement, implementation and coverage have emerged due to its convoluted structure (Varkkey and Mehta 2012; Srija 2014).

The mechanism for setting and implementing the level of the minimum wage in India has been hotly debated

since its inception. India follows a dual system: while minimum wages are set at the national level (central sphere), all states have the autonomy to set their own minimum wages according to their own costs of living and job markets. This often results in confusion about prevailing minimum wage rates and the same type of work represented by different classifications, with a high chance of different wage rates applying simultaneously for the same work. This has resulted in India having one of the most complex minimum wage systems in the world, with more than 1700 prevailing rates. The rates are also set as piece rates, hourly rates and monthly rates and are decided at national, regional and sector levels. However, in truth, there is no such thing as a national minimum wage that can be considered an official benchmark—something that has been persistently demanded by national trade unions. Furthermore, even though the International Labour Organization (ILO) has established a set of eight guidelines for establishing a minimum wage, India only follows one: inflation and/or cost of living index/economic situation and/or level of development. The law mandates the revision of minimum wage rates every two years, but since they are set by different authorities at different points in time, the entire process of establishing rates and implementing them lacks clear standards, resulting in confusion for both workers and employers (Varkkey and Korde 2013).

Discussions about the long-overdue reform of India's labour market policies have been circulating regarding a better system for determining and implementing the level of the minimum wage, to ensure that the most vulnerable workers are protected and basic social security is made available to them. Reforms are necessary to improve labour conditions and coverage levels. Employers will also have clarity about the minimum wage rates to be paid to workers. There is wide consensus among stakeholders, policymakers, employers, trade unions and academics that the



Photo: Adam Cohn. Workers in a clothing factory, Mumbai, India, 2015 <<https://goo.gl/KtQBx7>>.

“ While multiple issues plague the Indian minimum wage system, the core of the problem lies in the complications associated with the criteria for setting the minimum wage and its associated processes.

current system is flawed and that there is a pressing need for improvement (Rani and Besler 2012; Carpio and Pabon 2014).

Though the implementation of the minimum wage—with all its limitations—has definitely expanded the scope of decent working conditions, which has especially helped low-paid workers, it has also posed severe challenges, including the difficulty in balancing processes across all three levels of government and guaranteeing suitable compliance, in line with ILO guidelines and in the face of labour market distortions (Carpio and Pabon 2014; Varkkey 2015). Collective bargaining has also not been effective and has not been explored to its fullest in India, though wherever collective bargaining exists, the prevailing minimum wage rate is considered the starting point.

Aiming to reform labour laws in general and specifically the wage system, the Government of India has made a proposal by introducing the Code on Wages Bill (2017) and opening the subject to public debate. This bill proposes to empower the central government to set uniform wages for all sectors nationwide (PIB 2017). With the implementation of this law, the issues hampering the ideal implementation of minimum wages are expected to be resolved, and its benefits are expected to cover a large part of the working population.

The new bill is also expected to play a crucial part in reducing the obscurities in wage rates and to aid compliance,

without affecting workers' income levels and social security. This is one of the first significant initiatives undertaken by the Indian government to merge the existing, different labour laws related to wages (Payment of Wages Act of 1936, the Minimum Wages Act of 1949, the Payment of Bonus Act of 1965, and the Equal Remuneration Act of 1976) into one single code. This move is expected to not only considerably improve the ease of doing business but also ensure a universal minimum wage for all workers. This historical change in legislation, when implemented, is expected to help over 40 million workers (Press Trust of India 2018) across different sectors. Once the proposal is enacted into law, the country will have a statutory national minimum wage rate, and it will ensure that state governments are not able to set their minimum wage levels below the national minimum wage established for that region. This new minimum wage will be valid for all classes of workers. In the current system, the law covers only workers in 'scheduled' industries or establishments (MoLE 2018).

In addition to changes in legislation, the government aims to increase financial inclusion through multiple e-governance initiatives such as delivering payments through digital or electronic means, along with extending wage and social security coverage for workers. It also intends to ensure compliance through the use of analytics. To address non-payment and incorrect payment of the minimum wage, as well as the procedural hurdles currently

“Discussions about the long-overdue reform of India’s labour market policies have been circulating regarding a better system for determining and implementing the level of the minimum wage.



Photo: Adam Cohn. Informal worker in New Delhi, India, 2018 <<https://goo.gl/xzkyK6>>.

associated with securing legal support, the code also proposes “an appellate authority between claim authority and judicial forum” to ensure faster, cheaper and more effective redress of grievances (MoLE 2018).

The dualistic nature of the Indian labour market is evident from its clear segmentation into formal and informal sectors. A substantial proportion of the total workforce is employed in the informal sector (Srija 2014); 90 per cent of the 484 million-strong workforce is employed by the unorganised sector (Srija and Shirke 2012), and it is astonishing to find that the Minimum Wages Act of 1948 is unable to fully cover these workers. The proposed Code on Wages Bill (2017) mandates that this workforce be covered under national labour laws. However, the bill has been severely criticised and characterised as ‘anti-worker’ by major trade unions, primarily because the wage code compromises the legal rights of the trade unions to access the establishment’s accounts (NewsClick 2017; Venkat et al. 2017).

In conclusion, labour laws in India and their implementation have often (and rightly) been criticised for being redundant, fragmented and bureaucratic. There is significant room for restructuring, which could transform the system into a modern, all-inclusive regulatory framework, in line with developed countries (Polaski 2015). Earlier studies have shown that most of the Asian countries (which are developing countries) do not focus beyond

minimum wages while undertaking reforms (Varkkey and Korde 2013; Varkkey, Korde, and Singh 2016). However, the current Indian scenario demands reform that goes well beyond just the minimum wage—i.e. minimal structural changes or a ‘Band-Aid’ partial reform of labour laws and regulations—to institute a system under which all workers are eligible to obtain at least a ‘living wage’. A new wage code and the proposed reforms to the minimum wage should be tools to aid the establishment of this living wage system. To that end, the government and other stakeholders—including employers and trade unions—have to break from tradition and experiment with new approaches, including innovative and active labour market policies. ●

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Photo: Pippa Ranger/DFID. Health worker, Orissa, India, 2011 <<https://goo.gl/rchgTj>>.

“The current Indian scenario demands reform that goes well beyond just the minimum wage to institute a system under which all workers are eligible to obtain at least a ‘living wage’.

Minimum wages in China: there is no free lunch

Tony Fang¹

Although minimum wages have existed for more than a century and have now been adopted in more than 100 industrialised and developing countries, there is no consensus on the most important rationales behind the legislation.

In China, minimum wages have been considered an important policy tool to curb poverty and assist low-income individuals and families to achieve self-sufficiency; to protect workers in low-paid occupations and the unorganised non-union sector (Zhang and Deng 2005; Sun 2006); to help reduce income inequality and serve as an important safety net by providing a minimum floor on wages (Zhang 2007; Jia and Zhang 2013); to foster managerial efficiency and labour productivity through higher labour costs (Cooke 2005); and to prevent 'unfair' low-wage competition and induce employers to move up the value-added chain and invest in productivity-enhancing technology (ibid.).

Opponents of minimum wages in China argue that such legislation may not effectively achieve its intended policy objectives and may actually harm the vulnerable low-wage groups it intends to help. For example, higher minimum wages may reduce the employment opportunities of low-skilled workers and lead to reductions in other elements of the compensation package, such as non-wage benefits (Fang and Lin 2015; Ping 2005; Gong 2009; Xue 2004). It can also diminish China's comparative advantage based on its abundant supply of low-wage labour, undermine companies' dividend policies and result in joblessness among rural–urban migrant workers (estimated at 236 million people in 2012, or 17 per cent of the total population), who tend to have very low pay and are, therefore, likely to accept jobs which pay less than the minimum wage—thus relegating the 'minimum wage' to a misnomer (Chan 2001; Cheung 2004; 2010; Ye 2005).

From a research perspective, minimum wages also provide a useful illustration of the practical relevance of labour market models. The estimation of the minimum wage's impact on overall wages, wage spillovers, employment and earnings/income inequality has been an important area of research, filled with considerable debate. Although there is some consensus on the positive wage effects of increases to the minimum wages, there is less agreement on their effects on employment and earnings/income distribution. Although the neoclassical labour market model predicts unemployment effects in the face of increases to the minimum wage, the monopsony model² suggests otherwise. By and large, this is an empirical question.

China is a very large and heterogeneous country. A single national minimum wage would be unfeasible; therefore, minimum wages are set by local governments. New minimum wage regulations were promulgated in the country in January 2004, requiring these local governments to increase the minimum wage at least once every two years, extending coverage to self-employed and part-time workers and increasing the penalties for violation or non-compliance five-fold (Fang and Lin 2015). These regulations were enacted in March 2004, leading to frequent and substantial increases in minimum wages over subsequent years. These large variations, both across jurisdictions and over time, facilitate the estimation of the effects of minimum wages on wages, wage spillovers, employment and income/earnings distributions in China.

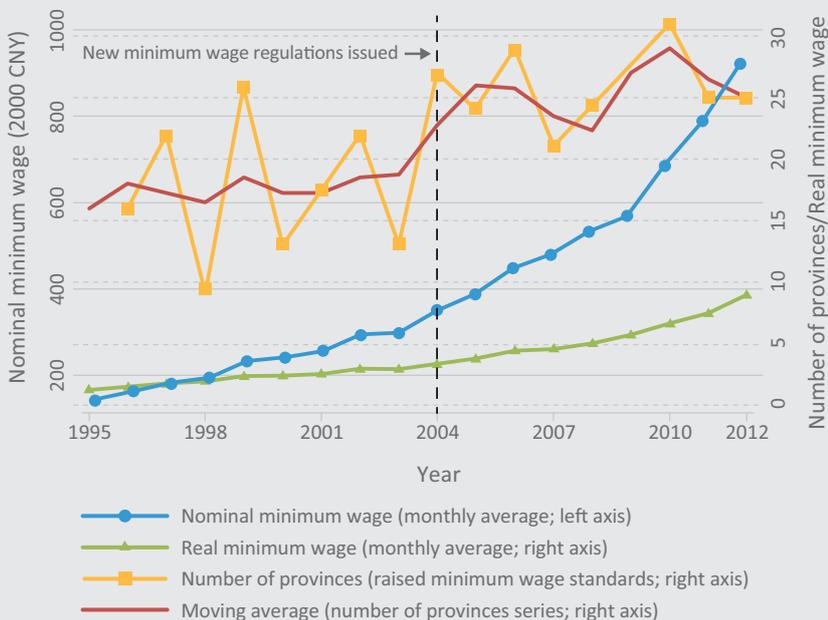
Figure 1 shows the nominal and real minimum wage (monthly average) in China from 1995 to 2012, as well as those corresponding to the provinces that raised the minimum wage each year, along with its moving average over the same period (ibid.). Between 1995 and 2003, the average nominal minimum wage increased steadily, from CNY169 to CNY301—amounting to a 78 per cent

growth over nine years. However, since the 2004 regulations were introduced, the nominal minimum wage has increased even more rapidly—by over 200 per cent, reaching CNY944 in 2012. The real minimum wage grew at a slower pace before 2004 and began to rise thereafter. Furthermore, as shown by the moving average curve in Figure 1, there is an apparent increase after 2004 in the number of provinces that raised minimum wage standards, indicating that adjustments to the minimum wage became more frequent after that year. This variation is crucial for estimating the impacts of minimum wages.

Li (2015) pointed to some evidence of higher unemployment, especially among young adults and the least skilled—particularly in less-developed areas (as opposed to coastal cities) as a result of increases to the minimum wage. This is consistent with the findings of Fang and Lin (2015), which show that changes to the minimum wage led to significant adverse effects on employment in China as a whole, but especially in the Eastern and Central regions of the country, resulting in unemployment for females, young adults and low-skilled workers. There is also some evidence of the effects of minimum wages on reducing wage and earnings inequality and narrowing the gender wage gap (Li 2015; Li and Ma 2015). Using city-level minimum wage panel data and representative Chinese household survey data, Lin and Yun (2016) also find that increasing minimum wages reduced earnings inequality in China between 2004 and 2009, by decreasing the earnings gap between the median and bottom decile over the period.

Using county-level minimum wage data merged with individual-level longitudinal data from the Urban Household Survey for 2004–2009 (spanning the period when the new 2004 minimum wage regulations were put in place), Fang, Lin, and Gunderson (2018) find that increases to the minimum wage raise the wages of otherwise low-wage workers by a little

FIGURE 1: Minimum wages in China, 1995–2012
(adjusted for inflation and expressed in 2000 CNY)



Source: Author's elaboration.

less than half (41 per cent) of the increase to the minimum wage. Depending on the specific situation, these wage effects also led to a reduction of 2–4 percentage points in the probability of being employed, with a reduction of 2.8 percentage points being their preferred estimate. They also find statistically significant but very small wage spillovers for those whose wages are just above the new minimum wage, but they are effectively zero for those higher up the wage distribution.

Clearly, China faces a classic economic trade-off. Minimum wages can raise the wages of low-wage workers and reduce earnings inequality by raising the wage floors in China, but at the expense of reducing the probability of employment for these low-wage workers. There is no such thing as a free lunch when it comes to raising minimum wages in China. ●

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“Opponents of minimum wages in China argue that such legislation may not effectively achieve its intended policy objectives and may actually harm the vulnerable low-wage groups it intends to help.

“ Although the neoclassical labour market model predicts unemployment effects in the face of increases to the minimum wage, the monopsony model suggests otherwise.



Photo: Chris/Toy factory in Tangxia, China, 2010 <<https://goo.gl/pJyglU>>.

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1. Memorial University of Newfoundland, University of Toronto and Institute of Labor Economics (IZA). Tony Fang is the Honorary Dean in the School of Management at Xihua University (China), Stephen Jarislowsky Chair in Economic and Cultural Transformation at Memorial University of Newfoundland, an Associate Professor at the Centre for Industrial Relations and Human Resources of the University of Toronto, a J. Robert Beyster Fellow at Rutgers University, a Research Fellow at IZA, and a past President of the Chinese Economist Society. He is also a Fellow of the Royal Society of Arts (FRSA, UK).

2. A monopsony is a market situation where there is only one buyer (employer) and many sellers (workers seeking employment).

“ Minimum wages can raise the wages of low-wage workers and reduce earnings inequality by raising the wage floors in China, but at the expense of reducing the probability of employment for these low-wage workers.



Photo: ILO. Worker in the assembly line. Zhejiang, China, 2016 <<https://goo.gl/ftU8qi>>.

Minimum wages in sub-Saharan Africa: a primer

Haroon Borat,¹ Ravi Kanbur² and Benjamin Stanwix¹

During the latter half of the 20th century, almost all economies in sub-Saharan Africa introduced some form of minimum wage legislation. These minimum wage laws often do not have national scope and may thus be limited to specific industries or occupations, or jobs in the formal sector.³ In general, the introduction of laws governing wages in sub-Saharan Africa is part of a regulatory 'revival' in low- and middle-income countries (LMICs), where a range of labour regulations aimed at protecting low-paid workers have been adopted (Piore and Schrank 2008). It is important to note, however, that in almost all African economies a small, formal, wage-earning sector coexists with a much larger, informal, non-wage-earning sector. Given that minimum wages usually only cover formal workers, their impact on employment and output levels in the African context is limited.

Figure 1 illustrates the percentage of wage-earning employees in seven African countries alongside average figures for the continent. The data make it clear that it is only in South Africa where formal, salaried employees constitute the majority of the labour force. For the other six countries, salaried employees account for less than half of the labour force.

This limits the impact of minimum wage policy, but as formality and urbanisation intensify in the region, wage regulation will become increasingly relevant. In this article we provide a broad overview of minimum wages in sub-Saharan Africa and examine some descriptive cross-country data.

In sub-Saharan African countries, minimum wage laws are used as a policy tool to achieve various stated objectives. The focus is generally on protecting vulnerable workers from extremely low pay, addressing internal wage inequality through the redistribution of income from employers to low-wage employees and encouraging within-

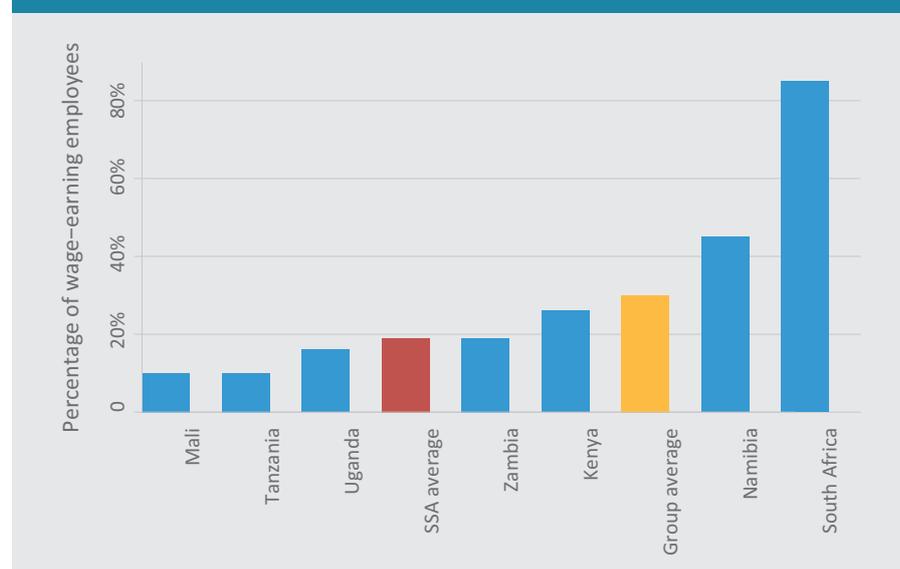
firm labour productivity. In most cases, country-level legislation also recognises the risks associated with instituting a wage floor. These can include increased unemployment in certain settings, adjusted hours of work that disadvantage workers, and the movement of workers from formal to informal employment, leading to more precarious livelihoods. While higher minimum wages might have positive effects by driving demand, they may also have a negative impact on the cost of living in the medium term.

In addition to these well-known issues concerning the impact of the minimum wage, there are additional factors worthy of note in a developing-country setting. First, enforcement and compliance are central to any discussion of the impacts of minimum wages. Indeed, it is a stylised fact that a large gap exists between *de jure* and *de facto* labour regulation in LMICs, and it is arguable that much of the impact of a minimum wage policy is contingent on enforcement and compliance. Simply put, levels of non-compliance with minimum wage laws

are high. The second issue to note is that there is a paucity of available household survey data for many sub-Saharan African countries, and particularly an absence of reliable information on earnings. This makes a rigorous study on the impact of minimum wages difficult, particularly because any attempt to measure it requires pre- and post-intervention data, and these are almost always absent for countries in the region. It is thus the purpose of this article to provide only a basic empirical overview of minimum wage regimes in sub-Saharan Africa.

Empirical work on the impact of minimum wages now constitutes a large and well-established field, dedicated to reviewing the main findings of the literature to date, although this literature remains predominantly focused on evidence from developed countries. Studies on developing countries are expanding but remain relatively scarce, and this is particularly the case for literature specific to sub-Saharan Africa, which covers only Ghana, Kenya, Malawi and South Africa. Results from the developing-country

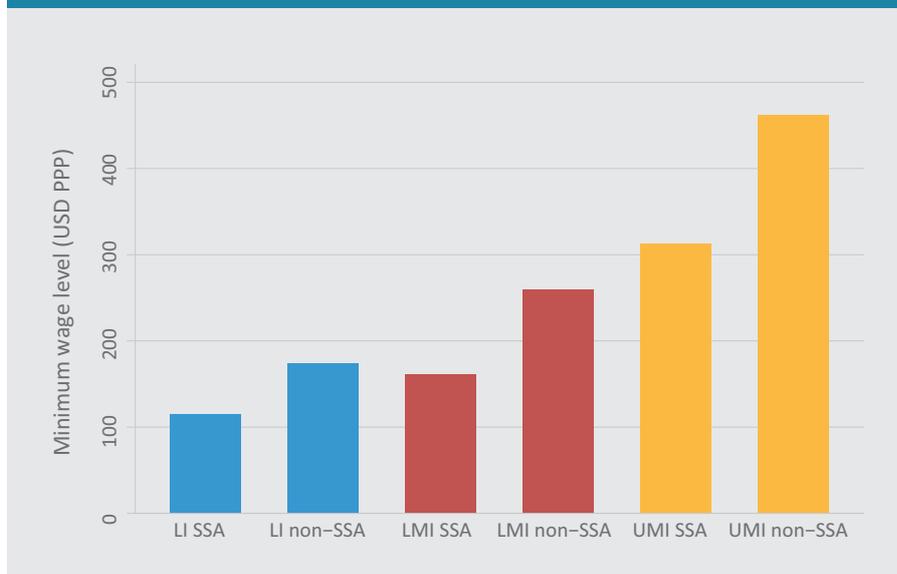
FIGURE 1: Wage-earning employees as a share of total employment



Source: Borat, Kanbur, and Stanwix (2015).

“The level at which a country sets minimum wages appears to be linked to country income levels.

FIGURE 2: Monthly minimum wages by country income group, SSA and non-SSA countries (USD PPP)



Source: Borat, Kanbur, and Stanwix (2015).

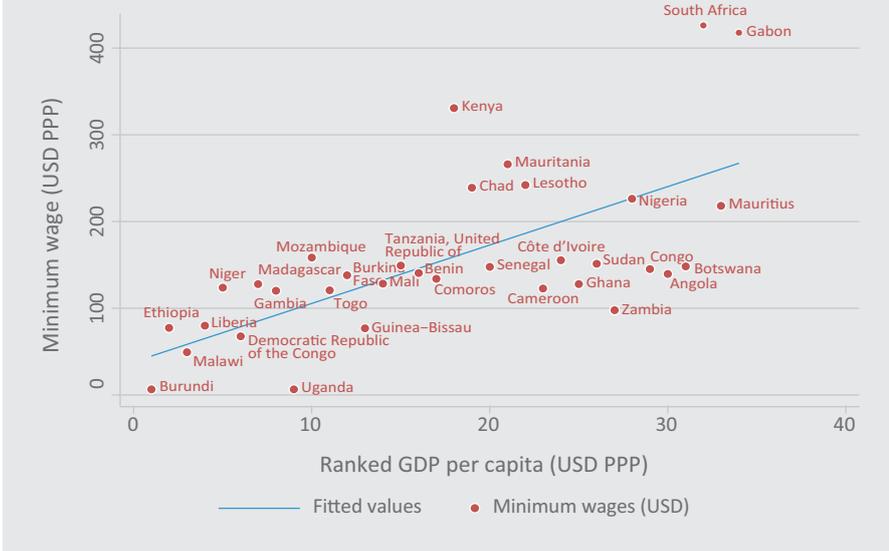
literature are not easily generalisable, but the majority of published findings reveal that minimum wages have either no effect or small negative effects on employment. The various results are reviewed in more detail in Borat, Kanbur, and Stanwix (2015), but for the purposes of this article, it will suffice to say that the impact of introducing or increasing a minimum wage is contingent on a variety of factors, including: the level of the minimum wage relative to average wages; the size of the minimum wage increase; the sector being considered (for example, whether it is a tradeable or non-tradeable sector); the timing of wage changes relative to general economic conditions; the enforcement regime; and the extent of compliance. While increases in minimum wages have not generally had large negative effects on employment, this cannot be said to be the case regardless of how much a minimum wage is raised. After a certain level, a minimum wage will begin to negatively affect employment, and this level varies according to different geographical regions, sectors and companies.

The level at which a country sets minimum wages appears to be linked to country income levels. To examine this, we have grouped 104 countries into three income categories: low-income (LI), lower-middle-income (LMI) and upper-middle-income (UMI), and examine minimum wage levels

across sub-Saharan African and non-sub-Saharan African countries. Figure 2 plots the results, which reveal substantial differences both across the three country income groups within sub-Saharan Africa and compared to non-sub-Saharan African countries. As expected, minimum wage levels are positively correlated with per capita income levels. In addition, our results suggest that minimum wage levels in sub-Saharan Africa are on average lower than in countries elsewhere in the world with the same level of income.⁴

Figures 3 and 4 highlight the relationship between country income levels and minimum wage levels. They plot levels of gross domestic product (GDP) per capita against the level of minimum wage for the 104 countries, divided into sub-Saharan Africa and non-sub-Saharan Africa, showing a strong relationship between both variables. Something similar was found in the relationship between poverty lines and consumption levels across countries: national poverty lines vary according to average consumption levels. Economic development is thus positively related to the country-based poverty line. This relationship appears to hold for minimum wage levels, where for a sample of African and non-African developing countries minimum wage

FIGURE 3: Monthly minimum wages and GDP per capita (USD PPP), Africa



Source: Bhorat, Kanbur, and Stanwix (2015).

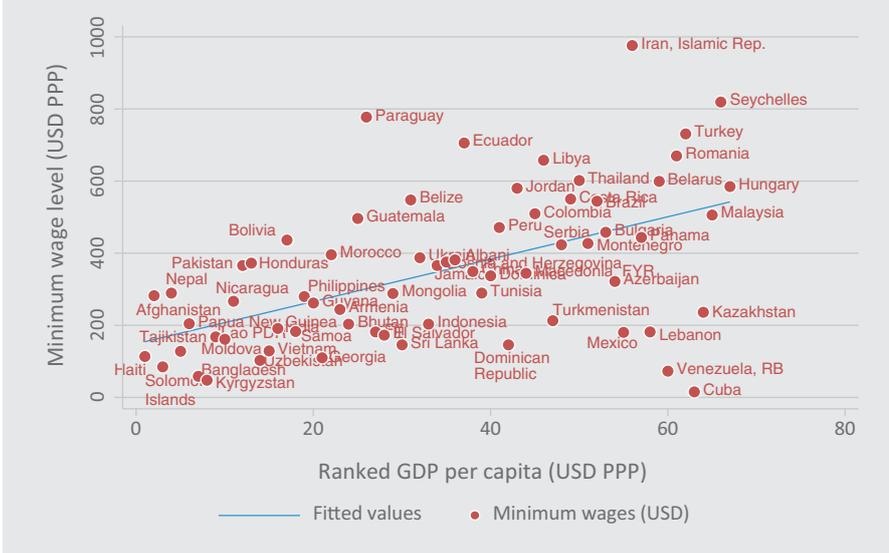
levels are adjusted upwards along with increases in GDP per capita.

Beyond this aggregate relationship, the data can be used to reveal more about the minimum wage levels set by sub-Saharan African countries. We use an interesting approach to measure the tendency of an economy to set a higher minimum wage

relative to other economies: if the ratio of the minimum wage in country (*i*) relative to that of the country with the highest minimum wage (*country max*) is higher than the ratio of the mean wage in *i* to *country max*, then this would reflect a relatively pro-minimum-wage policy environment. We set up a ratio to measure this minimum wage policy bias, which we term W_p ,

In Figure 5 (see page 44), we provide estimates of W_p for a sample of 66 developing countries. An example from the data: Chad's minimum wage mean is 22 per cent of the region's highest minimum wage. Yet its mean wage nationally is only 15 per cent of the region's highest mean wage. This suggests a relatively pro-minimum-wage policy in Chad when compared with

FIGURE 4: Minimum wages and GDP per capita (USD PPP), non-African developing countries



Source: Bhorat, Kanbur, and Stanwix (2015).

“ Minimum wage levels in sub-Saharan Africa are on average lower than in countries elsewhere in the world with the same level of income.

“ National poverty lines vary according to average consumption levels. Economic development is thus positively related to the country-based poverty line.

“ Low-income African economies are relatively more pro-minimum wage in their policymaking when compared with the mean relative wages on the continent.



Photo: Dominic Chavez/World Bank. Factory workers producing shirts. Accra, Ghana, 2015 <<https://goo.gl/hBuFg6>>.

its mean wage differential, relative to other developing countries. Put in numerical terms using the formula presented above, Chad's W_p value is 1.45, where a value over 1 suggests a pro-minimum-wage policy.

The data suggest that most countries in our sample have a W_p ratio of less than 1, and countries in sub-Saharan Africa do not appear to be large outliers in this regard. Indeed, the average figures for each region suggest that the East Asia/Pacific (EAP), Latin America and the

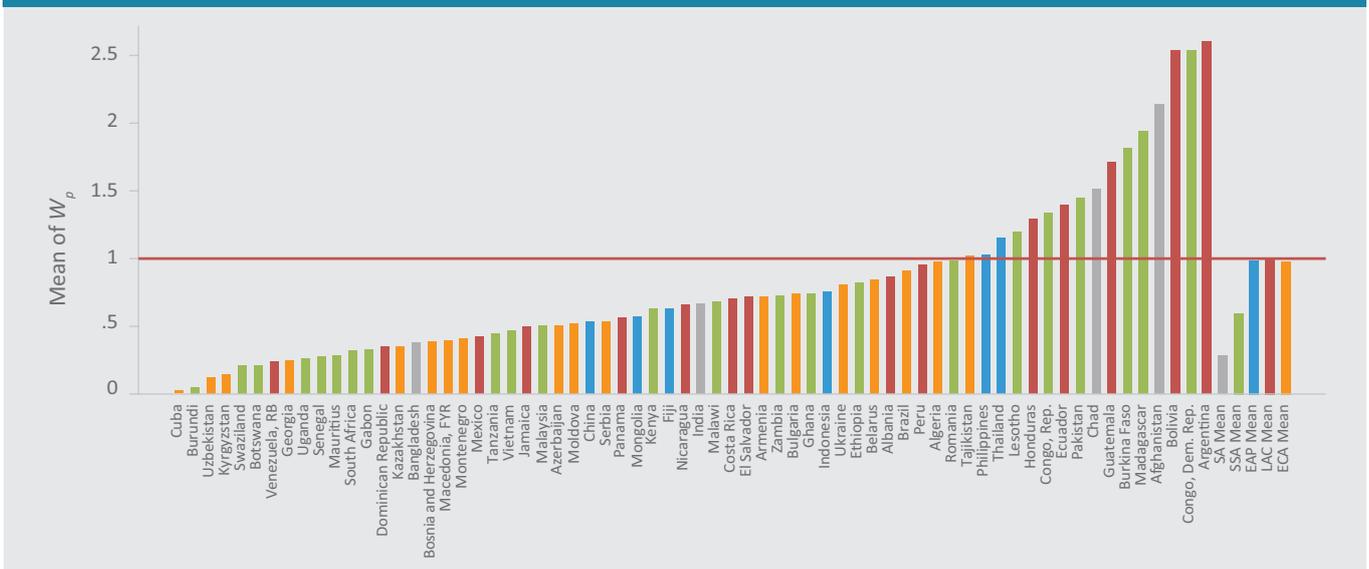
Caribbean (LAC) and Europe and Central Asia (ECA) regions all have higher W_p ratios than sub-Saharan Africa. The mean for the overall sample is 0.80.

Figure 6 focuses only on sub-Saharan Africa and presents the mean and median W_p figures by country income group. There are two notable features here. First, the graph shows that the ratio of minimum wages in sub-Saharan Africa relative to the maximum minimum wage on the African continent is greater than

this ratio for mean wages. Second, the LIC mean and median values are higher than both the LMI and UMI sample of countries. This would suggest that despite absolute minimum wage levels increasing with gross national income (GNI) per capita, low-income African economies are relatively more pro-minimum wage in their policymaking when compared with the mean relative wages on the continent.

Another common measure of the impact of the minimum wage is the Kaitz

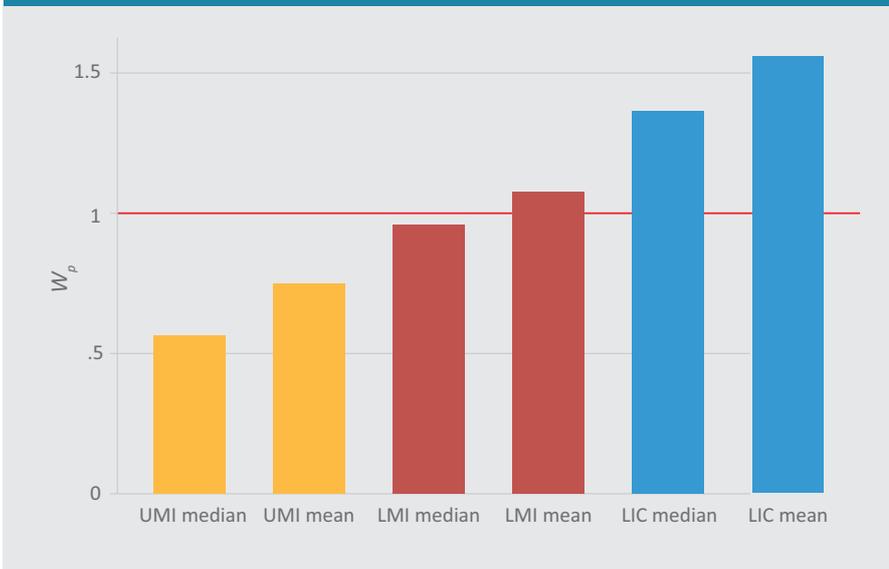
FIGURE 5: Degree of relative minimum wage policy bias by country



Note: Sample based on 66 countries, using the latest available data.

Source: Borhat, Kanbur, and Stanwix (2015).

FIGURE 6: Average W_p values for SSA by country income group



Source: Borhat, Kanbur, and Stanwix (2015).

ratio—the ratio of the minimum wage to the mean wage. Kaitz ratios for African countries range from 0.03 in Burundi to 1.27 in the Democratic Republic of the Congo. The overall mean for sub-Saharan Africa is instructive: minimum wages in the region are set at 37 per cent of the mean wage and at 28 per cent of the median wage. The Kaitz ratio also varies by income classification—while the Kaitz is 0.28 at the mean for UMI African economies, it is 0.31 for LMI economies and 0.46 for LICs. Simply put, low-income African countries are setting higher minimum wages relative to their domestic mean wages, compared with both UMI and LMI economies in the region. When compared with other regions, however, the data show that mean and median Kaitz ratios are low in sub-Saharan Africa. Indeed, the mean and median Kaitz ratios of other regions relative to that of sub-Saharan Africa show that only the ECA region has a lower Kaitz mean. This provides some support to the evidence presented in Figure 4 (see page 43).

The cross-country evidence on minimum wages in sub-Saharan Africa indicates, first, that if we simply group countries according to broad income levels, minimum wages in sub-Saharan Africa generally appear to be set lower than the rest of the developing world. Second, the evidence illustrates a

positive and linear relationship between GDP per capita and the level at which the minimum wage is set. Consistent with the positive relationship between country poverty lines and in keeping with other developing countries, African economies exhibit an upward trend in the value of the minimum wage as the economies in the region grow and develop. Third, when assessing the extent to which African governments may be more pro-minimum wage in setting wage levels than other regions, evidence indicates that there is no tendency towards progressive minimum wage policy in our sample. Indeed, the regional Kaitz ratios are lower for sub-Saharan Africa than for any other region except ECA. Finally, it becomes clear from examining the Kaitz index that while sub-Saharan African economies in general are setting minimum wages at just over a third of mean wages, substantially higher ratios are observed for LICs in the region.

It is evident that research in this area is still incipient, and this article has attempted to broadly outline the nature and extent of minimum wages on the continent. While work on minimum wages is fairly mature in many Organisation for Economic Co-operation and Development (OECD) countries, our understanding of minimum wage policy and its impact in sub-Saharan Africa is not. This is largely due to a severe

“African economies exhibit an upward trend in the value of the minimum wage as the economies in the region grow and develop.”

lack of crucial data. The release of country-level earnings and employment data at regular intervals lies at the heart of a future, country-focused minimum wage research agenda for Africa. ●

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Piore, M. J., and A. Schrank. 2008. “Toward managed flexibility: The revival of labour inspection in the Latin world.” *International Labour Review* 147(1).

1. University of Cape Town.
2. Cornell University.
3. The percentage of countries in Africa with multiple minimum wage systems, relative to those with a single minimum wage, is higher than in any other region in the world (Bhorat, Kanbur, and Stanwix 2017).
4. It should be noted that our sample of LICs outside sub-Saharan Africa is limited to four, and our sample of UMICs in sub-Saharan Africa is limited to five.





Statutory wage floors have made a return to the forefront of social policy debate. The minimum wage usually plays an important role in supporting the incomes of those in the lower part of the income distribution.

”

Patrick Belser and Ding Xu

In much of Latin America, minimum wages have doubled or tripled over the last decade or two.

”

Sergei Soares and Joana Silva

Minimum wages are less likely to increase incomes of poor families, because the policy targets low-wage workers, not low-income families.

”

David Neumark



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ISSN: 2318-8995



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