International Labour Organization

ILO Flagship Report

Global Wage Report

2020–21

Wages and minimum wages in the time of COVID-19

Global Wage Report

2020–21

Wages and minimum wages in the time of COVID-19

International Labour Office • Geneva

Global Wage Report 2020–21: Wages and minimum wages in the time of COVID-19
International Labour Office – Geneva: ILO, 2020.

ISBN 978-92-2-031948-2 (print)
ISBN 978-92-2-031945-1 (web pdf)

wages / COVID-19 / wage differential / minimum wage / wage policy / gender equality

13.07

ILO Cataloguing in Publication Data

Cover photo credits: © Luke Jones on Unsplash

Illustrations: © José Cardoso

Produced by the Publications Production Unit (PRODOC) of the ILO.

Graphic and typographic design, manuscript preparation, copy-editing, layout and composition, proofreading, printing, electronic publishing and distribution.

The ILO endeavours to use paper sourced from forests managed in an environmentally sustainable and socially responsible manner.

Code: DTP/WEI/ICA

Preface

The world has been profoundly affected by the COVID-19 pandemic. More than a million lives have been lost, social and economic activity has been disrupted, and the livelihoods and well-being of millions of people worldwide are threatened. The ILO has estimated that the equivalent of 345 million full-time jobs were lost in the third quarter of 2020.[1] In spite of the promising development of vaccines, the crisis is far from over.

This year's ILO *Global Wage Report* – the seventh in the series – presents the emerging empirical evidence of the effects of the crisis on wages. Part I of the report documents a downward trend in the level and/or growth rate of average wages in two thirds of the countries for which data from 2020 were available. Ten years ago the second report in this series looked at wage policies at the time of the global financial and economic crisis.[2] This time – much more so than during the 2008–10 period – governments have taken unprecedented action to counteract the economic and labour market impact, including through temporary wage subsidies, extending social protection and providing support to keep businesses afloat. Likewise, central banks across the world have intervened with expansionary monetary policies to stimulate economies. These measures have allowed millions of wage earners to retain all or part of their incomes.

Despite these measures, the economic and employment consequences of the COVID-19 crisis are likely to exert further downward pressure on wages in the near future. Hence, if economies are to return to a path towards sustained and balanced economic growth, wage developments will need to take into account the need both for incomes and aggregate demand to be supported and for enterprises to remain successful and sustainable. Constructive social dialogue will be key to success in achieving this goal.

In March 2020 the UN Secretary-General called for action to mitigate the impact of the pandemic on people's livelihoods and well-being. He also emphasized the need to build back better. If we are to lay the foundations for a "better normal", integrated policy responses will be required that focus on people and on what they need in order to build, or rebuild, their livelihoods and make a decent life. The 2019 ILO Centenary Declaration for the Future of Work, with its human-centred agenda, speaks directly to this need.

Part II of the *Global Wage Report* follows up on the ILO Centenary Declaration's call for "an adequate minimum wage, statutory or negotiated". It provides an empirically based description of minimum wage policies across the world and shows how minimum wages, when well-designed and applied, can become an effective tool to protect workers from unduly low wages while also reducing inequality.

Currently, 90 per cent of ILO Member States have minimum wage policies in place, either statutory or negotiated through collective bargaining. However, 266 million wage earners are paid less than the minimum wage, either because they are not legally covered or because of non-compliance. The report analyses the characteristics of minimum wage and sub-minimum wage earners and finds that women, young workers, workers with lower education, rural workers, and workers with dependent children are all over-represented. These are some of the groups most vulnerable to the current labour market crisis and minimum wages should play a vital role in enabling them to weather such difficult times. Unfortunately, minimum wages are not always set at adequate levels or in consultation with the social partners and are not always adjusted regularly.[3] Most of the workers receiving less than the minimum wage are in the informal economy where they are not protected, or only partly so, by legal and regulatory frameworks.

---

[1] ILO, *ILO Monitor: COVID-19 and the world of work. Sixth edition,* 2020.

[2] ILO, *Global Wage Report 2010/11: Wage policies in times of crisis*, 2010.

[3] As provided for under the ILO's Minimum Wage Fixing Convention, 1970 (No. 131).

This highlights the need for minimum wages to be accompanied by measures to formalize the informal economy, if they are to achieve their full potential as a policy device.

Part III of the *Global Wage Report* suggests a number of policy measures that can help implement minimum wages effectively. Together with the empirical evidence presented earlier in the report, these are intended to provide policymakers, social partners, academics and stakeholders with a valuable source of information and contribute to the urgently needed, human-centred recovery from COVID-19 in the world of work. Appropriate and time-bound wage policies will play an important role in achieving this goal, and the ILO stands ready to provide its support to Member States.

Guy Ryder
ILO Director-General

Acknowledgements

The report was prepared by staff of the Inclusive Labour Markets, Labour Relations and Working Conditions Branch (INWORK) of the ILO with contributions from other ILO colleagues in Geneva and field offices, under the responsibility of Philippe Marcadent, Chief of INWORK. Patrick Belser, Nicolas Maitre, Rosalia Vazquez-Alvarez, Khalid Maman Waziri, Ding Xu and Athanasia Zarkou were the main authors of the report. Patrick Belser provided overall coordination of the report. Rosalia Vazquez-Alvarez coordinated the research on the potential of the minimum wage to reduce inequality, with support from Athanasia Zarkou. Contributions to different parts of the report were provided by ILO specialists, including Sevane Ananian (Cairo), Florence Bonnet (Geneva), Xavier Estupiñan (New Delhi), Claire Hobden (Geneva), Daniel Kostzer (Bangkok), Andres Marinakis (Santiago de Chile), Adriana Mata-Greenwood (Geneva), David Mosler (Geneva) and Mariko Ouchi (Budapest). Chris Edgar coordinated the editing, publication and anonymous peer review of the report. The publications production service team (PRODOC) provided production project management, graphic design, including cover design, typesetting, copy-editing and proofreading. Gillian Somerscales copy-edited the initial draft. Chris Edgar, Inês Gomes and Yann Hakam produced the infographics published in conjunction with this report. Claire Piper provided secretarial support. Our special thanks go to Manuela Tomei, Director of the ILO Conditions of Work and Equality Department.

Specific contributions

Part II of the report is based on data cleaned and prepared by Maite Martinez Granados, Rasha Ramadan, Anna Lukyanova, Roxana Maurizio and Hanan Nazier. The chapter in Part I providing estimates of the labour market impacts of the COVID-19 crisis in Europe is based on a background analysis by the Institute for Employment Studies (IES). Adam Elsheikhi and Erika Chaparro Perez contributed to the literature review in Part II.

We wish to thank Professors Diego Sanchez Ancochea (University of Oxford), Jon Bakija (William's College), Charles M. Beach (Queen's College), Evelyn Z. Brodkin (University of Chicago), Matthew Dimick (State University of New York, Buffalo), Dennis Gilbert (Hamilton College), Janet Gornick (Graduate Institute of the City University of New York), Lawrence Kahn (Cornell University), Frank Levy (MIT), Margaret Denton (McMaster University), Doug May (Memorial University of Newfoundland), Ushnik Mukherjee (University of Waterloo), Richard J. Murnane (Harvard University), David Rothwell (Oregon State University), Christian Weller (University of Massachusetts) and Paul Wolfson (Tuck School of Business) for their specific technical assistance on the measurement of inequality.

Special thanks

Our special thanks go to all the national statistical offices which assisted us with our data collection efforts. We would also like to thank the entire team at ILO/SIALC (Labour Analysis and Information System for Latin America and the Caribbean) in Panama, in particular Bolívar Pino, for providing data on wages for Latin America and the Caribbean.

We would also like to thank the following people for their valuable input and comments: Samuel Asfaha, Christina Behrendt, Marva Corley-Coulibaly, Marcelo Cuautle Segovia, Angela Doku, Rosina Gammarano, Sajid Ghani, Roger Gomis, Tariq Haq, Yasuhiko Kamakura, Steven Kapsos, Stefan Kühn, Dong Eung Lee, Hannah Liepmann, Basha Marafie, Rossana Merola, Niall O'Higgins, Rafael Peels, Yves Perardel, Ira Postolachi, Shahrashoub Razavi, Diego Rei, Catherine Saget, Geraldine Scott-Scrivens, Pelin Sekerler Richiardi, Roberto Villamil, in addition to government officials and employer and union representatives from Member States, for their input in enriching this report.

Our particular thanks go to two anonymous referees who peer-reviewed the report as well as to all internal peer reviewers from various departments of the ILO.

Part of the report is based on data from Eurostat (European Union Statistics on Income and Living Conditions (EU-SILC) survey, 2018). We thank Eurostat for providing these data under contract number RPP_28_2020_EUSILC_SES_HBS_ILO_ID_2013.2018. The responsibility for all conclusions drawn from these data lies entirely with the authors.

Contents

List of boxes

List of figures

Table

Abbreviations

EU	European Union
EU-SILC	European Union Statistics on Income and Living Conditions
GDP	gross domestic product
IMF	International Monetary Fund
ISCO	International Standard Classification of Occupations
LCU	local currency unit
NSO	national statistical office
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
SDG	Sustainable Development Goal
SIALC	Sistema de Información y Análisis Laboral de América Latina y el Caribe (Labour Analysis and Information System for Latin America and the Caribbean) [ILO]
SMAG	*salaire minimum agricole garanti* (minimum wage for agricultural workers)
SMIG	*salaire minimum interprofessionnel garanti* (interoccupational minimum wage)
UN	United Nations
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
WHO	World Health Organization

Executive summary

Part I. Recent trends in wages

In the four years preceding the COVID-19 pandemic (2016–19), global wage growth fluctuated between 1.6 and 2.2 per cent; when China is excluded from the sample, real wage growth in those four years fluctuated at a lower level, between 0.9 and 1.6 per cent. In advanced G20 economies, real wage growth fluctuated between 0.4 and 0.9 per cent, while rising more rapidly – between 3.5 and 4.5 per cent annually – in emerging G20 countries. Between 2008 and 2019, real wages more than doubled in China. Among advanced G20 economies, wage growth accelerated the most (by 22 per cent) in the Republic of Korea, followed by Germany (15 per cent). By contrast, real wages declined in Italy, Japan and the United Kingdom.

In the first half of 2020, as a result of the COVID-19 crisis, a downward pressure on the level or growth rate of average wages was observed in two thirds of the countries for which recent data are available; in other countries average wages increased, largely artificially as a reflection of the substantial job losses among lower-paid workers. In times of crisis, average wages can be significantly skewed by sharp changes in the composition of employment – what is known as the "composition effect".[1] In Brazil, Canada, France, Italy and the United States, average wages have been rising markedly because of job losses mainly affecting those at the lower end of the wage scale. In contrast, a downward pressure on average wages has been observed in Japan, the Republic of Korea and the United Kingdom. In countries where strong job retention measures have been introduced or extended to preserve employment, surges in unemployment have been moderated, such that the effects of the crisis may have been more apparent through a downward pressure on wages than through massive job losses.

The impacts of the crisis on total wages have fallen differently on men and women, the latter being disproportionately affected. Looking at a selection of European countries, the report estimates that without the payment of wage subsidies, workers would have lost 6.5 per cent of their total wage bill between the first and second quarters of 2020. For women, the total wage bill would have declined by 8.1 per cent, compared to a decline of 5.4 per cent for men. Such a discrepancy was mainly caused by reduced working hours, more than by the difference in the number of lay-offs. The wage bill lost as a result of the drop in working hours was 6.9 per cent for women compared to 4.7 per cent for men.

The crisis disproportionately affected lower-paid workers, thereby increasing wage inequalities. Studies have shown that in many countries, reductions in hours worked have impacted lower-skilled occupations – in particular those in elementary work – more than higher-paying managerial and professional jobs. For selected European countries, the report estimates that without wage subsidies the lowest-paid 50 per cent of workers would have lost an estimated 17.3 per cent of their wages, which is much more than the estimated 6.5 per cent decline for all workers. Consequently, the share of the total wage bill received by those in the bottom 50 per cent of the wage distribution – a measure of inequality – would have fallen by about 3 percentage points, from 27 to 24 per cent on average of the total wage bill, while the share of the upper half of the distribution would have risen from 73 to 76 per cent.

[1] When most of those who lose their jobs are low-paid workers, this automatically increases the mean wages of remaining employees.

However, temporary wage subsidies have enabled many countries to compensate part of the wage bill that would have been lost, and to lessen the effect of the crisis on wage inequality. Many countries across the world have either introduced or expanded existing wage subsidies in order to safeguard jobs during the crisis. In a selection of ten European countries for which data are available, the report estimates that wage subsidies have permitted to compensate 40 per cent of the total wage bill loss, including 51 per cent of the wage bill loss caused by the reduction in working hours. Wage subsidies have also permitted to moderate the effects of the crisis on earnings inequalities because the main beneficiaries were those who have been more severely hit by the crisis, namely workers in lower-paying jobs.

With a view to supporting low-paid workers, many countries with regular minimum wage adjustments went ahead with planned increases in the first half of 2020. Analysis reveals that in the 60 countries that adjust minimum wages on a regular basis, all the adjustments scheduled for the first quarter of 2020 took place as expected, whereas 6 out of 9 countries that usually adjust in the second quarter kept to the scheduled adjustment date, in the midst of the crisis. Among the 87 countries that adjust minimum wages irregularly, 12 increased their minimum wages in the first half of 2020 – a lower number than in the previous year. This suggests that the COVID-19 crisis may have induced some governments to postpone potential adjustments this year.

▸ Part II. Minimum wages and inequality

Turning its focus to the topic of minimum wages, the report shows that minimum wages, statutory or negotiated, exist in 90 per cent of the 187 ILO Member States. Minimum wage systems differ widely across countries and range from simple to very complex. Globally, around half of the countries that have a statutory minimum wage have a single national minimum wage rate; the other half have more complex systems with multiple minimum wage rates, determined by sector of activity, occupation, age of employee or geographical region. Different systems are compatible with the Minimum Wage Fixing Convention, 1970 (No. 131), which calls for a broad scope of application, full consultation with the social partners, levels that take into account the needs of workers and their families and economic factors, adjustments from time to time, and measures to ensure effective application.

Globally, an estimated 327 million wage earners are paid at or below the applicable hourly minimum wage. This figure represents 19 per cent of all wage earners, and includes 152 million women. Although, in absolute number, more men than women earn minimum wages or less, women are over-represented among this category of workers: while women make up 39 per cent of the world's employees paid above the minimum wage, they represent 47 per cent of the world's sub-minimum and minimum wage earners.

The extent to which a minimum wage may reduce wage and income inequality depends on at least three key factors: the "effectiveness" of minimum wages, the level at which minimum wages are set, and the characteristics of minimum wage earners. Although the primary purpose of minimum wages is to protect workers against unduly low pay, minimum wages can also contribute to reducing inequality under certain conditions. The first condition comprises the extent of the *legal coverage* and the *level of compliance* – which, when combined, may be called the "effectiveness" of minimum wages. Second, the *level* at which minimum wages are set plays a crucial role. Finally, the potential of minimum wage systems for reducing inequality depends on the *structure of a country's labour force,* particularly whether workers with low labour incomes are wage workers or self-employed, and the *characteristics of the beneficiaries* of the minimum wage – in particular, whether they live in low-income families.

The effectiveness of minimum wages

Out of the estimated 327 million wage earners who are paid at or below the minimum wage, 266 million wage earners around the world earn less than existing hourly minimum wages, either because they are not legally covered or because of non-compliance. The groups most frequently excluded from legal coverage of minimum wage systems are agricultural workers and domestic workers. The report shows that, as of 2020, an estimated 18 per cent of countries with statutory minimum wages exclude either agricultural workers, domestic workers or both from minimum wage regulations. One of the most significant indicators of non-compliance is a high incidence of informality, which poses a major challenge for the rights of workers generally, including for the enforcement of minimum wages. In countries with high levels of informality, if minimum wages are to be effective, they need to be accompanied by measures to encourage formalization. Other measures include, for example, targeted labour inspections, awareness-raising campaigns, as well as efforts to raise productivity. Indeed, low productivity is one of the drivers of informality and has repercussions for the level of non-compliance with minimum wage legislation.

The adequacy of minimum wage levels

As prescribed by the Minimum Wage Fixing Convention, 1970 (No. 131), setting an adequate minimum wage level should involve social dialogue and take into account the needs of workers and their families as well as economic factors. Results show that minimum wages are set, on average, at around 55 per cent of the median wage in developed countries and at 67 per cent of the median wage in developing and emerging economies. Among developed countries, a large majority of countries have minimum wages set somewhere between 50 per cent and two thirds of the median wage. In developing and emerging economies, minimum-to-median wage ratios range from 16 per cent in Bangladesh to 147 per cent in Honduras. Globally, the median value of gross minimum wages for 2019 is equal to US$486 PPP per month, meaning that half of the countries in the world have minimum wages set lower than this amount and half have minimum wages set higher. Some countries have minimum wages below the poverty line.

Sufficiently frequent adjustment is crucial to maintain minimum wages at an adequate level, and a very low level often reflects failure to adjust rates regularly over time. In practice, only 54 per cent of countries with statutory minimum wages adjusted their minimum wages at least every two years during the period 2010–19. At the global level, 114 countries out of the 153 for which data are available (approximately 75 per cent) have seen their minimum wages grow in real terms between 2010 and 2019. Real annual minimum wage growth was, on average, 1.1 per cent in Africa, 1.8 per cent in the Americas, 2.5 per cent in Asia and 3.5 per cent in Europe and Central Asia.

The characteristics of minimum wage earners

Globally, the majority of wage earners paid at or below the hourly minimum wage are located in the lower tail of the distribution of household incomes, but the characteristics of minimum wage earners vary by country and by region. In Europe, for instance, on average, 69 per cent of all sub-minimum and minimum wage earners are in the lower half of the income distribution. In addition, sub-minimum and minimum wage earners located in poorer households are more likely to be older and living as single parents with dependent children than those located in richer households. However, in Africa only 52 per cent of all sub-minimum and minimum wage earners are in the lower half of the income distribution. In developing countries, many workers with low incomes are self-employed rather than wage earners. This points to the fact that wage employment tends to increase average household income, and that in developing countries minimum wages should be accompanied by measures to create wage employment for workers in poor households.

Women are generally over-represented among low paid workers and the literature shows that, in many cases, minimum wages can narrow pay gaps between men and women. In all regions, the proportion of women among those earning the minimum wage or less is larger than their share among those earning more than the minimum wage. Similarly, young workers (aged under 25), workers with lower education levels and rural workers are all over-represented, indicating that minimum wages can also reduce pay gaps between these and other groups. Regarding labour characteristics, the report shows that sub-minimum and minimum wage earners are more likely to have temporary contracts and part-time jobs than those paid at higher levels; they also, on average, work more hours.

Results from a simulation exercise

Using micro data for a set of 41 countries covering Africa, Asia, Europe and Latin America, and for which wage and income information were available, simulations suggest that, whatever the measure of inequality used, in practically all the countries studied, improving the legal coverage and the compliance with the minimum wage and raising the level, for example, up to two thirds of the median have the potential to reduce income inequality. Looking at the Palma ratio (the income share of the top 10 per cent divided by the income share of the bottom 40 per cent), when both full compliance and an increased level are assumed, inequality declines by between 3 and 10 per cent in a majority of countries. However, in low- and middle-income countries, where informal work is prominent, if full compliance with the minimum wage does not extend to wage employees in informal jobs, the potential reduction of inequality becomes much lower.

While in some countries minimum wage systems may already be achieving most of their inequality-reducing potential, in others there is room for improvement. For instance, in some countries, such as Ecuador and Hungary, the potential for reducing income inequalities through an increase in compliance is relatively high. In another set of countries including Estonia, Uruguay and Viet Nam, there is a high potential for reducing income inequalities through an increase in the minimum wage level, taking into account the needs of workers and their families as well as the economic factors. Whether by increasing effectiveness through measures aimed at strengthening enforcement, formalizing jobs or broadening legal coverage, or by setting adequate levels through a balanced and evidence-based approach, policy measures can go a long way towards ensuring that minimum wage systems achieve their full potential.

▸ Part III. Wage policies for a human-centred recovery

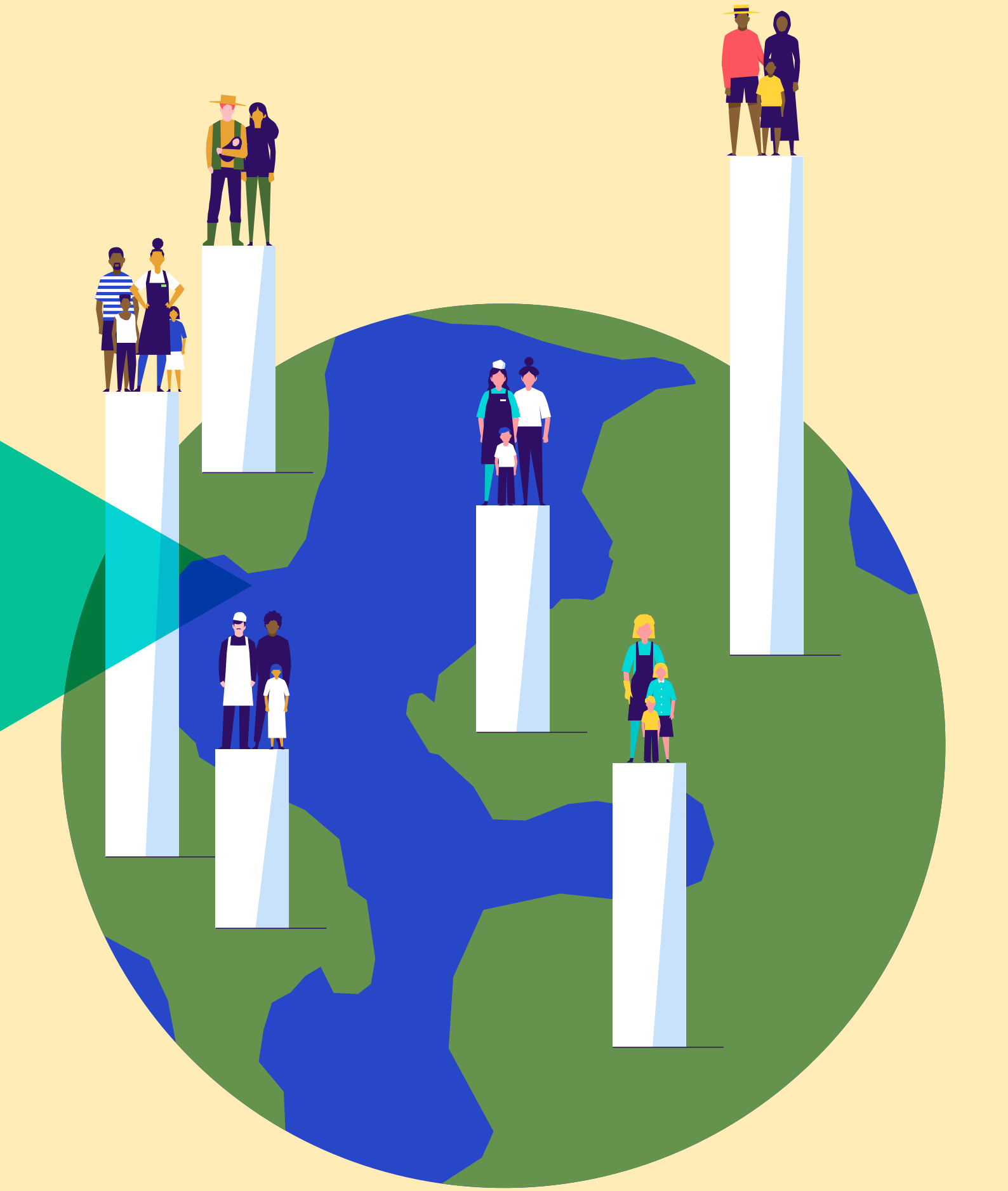
Adequate and balanced wage policies, arrived at through strong and inclusive social dialogue, are needed to mitigate the impact of the crisis and support economic recovery. In the near future, the economic and employment consequences of the COVID-19 crisis are likely to exert massive downward pressure on workers' wages. In this context, adequately balanced wage adjustments, taking into account relevant social and economic factors, will be required to safeguard jobs and ensure the sustainability of enterprises, while at the same time protecting the incomes of workers and their families, sustaining demand and avoiding deflationary situations. Adjustments to minimum wages should be carefully balanced and calibrated. While adjusting rates to compensate for price inflation may be essential for ensuring that low-paid workers and their families are able to maintain their living standards, in the particular circumstances of some countries it may be difficult or risky to implement larger increases. Collective bargaining that takes into account the particular circumstances of specific enterprises or sectors is best placed to strike the right balance, and to re-evaluate the adequacy of wages in some mostly

female-dominated low-paid sectors which have proved to be essential and of high social value during the current crisis. Wage subsidies, which have played a large role in mitigating the impact of the crisis by protecting enterprises and workers, may need to be prolonged in the second wave of lockdowns, taking into account cost implications.

In planning for a new and better "normal" after the crisis, adequate minimum wages – statutory or negotiated – could help to ensure more social justice and less inequality. The 2019 ILO Centenary Declaration for the Future of Work, which calls for a human-centred approach to the future of work, emphasizes the importance of adequate minimum wages, statutory or negotiated. The empirical analyses presented in Part II of this report show that when minimum wages are set at an adequate level, legally cover those employees most likely to be in low-paid jobs, and are well-enforced, they not only help protect workers against unduly low pay but also contribute to reducing inequality. The details of what constitutes an adequate minimum wage, including an adequate level thereof, should be agreed at national level through evidence-based social dialogue, in line with the Minimum Wage Fixing Convention, 1970 (No. 131**).** Furthermore, to be most effective, minimum wages must be accompanied by other policy measures that support the formalization of the informal economy, the creation of paid employment and the growth of productivity among sustainable enterprises. Minimum wages are only one in a set of policies – which include social protection and fiscal policies – that can be used to promote economic growth with social justice.

Part I

Recent trends in wages



1 Introduction

The year 2020 has been marked by the outbreak of the COVID-19 pandemic, which rapidly generated an unprecedented global economic and labour market crisis with large losses in employment and working hours. As of November 2020, more than 45 million confirmed COVID-19 cases had been reported around the world, along with more than 1.1 million deaths from the disease.[1] The pandemic put enormous pressure on public health services and their employees, a majority of whom are women, and many of whom became infected by the virus. As the virus spread around the world, so did its economic repercussions. Workplaces were closed, enterprises were shut down, and millions of workers lost all or part of their incomes for weeks or months. The scale of these effects is evidenced by the estimated 12.1 per cent loss in working hours globally – equivalent to 345 million full-time jobs – for the third quarter of 2020 in comparison to the fourth quarter of 2019 (ILO 2020a). A 10.7 per cent decline in global labour income – equivalent to US$3.5 trillion – has been estimated for the period covering the first three quarters of 2020 in comparison with the same period of 2019. Workers in the informal economy suffered particularly badly: it is estimated that 1.6 billion informal economy workers – 76 per cent of world's informal employment – experienced significant impacts from the crisis (ILO 2020b).[2]

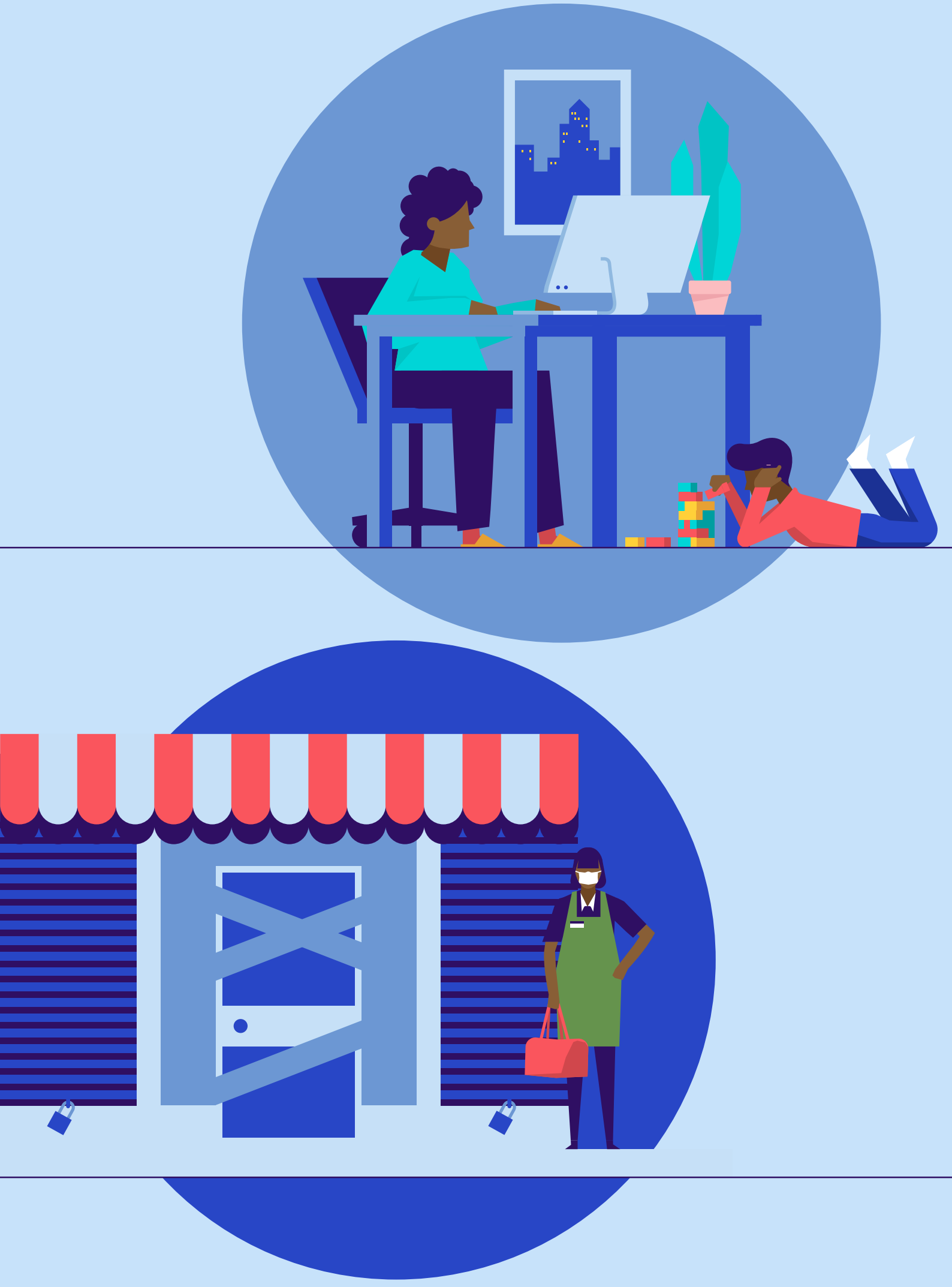
Many countries implemented an unprecedented range of policy measures, without which the economic and labour market impact of the crisis would have been far worse. Wage subsidies and income support measures were complemented by more general measures to stimulate the economy and prevent large-scale bankruptcies: these included fiscal and monetary policies as well as targeted measures such as the establishment of credit facilities, the postponing of tax payments and social security contributions, and the deferral of enterprises' rent and utility bills. Initiatives were taken to extend protection to a large number of vulnerable workers and enterprises. However, notwithstanding a number of initiatives taken in support of workers and enterprises in the informal economy, in most countries wage subsidies or credits were directed towards the formal economy (Fasih, Patrinos and Shafiq 2020).

In these exceptional circumstances, what have been the effects of the COVID-19 crisis on wages, and to what extent have wage subsidies and other policy measures contributed to the stability of workers' wages and incomes? To document recent trends in wages, this report relies, to the extent possible, on data collected and published by national statistical offices. Some national statistical offices implemented new survey methods to assess the impact of the crisis on labour markets. In other countries, however, data are published only after a relatively long time lag, such that the exact impact of COVID-19 on wages in these contexts remains unknown. The scarcity of national statistics across the world also makes it difficult to make an accurate assessment of the impact of wage subsidies and other policy measures on wage trends. This report accordingly relies on a variety of sources and uses a combination of methodologies, including simulations based on models and assumptions that are described in the report and its appendices.

---

[1] World Health Organization (WHO) Coronavirus Disease (COVID-19) Dashboard, https://covid19.who.int/.

[2] In this report, the terms "wage employees" and "wage earners" are used interchangeably to denote all paid employees, irrespective of their contractual arrangements, in both the formal and the informal economy.



2 The global economic and labour market context

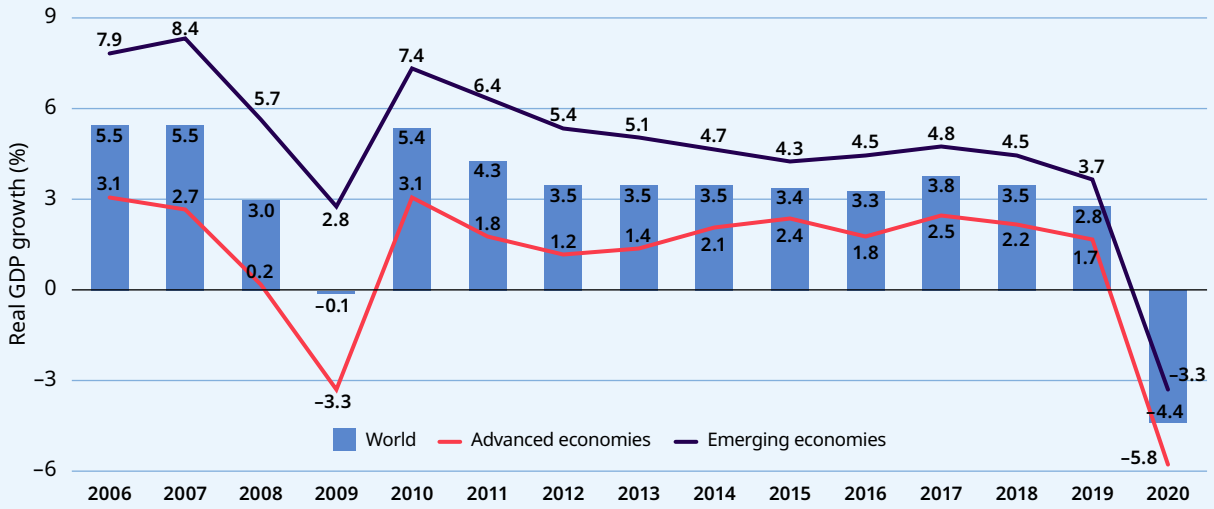
2.1 The economic context

After decelerating between 2017 and 2019, global economic growth collapsed in 2020 under the impact of the COVID-19 pandemic, with gross domestic product (GDP) falling more sharply in advanced economies than in emerging economies (see figure 2.1). Isolation measures, lockdowns and widespread enterprise closures – implemented to allow healthcare systems to cope and to slow the spread of the virus – have inflicted high economic costs. Different countries have faced different combinations of domestic disruption, falling external demand, capital outflows and plunging commodity prices (World Bank 2020a). In October 2020, the International Monetary Fund (IMF) projected that the global economy, having grown by 2.8 per cent in 2019, would contract by 4.4 per cent in 2020. In advanced economies, the IMF expected a much steeper decline of 5.8 per cent, contrasting with a smaller but still substantial contraction of 3.3 per cent in emerging economies. While some expect a strong rebound in 2021, there remains much uncertainty surrounding this forecast. The IMF warns that the diverse impacts on low-income households will be particularly acute, imperilling the significant progress made in reducing extreme poverty in the world since the 1990s (IMF 2020a).

Not all industries have been equally affected by the lockdown. The sectors hardest hit include wholesale and retail trade, accommodation and food services, and other sectors in which women tend to be over-represented. It has been estimated that the hardest-hit sectors account for 40 per cent of all female employment, compared to 36.6 per cent for men (ILO 2020c). In low-income countries, moreover, informal employment accounts for up to 80 per cent of total employment in these hardest-hit sectors (ILO 2020d). Other industries, such as the banking sector and e-commerce, have either been less seriously affected or have seen an increase in activity. It has also been observed that small and medium-sized enterprises have been, on average, more adversely affected than very large companies (OECD 2020a). The effects were particularly devastating for micro and small enterprises, which employ over 95 per cent of the 1.6 billion informal economy workers that have been significantly affected (ILO 2020b).

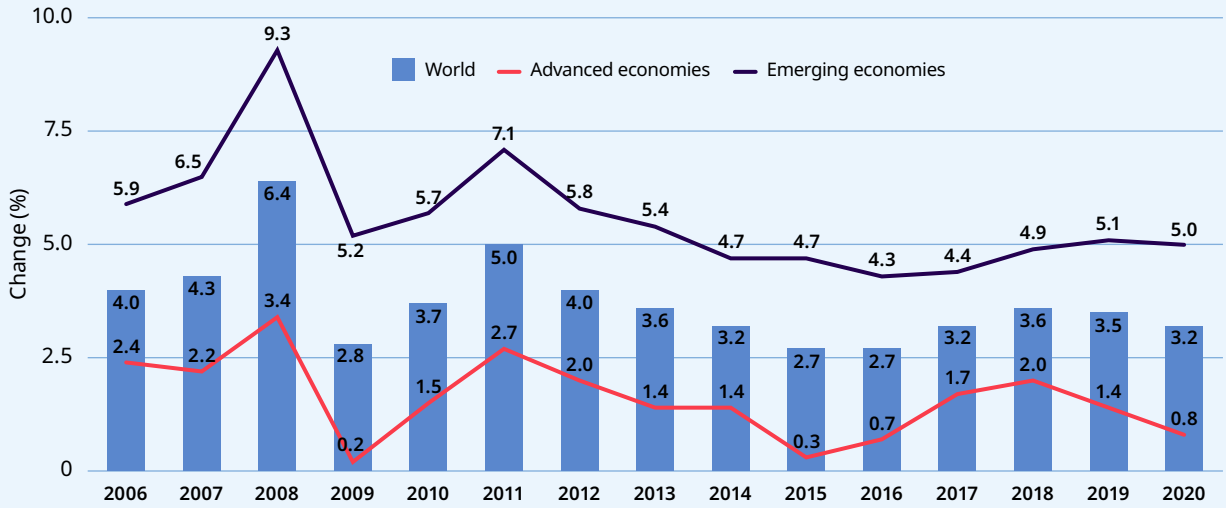
Overall price inflation has tended to decline, particularly in advanced economies (see figure 2.2). Although price inflation has changed relatively little in emerging economies, it fell substantially in advanced economies in 2019 and particularly in 2020. This means that in advanced economies, for those workers whose wages maintained their nominal value, real wages have declined only a little. In emerging economies, however, a constant nominal wage level implies a substantial decline in real wages.

Figure 2.1 Annual average economic growth, 2006–20 (GDP in constant prices) (percentages)



Source: IMF (2020a).

Figure 2.2 Inflation, 2006–20 (average consumer prices) (percentage)



Source: IMF (2020a).

2.2 Labour markets across the world

Economic lockdowns and the temporary closure of millions of workplaces have had enormous effects on labour markets across the world, disproportionately affecting lower-paid workers. As countries, one after another, closed down non-essential economic activities, huge numbers of workers felt the impacts. In the United States of America, the Bureau of Labor Statistics estimated that, before the lockdown, about 20 per cent of workers were employed in the six sectors most directly affected by these measures.[3] Furthermore, the shut-down policies disproportionately affected lower-paid workers.[4] Estimates by the Bureau of Labor Statistics show that nearly 54 per cent of jobs in the sectors shut down were located in the bottom 20 per cent of the national wage distribution. Although workers in shut-down sectors represented 20 per cent of total employment in the country, their wages accounted for only about 12 per cent of total wages – showing that their wages were well below the national average.

> The shut-down policies disproportionately affected lower-paid workers.

In some countries, the detrimental effects of lockdown measures on employment were quick to emerge, generally taking the form of substantial reductions in working hours or job losses. For the second quarter of 2020, the ILO has estimated that losses of working hours have reached 15.2 per cent in Asia and the Pacific, 15.6 per cent in Africa, 16.9 per cent in the Arab States, 17.5 per cent in Europe and Central Asia, and 28 per cent in the Americas, with a global average of 17.3 per cent (ILO 2020a). The International Trade Union Confederation has reported in its fourth global COVID-19 survey that companies in 87 of the 100 surveyed countries are laying off workers because of the crisis (ITUC 2020). Although not all laid-off workers may be available to seek other employment during the current particular circumstances, spikes in unemployment have appeared in many high-income countries, while other countries have fared better (ILO 2020c). Significant job losses are also observed in emerging countries, where unemployment benefits generally have limited coverage.

Among the workers who continued to work (in both essential and non-essential activities), many shifted to teleworking arrangements. One important measure taken by governments across the world to contain the spread of COVID-19 was to encourage those who can work from home to do so. As a result, by mid-April 2020, 59 countries had implemented teleworking for non-essential public employees, and many privately employed staff and their companies followed suit (ILO 2020e). For many other workers, however, including those in sectors such as manufacturing, health, supermarkets or the packaging of goods for delivery, teleworking arrangements were not possible. Evidence from the IMF suggests that young people, workers without tertiary education, those with non-standard contracts and those working in smaller firms or at the bottom end of the earnings distribution are least able to telework (Brussevich, Dabla-Norris and Khalid 2020). For the large majority of the workforce in developing countries who work in the informal economy, for example street vendors and waste-pickers, teleworking was never an option.

[3] These were: restaurants and bars, travel and transport, entertainment, personal services, parts of retail (such as department stores and car dealers) and parts of manufacturing (such as aircraft and car manufacturing). See United States, US Bureau of Labor Statistics (2020).

[4] US data suggest that lay-offs and reductions in working hours have caused an estimated wage reduction of 26 per cent for workers in the lower half of the distribution between mid-March and mid-April 2020, while the corresponding reduction is estimated at 1 per cent for higher wage earners. See Berman (2020).

The adverse impact on workers' incomes and poverty has been huge and, overall, the crisis has disproportionately affected groups in vulnerable situations. The ILO estimated that in the first month of the crisis, the overall earnings of informal workers globally may have declined by up to 60 per cent. This drop in turn is estimated to have led to significant increases in the numbers of working poor across the world. In particular, it is estimated that relative poverty among workers in the informal economy worldwide may have increased from 26 per cent to 59 per cent over the first month of lockdown (ILO 2020b). World Bank projections suggest the COVID-19 crisis could imperil progress made in poverty reduction by pushing between 71 million and 100 million people into extreme poverty in 2020, thereby increasing the global extreme poverty rate for the first time since 1998 (World Bank 2020b). Groups in vulnerable situations, such as migrant workers – amounting to 164 million worldwide – have been among the hardest hit (ILO 2020f; UN Women 2020). Young people have also suffered disproportionately, as 40 per cent of them were working in the hardest-hit sectors and 77 per cent were in informal jobs (ILO 2020g). With youth unemployment across the world already three times as high as that of adults, the current economic and jobs crisis is seriously complicating future employment prospects for the world's youth (ILO 2020h).

> The impacts of the crisis have fallen differently on men and women, the latter being disproportionately affected in many ways which could widen gender gaps in the labour market.

The impacts of the crisis have fallen differently on men and women, the latter being disproportionately affected in many ways which could widen gender gaps in the labour market and possibly wipe out the progress made over the past few years. First, women represent a high proportion of workers in essential services and front-line occupations, accounting for more than 70 per cent of health and social workers. Second, larger proportions of women than of men work in the hardest-hit sectors; thus they have experienced greater job losses, as indicated by recent employment statistics in Australia, Canada, Colombia, Japan, the Republic of Korea and the United States. ILO estimates have also highlighted that 55 million domestic workers, of whom around two thirds are women, were significantly affected by job losses or reductions in working hours and earnings (ILO 2020i). Third, women rely more than men on informal employment in more than 90 per cent of sub-Saharan African countries, 89 per cent of countries in South Asia and almost 75 per cent of Latin American countries. Furthermore, women have also suffered from the unequal sharing of household work, exacerbated by the increased child-care needs during the pandemic (ILO 2018a; ILO 2020c).

iStock.com/wildpixel

2.3 Policy measures

During lockdown, many governments took unprecedented actions to counteract the economic and labour market effects of the crisis,[5] although the scale of measures varied widely (IMF 2020b). According to one estimate, the countries of the G20 together spent more than US$7,600 billion, approximately 11.2 per cent of their GDP, on fiscal measures to counteract the social, economic and financial impacts of the crisis (Segal and Gerstel 2020). The largest component of fiscal support was the provision of financial assistance to keep businesses alive (OECD 2020b). This took various forms, such as direct government spending and forgone revenue, loans and credits, and tax relief for enterprises, including on their social security contributions. Fiscal interventions have also proved essential in many countries for implementing strong job retention measures, ranging from the prohibition of dismissals to large-scale work-sharing programmes, the expansion of unemployment benefits and wage subsidies (see, for example, Cheng 2020). International institutions have also made significant responses. Furthermore, recognizing the record levels of public indebtedness reached by most emerging and developing economies, which leave limited room for fiscal interventions, G20 countries have announced debt service suspension as of 1 May 2020 (World Bank 2020c). Central banks have also intervened on a massive scale.

> Particularly relevant to wage trends, numerous countries implemented temporary wage subsidies to safeguard jobs during the crisis.

Particularly relevant to wage trends, numerous countries implemented temporary wage subsidies to safeguard jobs during the crisis (ILO 2020j). Wage subsidies include all types of transfers to employers or employees intended to cover all or part of the eligible individual's wage or non-wage employment costs. Some countries, such as New Zealand, designed wage subsidies as a lump sum; in numerous other instances (including, for example, Denmark, Germany and Switzerland), wage subsidies covered a percentage of workers' pay, up to a specified ceiling. Where wage subsidies existed, they were used by large numbers of enterprises employing millions of workers. In France, by the beginning of July, more than 1 million establishments had applied for *chômage partiel* (partial activity) to help pay the wages of more than 14 million workers, representing 56 per cent of all employees in the country (France, Ministry of Labour, Employment and Economic Inclusion 2020a; for figures on salaried employment, see France, Ministry of Labour, Employment and Economic Inclusion 2020b). In Switzerland, at the end of April 2020, the corresponding scheme covered 1.9 million employees, or 37 per cent of all wage workers (Government of Switzerland, Federal Council 2020). In the United Kingdom of Great Britain and Northern Ireland, the proportion of furloughed workers in businesses that have not permanently stopped trading was estimated at 29.2 per cent in the week ending 28 June (United Kingdom, Office for National Statistics 2020).

[5] The ILO provides a comprehensive summary of these policy measures in a section of its website entitled "COVID-19 and the World of Work: Country Policy Responses", https://www.ilo.org/global/topics/coronavirus/country-responses/lang--en/index.htm.

3 Wage trends before and during the COVID-19 crisis

3.1 Global and regional average wages before the crisis

How were wages across the world evolving before the crisis? Figure 3.1 shows that in the four years preceding the pandemic, global real wage growth fluctuated between 1.6 and 2.2 per cent; when China is excluded from the sample, real wage growth in those years before the crisis fluctuated at a lower level, between 0.9 and 1.6 per cent. As in previous editions of the *Global Wage Report*, these data refer to real monthly average wages. Real monthly wage growth is calculated as the change in nominal monthly wages net of changes in the cost of living as measured by the relevant national price index, usually the consumer price index. Because the report uses monthly wages, rather than the less widely available hourly wages, fluctuations reflect changes in both hourly wages and the average number of hours worked. The global and regional estimates are weighted averages that take into account the total numbers of employees in different countries. The estimates in figure 3.1 are based on data from 136 economies, up to the year 2019 for many of them.[6]

Figure 3.2 presents estimates of annual average real wage growth for the G20 countries, showing that in the four years before the crisis real wage growth fluctuated between 0.4 and 0.9 per cent in the advanced economies in this group, and at higher levels – between 3.5 and 4.5 per cent – in the emerging economies.[7] Overall, the estimate of wage growth in the G20 is very similar to the global estimate in figure 3.1 – which is not very surprising, since the G20 countries account for some 60 per cent of the world's wage employees, and produce about three quarters of world GDP.

[6] Not all countries have published data up to 2019. The full data set and methodology for calculating global and regional estimates are available on the ILO *Global Wage Report* website (www.ilo.org). See also ILO (2018b, Appendix I).

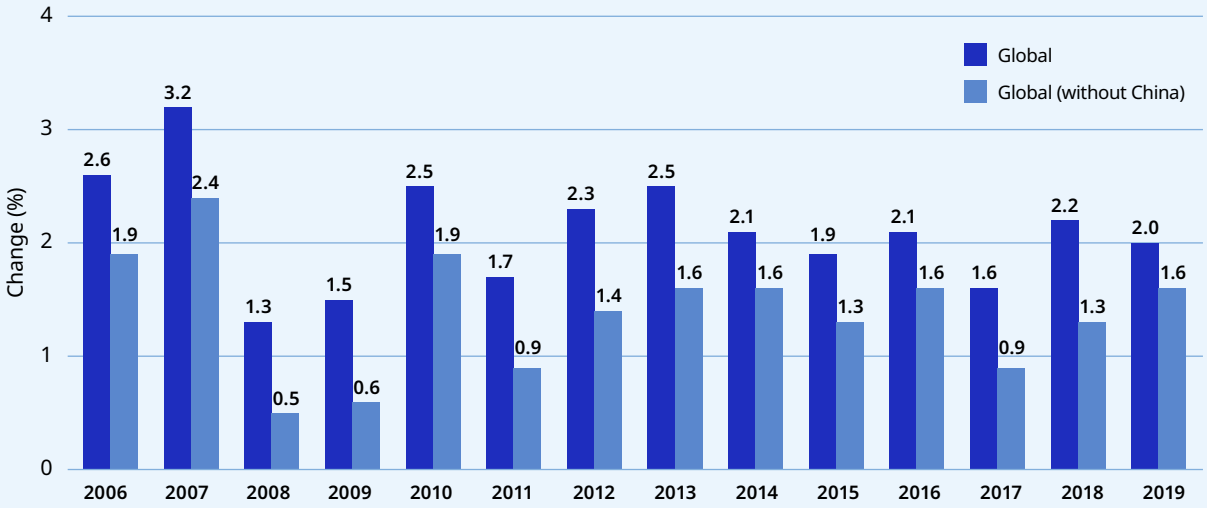
[7] The division of G20 countries into "advanced G20" and "emerging G20" is based on IMF groupings. The G20 includes 19 countries, as the aggregate entity of the EU is excluded.

In the four years preceding the pandemic, global real wage growth fluctuated between

1.6 and 2.2 per cent

iStock.com/Omar Osman

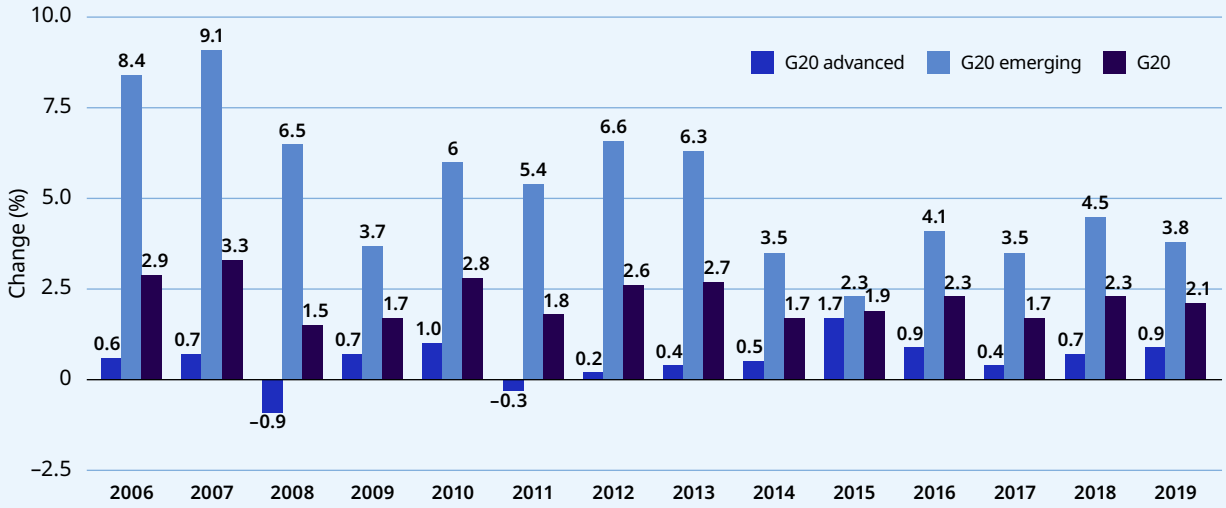
▶ Figure 3.1 Annual average global real wage growth, 2006–19 (percentage)



Note: Figures for 2019 are preliminary estimates as national estimates are not yet available for all countries.

Source: ILO estimates based on official national sources as recorded in ILOSTAT and the ILO Global Wage Database. The full data set is available from the ILO Global Wage Database and can be downloaded free of charge (see www.ilo.org/ilostat).

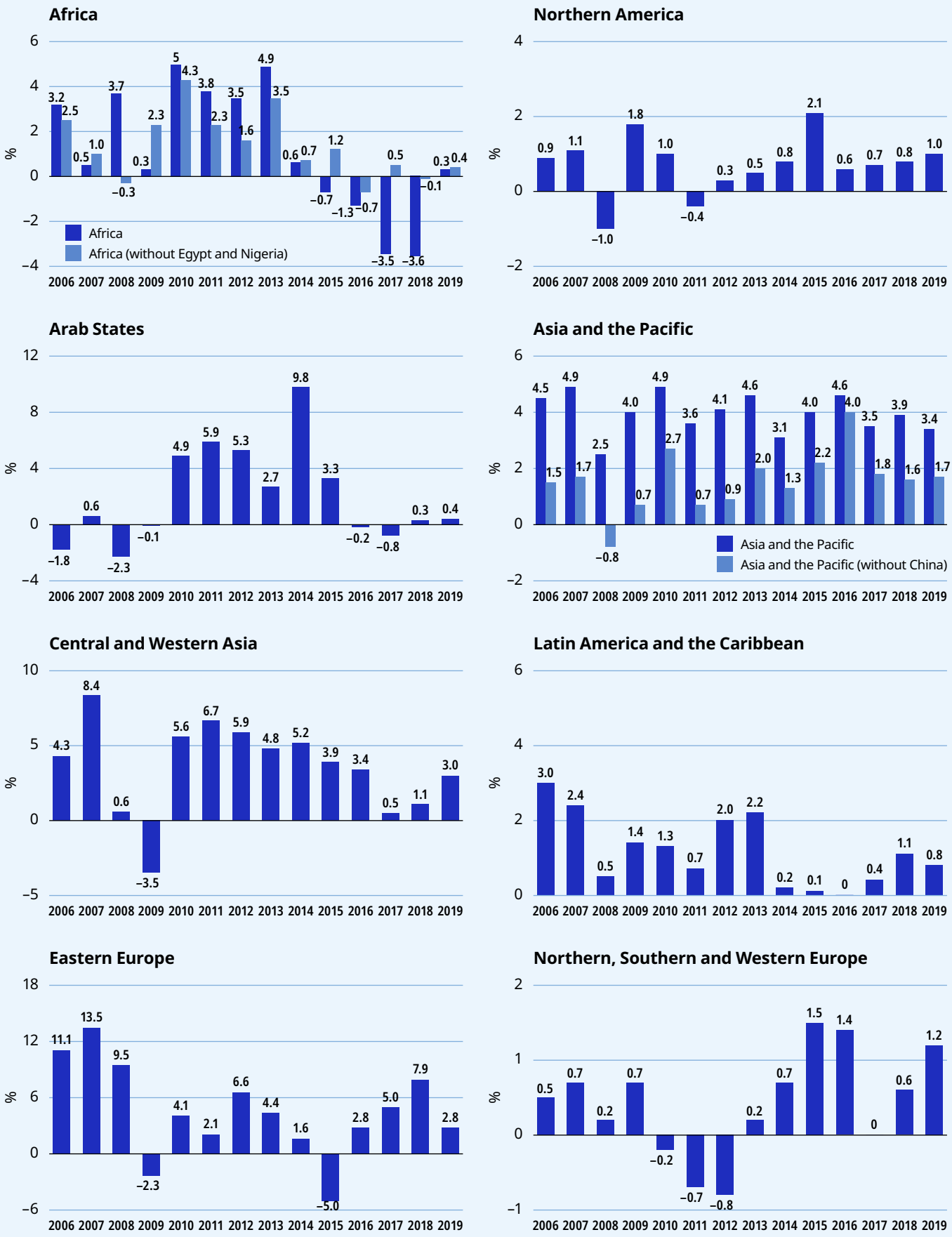
▶ Figure 3.2 Annual average real wage growth in the G20 countries, 2006–19 (percentage)



Note: Figures for 2019 are preliminary estimates as national estimates are not yet available for all countries.

Source: ILO estimates based on official national sources as recorded in ILOSTAT and the ILO Global Wage Database. The full data set is available from the ILO Global Wage Database and can be downloaded free of charge (see www.ilo.org/ilostat).

Figure 3.3 Annual average real wage growth by region, 2006–19 (percentage)



Source: ILO estimates based on official figures.

The regional perspective displayed in figure 3.3 shows that in the few years before the crisis, real wages increased most rapidly in Asia and the Pacific and in Eastern Europe, and much more slowly in Northern America and in Northern, Southern and Western Europe. Workers in Asia and the Pacific enjoyed the highest real wage growth among all regions over the period 2006–19, with China, India, the Republic of Korea, Thailand and Viet Nam leading the way. By contrast, real wage growth has been fluctuating between zero and around 1 per cent in Northern America (Canada and the United States) and in Western Europe, albeit with an upward trend within that range over the past two years. In Latin America and the Caribbean, real wage growth also started to bounce back after 2016, nudging above the 1 per cent mark in 2018 before falling slightly again in 2019. In Africa, real wage growth started to recover in 2019 after a sharp decline in 2017 and 2018 as a result of persistent inflationary pressure there. The estimates shown in figure 3.3 for the Arab States are only tentative, owing to severe data constraints in that region.

> In the few years before the crisis, real wages increased most rapidly in Asia and the Pacific and in Eastern Europe, and much more slowly in Northern America and in Northern, Southern and Western Europe.

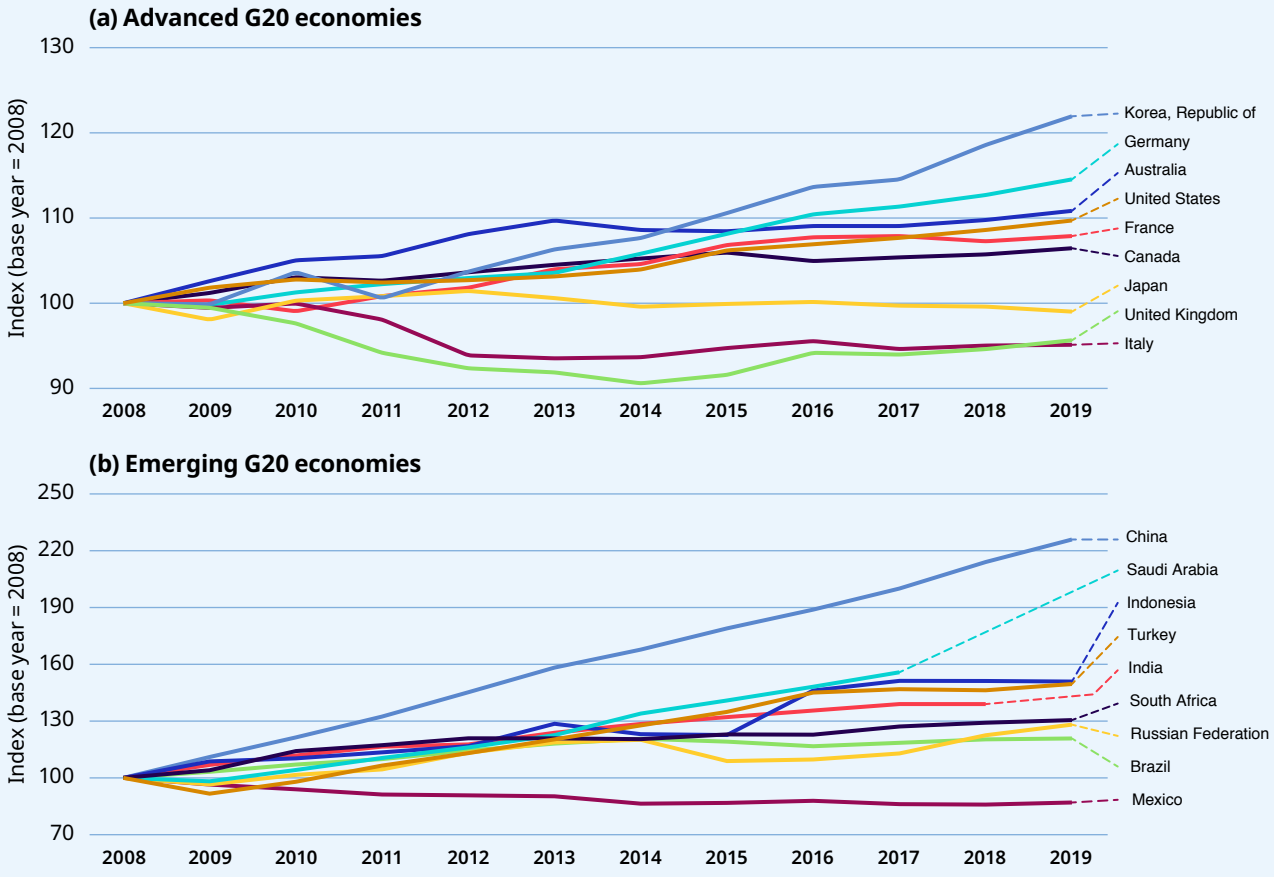
Regional differences in wage growth largely reflected differences in economic indicators, which varied considerably by region. In the few years up to 2019, economic growth remained higher in emerging economies in Asia than in other regions of the world, despite slowing yet robust GDP growth in China. Inflation also varied considerably among regions. In 2019, it was highest in sub-Saharan Africa and in the Middle East and northern Africa, having increased in all emerging economies except sub-Saharan Africa over the previous three years.

3.2 Wages and productivity indices before the crisis

Figure 3.4, which shows the evolution of real wage indices since 2008 in advanced and emerging G20 countries, reveals wide variations in patterns of wage growth in the years before the COVID-19 crisis. Among advanced economies, wage growth accelerated most rapidly (by 22 per cent) in the Republic of Korea, followed by Germany, where wage growth was near zero in 2008 and 2009 and only moderate in the period 2010–13, but thereafter accelerated, leading to a 15 per cent increase in real wages over the whole period 2008–19. By contrast, real wages declined in Italy, Japan and the United Kingdom. Among emerging G20 countries China stands out, with a constant rise in wages, which more than doubled over the period as a whole; but all countries in this group except Mexico experienced significant positive growth in average real wages over this period. Nevertheless, in spite of that more rapid wage growth, the level of average wages in emerging economies remains substantially lower than that in advanced G20 economies. Converting all G20 countries' average wages into US dollars using purchasing power parity (PPP) exchange rates yields a simple average wage of some US$3,780 per month in advanced economies and about US$1,850 per month in emerging economies.

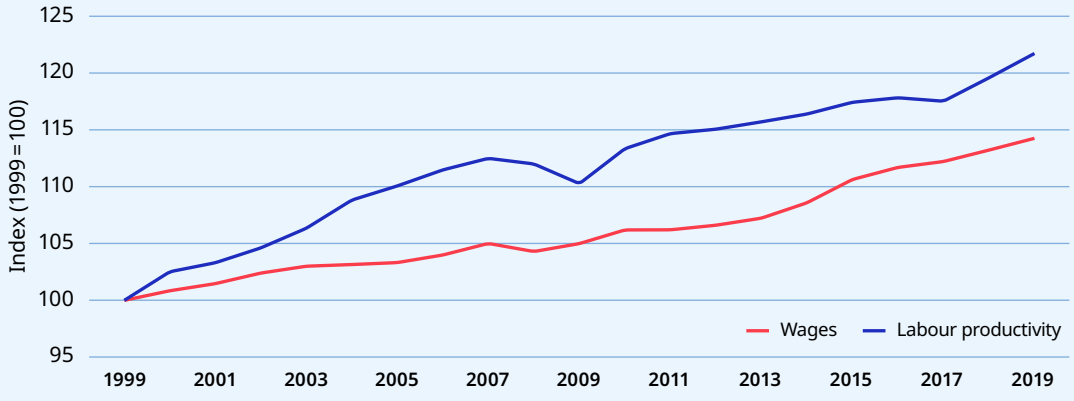
> In China, real wages more than doubled over the period 2008–19.

Figure 3.4 Average real wage index for the G20 countries, 2008–19



Source: ILO estimates.

Figure 3.5 Trends in average real wages and labour productivity in 52 high-income countries, 1999–2019



Source: ILO estimates.

To date, the ILO *Global Wage Report* has focused on identifying changes in wages over time within countries rather than comparing wage levels across countries, because the definitions of these statistics vary widely. For example, some countries include bonuses in the calculation of earnings, while others exclude them. Consequently, in view of the differences in definitions and the absence of data on wages that are harmonized across countries, it is impossible to derive fully comparable statistics. Country-level data on average wages, however, are shown in Appendix I.

In the last 20 years, a gap was observed between wage growth and productivity growth, particularly in some high-income countries. Sustainable wage growth over long periods is only possible when there is significant productivity growth. Figure 3.5 shows the indices of average real wages and labour productivity in 52 high-income countries between 1999 and 2019. Labour productivity is measured as GDP per worker; both the real wage index and the real productivity index are calculated as weighted averages (so that large countries influence the figure more than smaller countries) and are shown in relation to the base year of 1999. Overall, it may be seen that labour productivity (+21.8 per cent) increased more rapidly than real wages (+14.3 per cent) between 1999 and 2019. In the period 2016–17 productivity declined slightly while wages rose slightly. Over those two years the gap narrowed by about 2 per cent; thereafter, productivity started to rise again more quickly than wages, so that over the years 2018–19 the gap widened again by 2 per cent. Overall, the decoupling of wages from labour productivity explains why labour income shares (the share of labour compensation in GDP) in many countries remain substantially below those of the 1990s.

> In the last 20 years, a gap was observed between wage growth and productivity growth, particularly in some high-income countries.

3.3 The impact of the COVID-19 crisis on wages in 2020

At the same time as demands emerged for additional data in the quest to understand the impact of the COVID-19 crisis on wages, the pandemic made it more difficult for national authorities to collect statistics (ILO 2020k; ILO 2020l). The extent of these difficulties varied with the specific context, infrastructure and capacities of individual countries. Restrictions on movement during lockdowns forced many countries to suspend face-to-face interviews, which are still the main way to collect data for labour force surveys. Countries have reacted in various ways, for example by shifting to telephone interviews, implementing rapid response surveys, and turning to novel data sources and experimental methods. Even so, the impact of the crisis in many places around the world remains unknown. Even regular wage statistics are in many places published only months or even years after they were collected. It is thus only in the coming months and years that the world will obtain a full picture of the impact of the crisis on wages and labour markets.

There is abundant case study evidence of workers having to accept – at least temporarily – shorter hours and/or wage cuts. According to Adams-Prassl et al. (2020), among respondents in the sample who still had a paid job in early April, 35 per cent (United States), 30 per cent (United Kingdom) and 20 per cent (Germany) reported having had lower earnings in March than in January and February. In Argentina, where the Government enforced a generalized prohibition on dismissing workers without just cause during the crisis, a collective agreement identified a set of emergency measures, including a 25 per

cent cut in the wages of workers in shut-down sectors for 60 days from 1 April 2020, with a view to saving jobs (Sindicato Empleados de Comercio de Junín 2020). Similarly, in Chile the proportion of businesses that have reached agreement with workers to reduce wages temporarily in order to preserve employment increased from 6.6 per cent in April 2020 to 8.4 per cent in July 2020, and to over 15 per cent in some sectors.[8] In Ethiopian urban areas, nominal average wages in the private sector fell by about 6 per cent between February and August 2020 (ILO, JCC and Ethiopoll 2020). In India, recent evidence suggests that formal workers' wages have been cut by 3.6 per cent, while informal workers have experienced a much sharper fall in wages of 22.6 per cent (Estupiñan and Sharma 2020). Among other countries, Paraguay implemented temporary wage cuts in the public sector in order to allocate more funds to the public health system to combat the virus (Gamba, 2020). In Uruguay, a 20 per cent temporary wage cut for public officials earning above a specific level contributed to funding spending related to fighting COVID-19, while Burkina Faso has announced a plan to divert part of the salaries of some civil servants to finance the response to the crisis (García-Escribano and Abdallah 2020).

Early data from national statistical offices show that around two thirds of countries for which short-term statistics are available showed decreasing wages or slower average wage growth, while in other countries average wages took a surprising jump in the statistics – mostly reflecting a "composition effect" due to the loss of lower-paying jobs.

Early data from national statistical offices show that around two thirds of countries for which short-term statistics are available[9] showed decreasing wages or slower average wage growth, while in other countries average wages took a surprising jump in the statistics – mostly reflecting a "composition effect" due to the loss of lower-paying jobs. In times of crisis, average wages can be substantially skewed by the "composition effect" which arises from changes in the composition of employment. When most of those who lose their jobs are low-paid workers, this automatically increases the mean of wages of remaining employees. To make sense of the country-level wage data, the report documents the evolution of the overall unemployment rate on the one hand, and indices of nominal and real average wages on the other. To facilitate comparison with the pre-crisis period, an average wage index is constructed, with the year 2019 serving as the index reference period (2019 = 100). Although unemployment estimates might be subject to some bias, owing to the difficulty of undertaking an active job search during lockdown or discouragement among unemployed people in the face of

[8] Instituto Nacional de Estadística, Chile: https://www.ine.cl/docs/default-source/sueldos-y-salarios/boletines/espa%C3%B1ol/base-anual-2016-100/m%C3%B3dulo-covid-19-ir-icmo/bolet%C3%ADn_covid_amjj.pdf?sfvrsn=a1a46ea9_12.

[9] Countries were selected mainly on the basis of the availability of recent average wage statistics that cover at least the first half of 2020, thereby permitting examination of the first impacts of the COVID-19 crisis on the labour market. Although recent average wage statistics for the second quarter of 2020 for countries in Africa were not available when the present section was compiled, these figures, along with those for other G20 economies, are presented in the *Global Wage Report 2020/21* infographics (www.ilo.org).

unprecedented job losses, the unemployment rate generally increases as jobs are lost.[10]

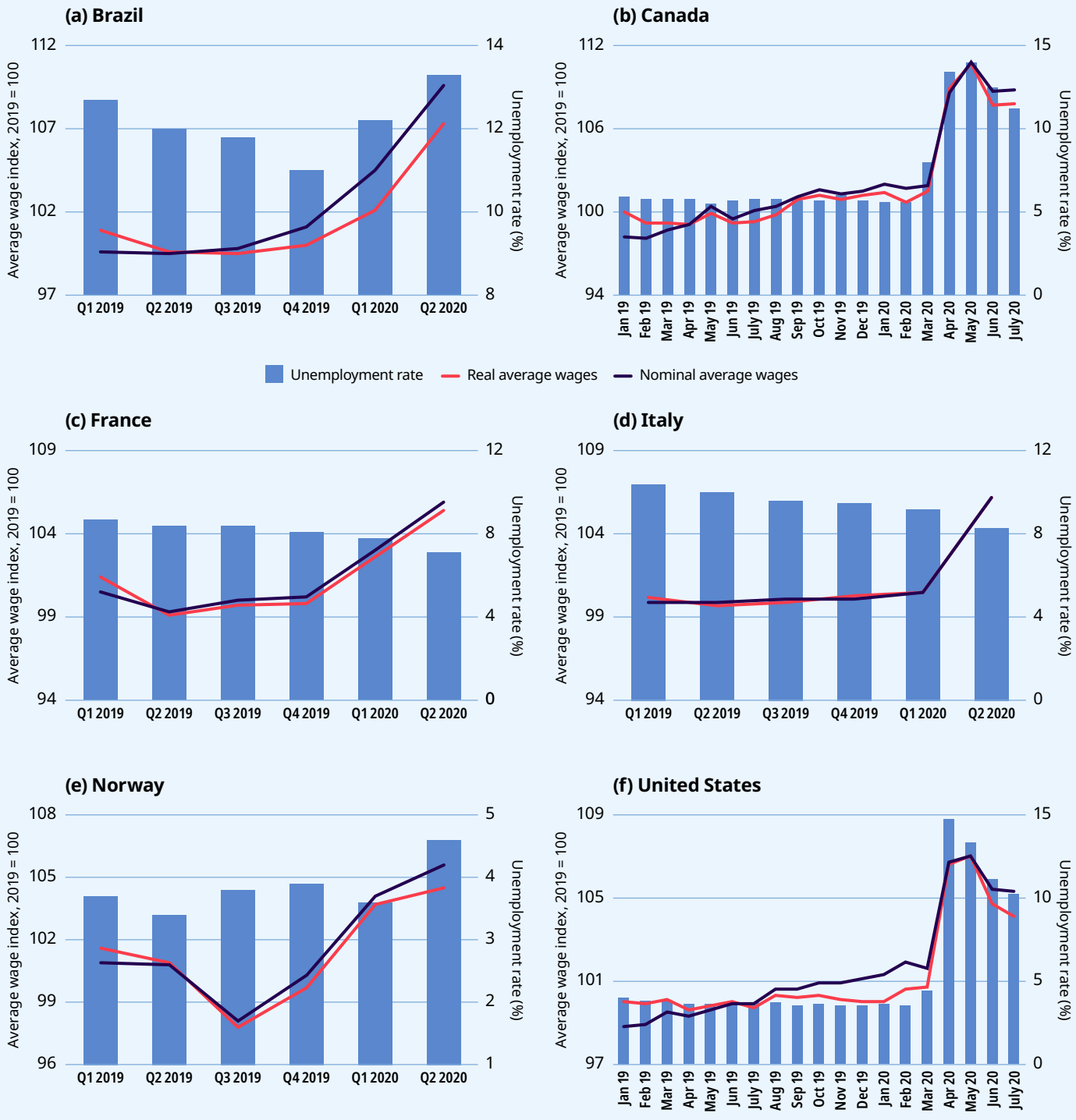
Figure 3.6 provides some striking examples of a "composition effect" in Brazil, Canada, France, Italy, Norway and the United States, where average wages have been rising markedly at the same time as unprecedented job losses. In the United States, where most states had implemented lockdown measures by the end of March 2020, significant labour market effects were noticeable as early as April 2020, a month marked by an unprecedentedly sharp increase in unemployment, which hit 14.7 per cent while the real average wage index jumped to 106.6. Compared to the average wage for the year 2019, real average wages were around 7 per cent and 4 per cent higher in, respectively, April 2020 and July 2020, because in the latter months it was the least qualified workers who experienced the largest unemployment increases. Specifically, for the month of April 2020, unemployment rose by 14.4 percentage points among those with "less than a high school diploma", compared to 5.9 percentage points among those with a "bachelor's degree and higher".[11] (For more on the impact of the composition effect in the United States, see box 3.1.) A similar pattern is evident in Canada, where unemployment rose sharply from March 2020, reaching a high of 14 per cent in May, while the index of real average wages increased from 101.5 in March 2020 to 110.7 in May 2020, indicating that the average real wage for the latter month is around 11 per cent higher than the average real wage for 2019. Similarly, in Brazil, the index of real average wages peaked at 107.3 in the second quarter of 2020, an increase accompanied by a slight rise in unemployment as the virus accelerated and anti-COVID measures were tightened. In Norway, meanwhile, a smaller composition effect is evident, possibly due to a proportionally smaller increase in unemployment. Although the unemployment rate has fallen in France and Italy during the COVID-19 crisis because of difficulties in undertaking an active job search, an unprecedented number of workers have lost their employment and consequently average wages have increased owing to the composition effect.

> High wage growth captured in aggregate measures should not be seen as indicative of a recovering or a strong labor market.
>
> ▶ ***The Illusion of Wage Growth***
> **Crust et al. 2020**

[10] Use of the unemployment rate to highlight the effects of the crisis has been motivated by the fact that this labour market indicator is much more accessible than the employment-to-population ratio and other measures of labour under-utilization. In many countries, while employment figures were falling, the unemployment rate has risen. For instance, in Chile, when the employment rate fell by around 20.5 per cent in the second quarter of 2020, the unemployment rate increased by 49 per cent. The same trend is evident in many other countries. In contrast, in France and Italy the unemployment rate fell after the start of the crisis, because only a small portion of those who lost their jobs were actively looking for new jobs during lockdown (see, https://www.insee.fr/fr/statistiques/4641598#titre-bloc-1).

[11] Data from US Bureau of Labor Statistics, average weekly earnings of all private sector employees, seasonally adjusted.

Figure 3.6 The "composition effect" in selected countries, illustrated by average wage indices and unemployment rates, 2019 and 2020



Notes: (a) Brazil: average income from the main job, usually received per month, for persons 14 years and older; unemployment rate for persons 14 years and older. (b) Canada: average weekly earnings including overtime for all employees, industrial aggregate excluding unclassified businesses; unemployment rate overall. (c) France: labour cost index – wages only (hourly wage index), all industries; unemployment rate (unemployment as defined by the International Labour Organization) for persons 15 years and older, France excluding Mayotte, seasonally adjusted. (d) Italy: gross earnings per full time equivalent unit index, only industry and services are covered, excluding public administration and defence, and compulsory social security, seasonally adjusted; unemployment rate for persons 15 years and older, seasonally adjusted. (e) Norway: average monthly earnings, whole country and all industries; unemployment rate persons aged 15–74. (f) United States: average weekly earnings of all employees in the private sector, seasonally adjusted; civilian unemployment rate for persons 25 years and older, seasonally adjusted.

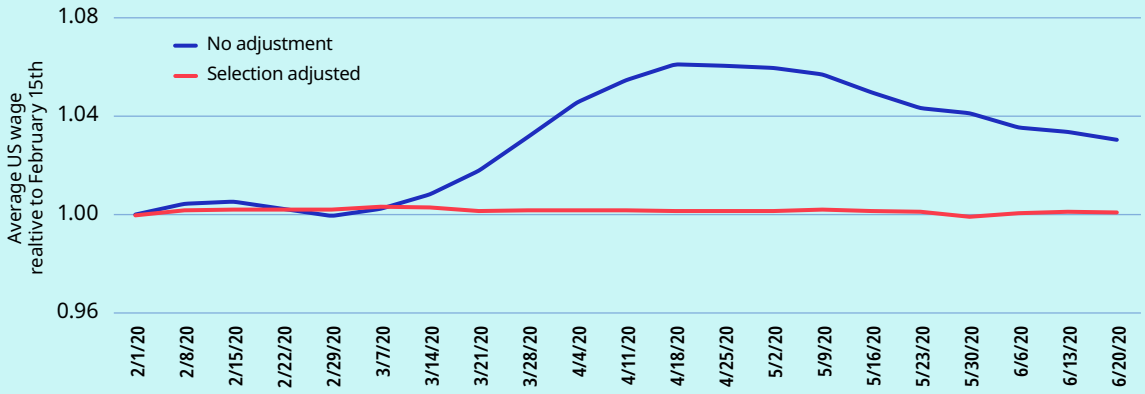
Sources: (a) Instituto Brasileiro de Geografia e Estatistica. (b) Statistics Canada. (c) Institut national de la statistique et des études économiques (INSEE), Agence centrale des organismes de sécurité sociale (ACOSS), Direction de l'Animation de la recherche, des Études et des Statistiques (DARES). (d) Istituto nazionale di statistica (Istat). (e) Statistics Norway. (f) US Bureau of Labor Statistics.

▶ Box 3.1 Wage cuts and wage freezes in the United States

A study using the longitudinal nature of administrative payroll data (Cajner et al. 2020) shows the impact of the composition effect on base wages (contractual earnings per paid period, excluding variation in hours worked and special payments) in the United States by comparing the evolution of the average base wage of all workers in the sample (which reflects changes in the number and profile of workers) with the evolution of the average base wage of a given worker over time. The result, shown in figure B3.1.1, shows that the increase in average wages in the full sample is entirely attributable to the composition effect. When the sample is restricted to a given worker employed across the period, wage growth is approximately zero.

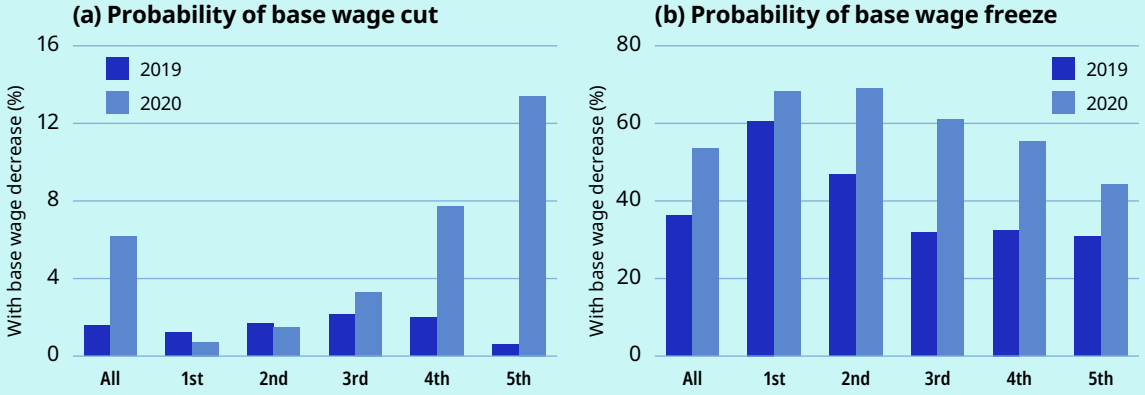
The authors also found that wage cuts and wage freezes were much more common in 2020 than in 2019. While only 1.6 per cent of the workers who were employed with a given firm in both March and June 2019 were affected by a wage cut in that year, that share had more than trebled to 6.2 per cent in 2020. When the sample was restricted to include only firms that normally adjust their base wages in March, April, May or June, many more wage freezes occurred in 2020 (58 per cent of their employees) than in 2019 (36 per cent of their employees). While the likelihood of a wage freeze was high across the wage distribution, the probability of a pay cut was higher for more highly paid workers.

▶ Figure B3.1.1 Trend in US base wages, controlling for selection, February–June 2020



Notes: The figure shows trends in weekly wages during the beginning of the pandemic recession. The blue line shows average base wages across all employed workers; the red line controls for selection by measuring the base wage of a given worker over time. All data are weighted so that the primary sample from Automatic Data Processing, Inc. matches aggregate employment shares by 2-digit industry cross business size.

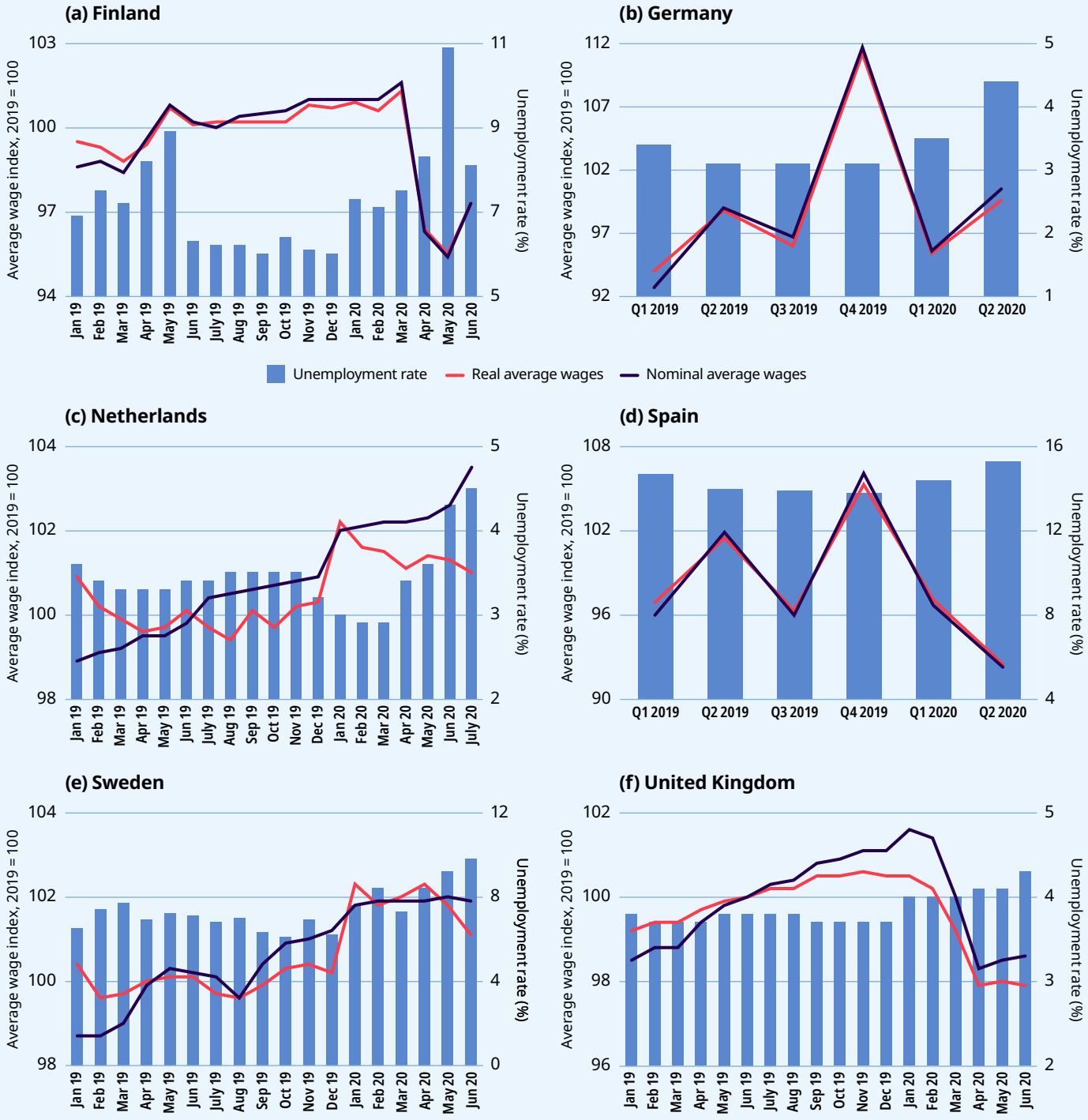
▶ Figure B3.1.2 Probability of base wage cut (a) and freeze (b) in 2019 and 2020 by base wage quintile sample: Workers at firms that usually adjust wages in March–June



Notes: The figure shows the probability of a wage cut (a) or wage freeze (b) for different wage quintiles. (a) The sample includes all workers employed with the same firm in both March and June. (b) The sample is restricted to firms that made 75% of their annual wage changes for their employees in 2019 during March, April, May and June.

Source: Cajner et al. (2020).

▶ Figure 3.7 Examples of downward pressure on wages in selected countries in Europe



Notes: (a) Finland: wage and salary indices by industry, monthly, seasonally adjusted series, whole economy; unemployment rate for persons aged 15–64. (b) Germany: Index of agreed monthly earnings, including extra-payments, whole economy; ILO unemployment rate. (c) Netherlands: monthly index of collective labour agreement wages, including special payments; unemployment rate, 15–74 years, seasonally adjusted. (d) Spain: total wage cost per worker, all industries from B to S of NACE Rev.2 (except activities of households as employers and of extraterritorial organizations and bodies); overall unemployment rate. (e) Sweden: average monthly salary of non-manual workers in private sector, including variable supplements; unemployment rate, 15–74 years. (f) United Kingdom: average weekly earnings, seasonally adjusted, whole economy; ILO unemployment rate, all Great Britain, seasonally adjusted.

Sources: (a) Statistics Finland. (b) Germany, Statistisches Bundesamt. (c) Statistics Netherlands. (d) Spain, Instituto Nacional de Estadística. (e) Statistics Sweden. (f) UK Office for National Statistics.

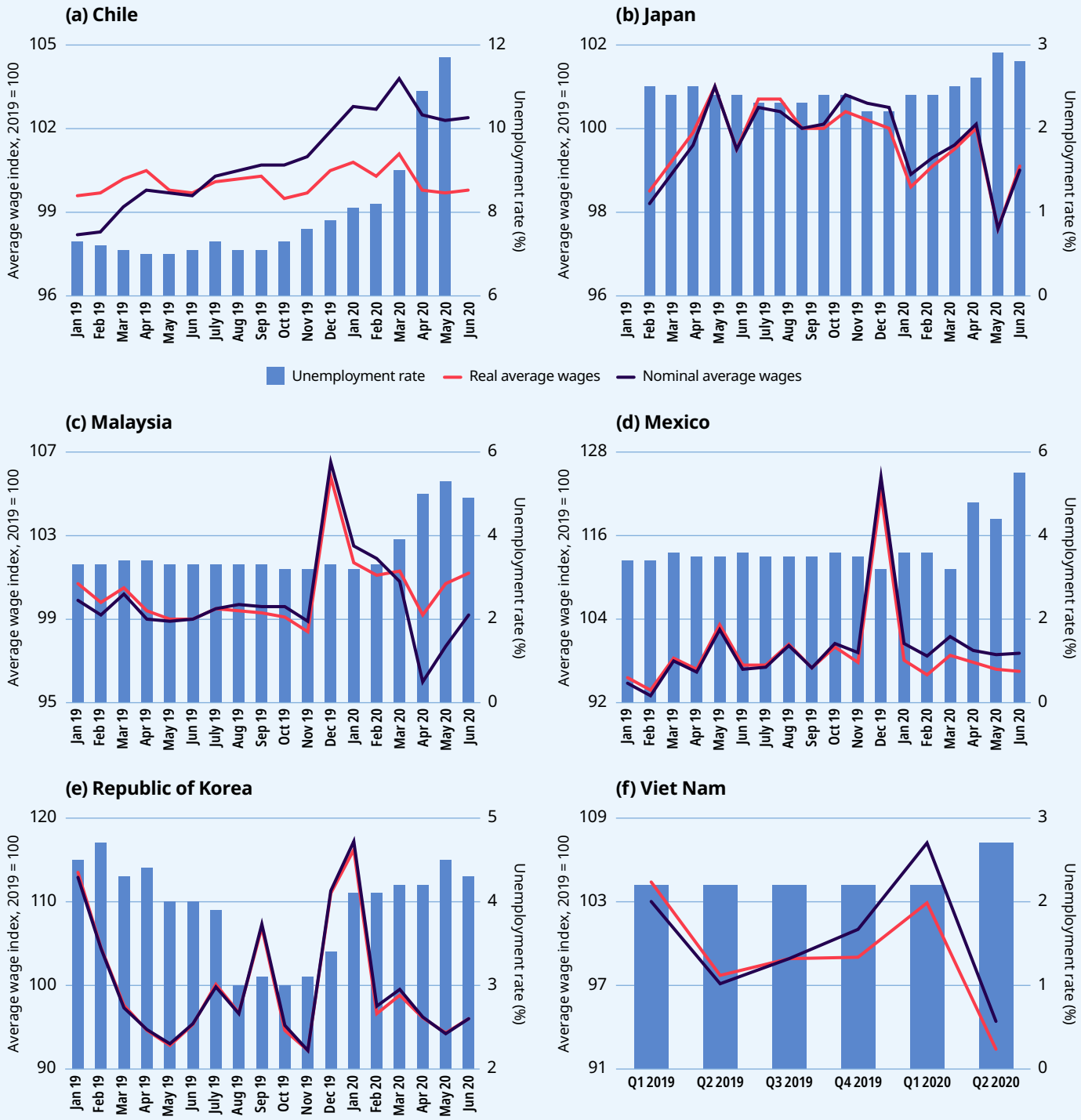
In contrast, figure 3.7 shows the downward pressure on wages in a selection of countries in Europe where increases in unemployment have been much less sharp and/or sustained, possibly because of the existence of stronger job retention schemes. The United Kingdom provides the clearest example of such a drop in average wages, which began in February 2020 and then accelerated in March and April, while the unemployment rate remained stable despite the crisis. This situation can be explained by the fact that employees who benefited from the national job retention (furlough) scheme, under which the Government paid 80 per cent of wages, were not considered as unemployed even though their working hours were reduced to zero. Consequently, the real average wage index fell to 97.9 in April 2020, indicating a 2.1 per cent decrease in the average wage compared to that for 2019. Similar situations may be noted in other European countries, including Finland, the Netherlands, Spain and Sweden. In Finland, for example, the wage indices fell sharply in April and May 2020 at the same time as unemployment rose, albeit temporarily. In Germany, smaller wage growth can be observed between the first and the second quarters of 2020, compared to 2019. These findings suggest that labour market adjustments have also taken place, at least in some of these countries, in the form of downward pressure on wages.

Figure 3.8 highlights the same downward pressure on wages in other regions: specifically, the Americas, and Asia and the Pacific. In Chile and Mexico, in contrast with the trends observed in 2019, average wage indices fell in April and May 2020 – by about 1.5 per cent in both countries – as unemployment rates rose. In Viet Nam, quarterly labour market data show that between the first and the second quarters of 2020 real average wages declined by 10.5 per cent (the index fell from 102.9 to 92.4), while a generally stable unemployment rate exceptionally increased by 0.5 percentage points, highlighting a pronounced effect of the COVID-19 crisis in a country where wages may have served as the main labour market adjustment variable. A similar pattern can be observed in Malaysia, where a relatively larger increase in unemployment of 1.1 percentage points between March and April 2020 has been accompanied by a steep fall in average wages of 2.1 per cent in real terms and 4.8 per cent in nominal terms in April. Thanks to falling prices from April, the drop in the purchasing power of nominal average wages – which are 4 per cent lower than the average for 2019 – has been moderate. Finally, in Japan and the Republic of Korea, two countries that were among the first to be affected by the virus, unemployment rates increased very slightly from the first quarter of 2020 while decreases in wages were less marked. In Japan, a downward pressure on wages is identifiable between January and March 2020, a period that saw a much smaller increase in wages than the corresponding period in 2019. Likewise, the fall in average wages for May 2020 has been sharper than that for 2019. A similar scenario is observable in the Republic of Korea, where wages fell more sharply between January and February 2020 than in the same period of 2019.

In other countries, notably Denmark and Romania, there are no identifiable effects of the crisis on wages, as can be seen in figure 3.9. In Romania, despite a rise in unemployment, no impact on wages has been evident. The same is true for Denmark possibly because of its solid labour relations along with strong collective bargaining, which may have contributed to effectively cushioning workers against the impacts of the crisis.

In advanced G20 economies, on average, real average wages increased by 2.6 per cent at the end of the second quarter of 2020, owing to unprecedented changes in the composition of employment in many countries, especially the United States. Using available recent data from national statistical offices, figure 3.10 compares annual wage growth in 2020 and 2019, estimated on the same basis for both years, with the aim of providing an idea of the effect the crisis could have on annual wage growth in advanced G20 countries. Estimates suggest that annual real wage growth will be negative or at least weaker in four out of the nine advanced G20 countries. However, real average wages would increase by 2.6 per cent on average, owing to unprecedented job losses that have automatically increased average wages for the remaining employees in many countries, especially the United States.

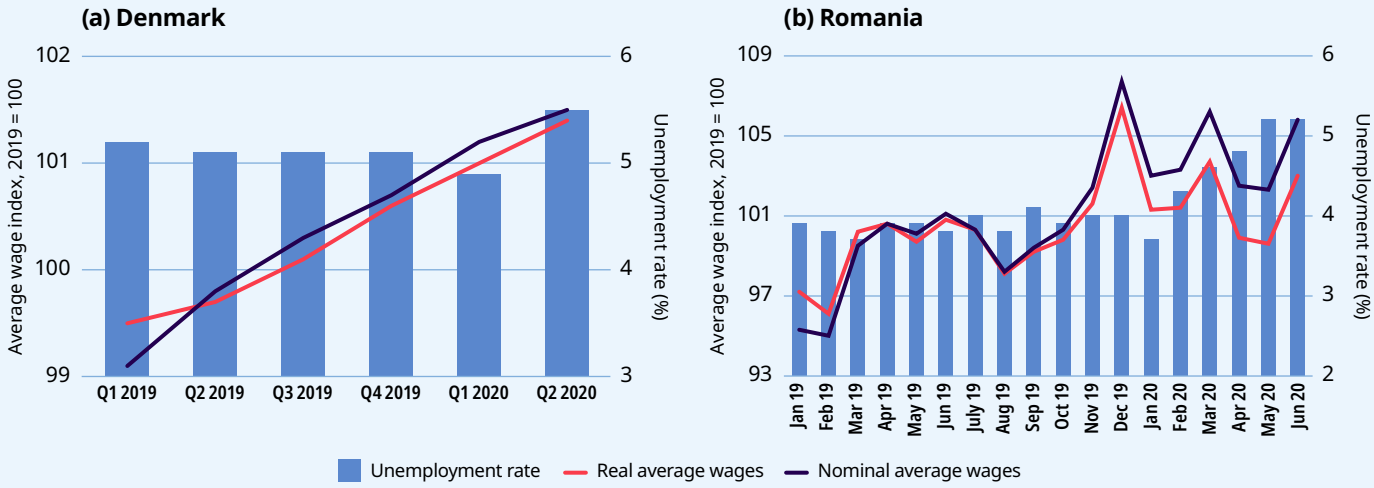
Figure 3.8 Examples of downward pressure on wages in selected countries in the Americas, and Asia and the Pacific



Notes: (a) Chile: real and nominal remuneration indices, 15 years and over; unemployment rate, 15 years and over. (b) Japan: contractual cash earnings establishments with five or more employees; OECD unemployment rate. (c) Malaysia: average salaries and wages per employee in manufacturing sector, 15 years and over; unemployment rate, 15 years and over. (d) Mexico: index of real average wages per person employed and per hour worked in manufacturing sector; OECD unemployment rate. (e) Republic of Korea: total gross wage, all businesses with one or more employees; overall unemployment rate. (f) Viet Nam: average monthly earnings; overall unemployment rate, working age.

Sources: (a) Chile, Instituto Nacional de Estadísticas. (b) Ministry of Health, Labour and Welfare of Japan. (c) Department of Statistics Malaysia. (d) Mexico, Instituto Nacional de Estadísticas y Geografia. (e) Statistics Korea. (f) General Statistical Office of Viet Nam.

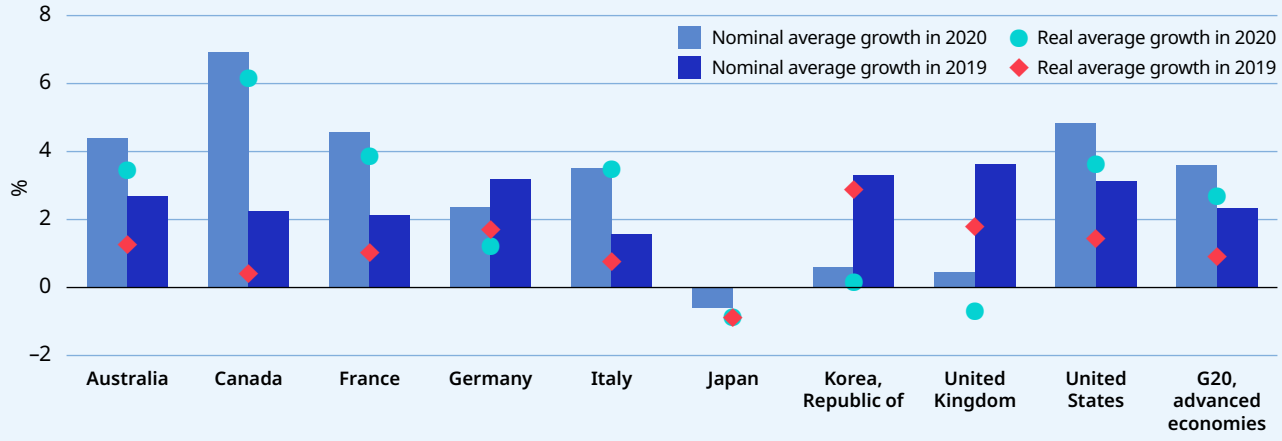
▶ Figure 3.9 Countries where the COVID-19 crisis has had no apparent effect on wages



Notes: (a) Denmark: implicit index of average earnings in corporations and organizations, industrially and seasonally adjusted; ILO unemployment rate, seasonally adjusted. (b) Romania: monthly gross average earnings, total economy; overall unemployment rate.

Sources: (a) Statistics Denmark. (b) Institutul National de Statistica, Romania.

▶ Figure 3.10 Comparison of nominal and real average wage growth in 2020 and 2019, advanced G20 countries (percentage)



Notes: Available short-term wage statistics from national statistical offices are used to estimate annual wage growth for 2020 and 2019 on the same basis. Recent wage statistics cover at least the first half of 2020. Australia: average weekly earnings, original series, full time adults, total earnings; Canada: average weekly earnings including overtime for all employees, industrial aggregate excluding unclassified businesses; France: labour cost index – wages only (hourly wage index), all industries; Germany: index of agreed monthly earnings, including extra-payments, whole economy; Italy: gross earnings per full time equivalent unit index, only industry and services are covered, excluding public administration and defence, and compulsory social security; Japan: contractual cash earnings establishments with five or more employees; Republic of Korea: total gross wage, all businesses with one or more employees; United Kingdom: average weekly earnings, whole economy; United States: average weekly earnings of all employees in the private sector.

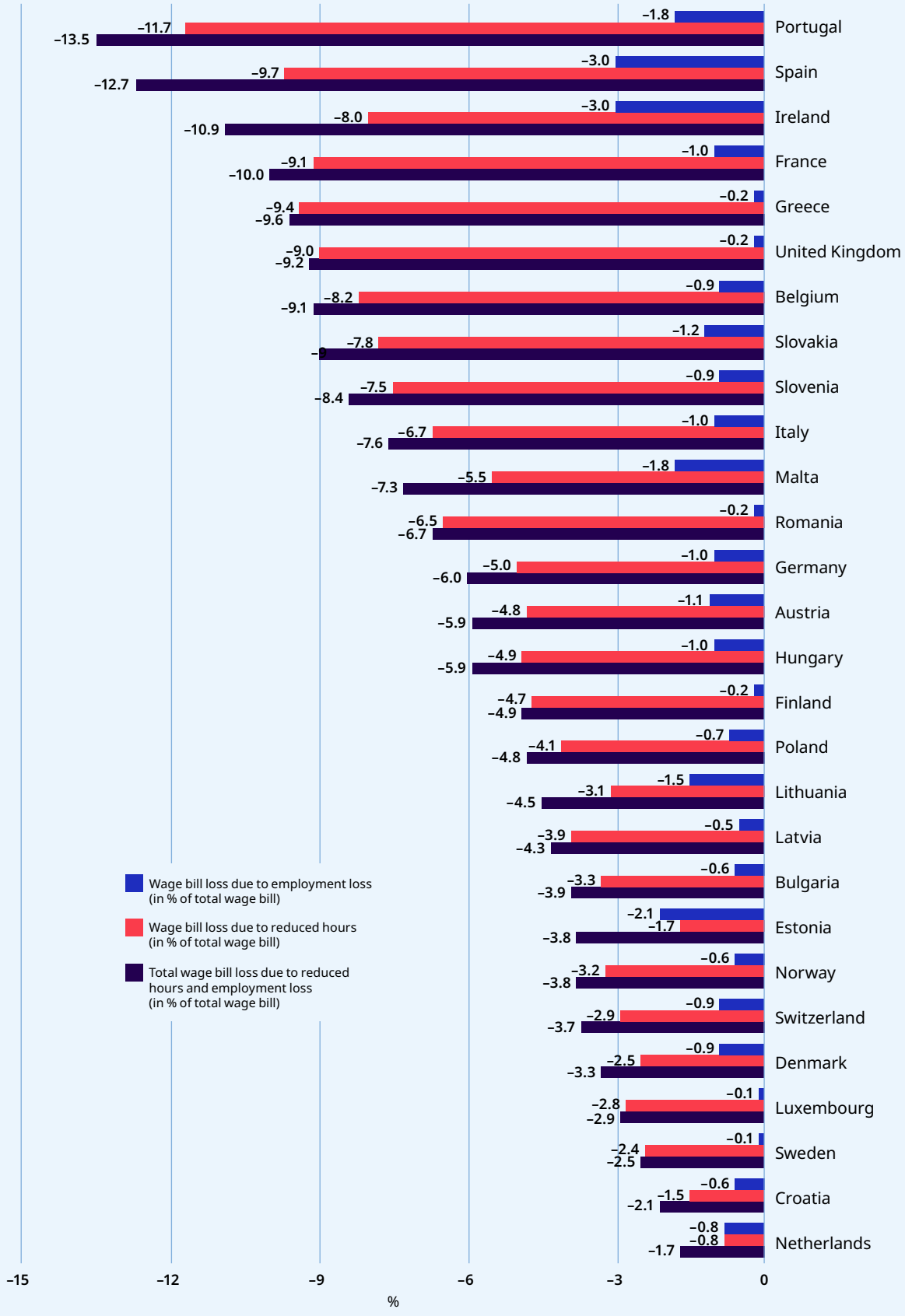
Sources: ILO and national statistical offices of the respective countries.

4

The impact of the crisis in Europe

Looking at the impact of the COVID-19 crisis on European countries, unprecedented job losses and reduction in working hours could lead to an estimated total wage bill loss of 6.5 per cent on average (before taking account of wage subsidies), a drop mainly driven by the reduction in working hours (figure 4.1). The decline in the total wage bill is smaller than the decrease in the total number of hours actually worked in those countries (–11.4 per cent) because the lowest-paying jobs are the ones that have been most severely hit by the fall in employment and hours. Furthermore, while many employees have lost their earnings because of lay-offs, it appears that, in all the selected countries, reduced working hours have been the primary means by which the labour market has coped with this crisis. Consequently, the wage bill losses caused by lay-offs (–1 per cent) are smaller than those attributable to reductions in working hours (–5.5 per cent), suggesting that policy measures implemented to safeguard jobs have managed to contain the negative impacts of the crisis on employment. The largest wage bill losses – in excess of 10 per cent – have been estimated in Ireland, Portugal, and Spain. At the opposite end of the sample, workers in Croatia, Luxembourg, the Netherlands and Sweden have suffered the lowest wage bill losses, smaller than 3 per cent.

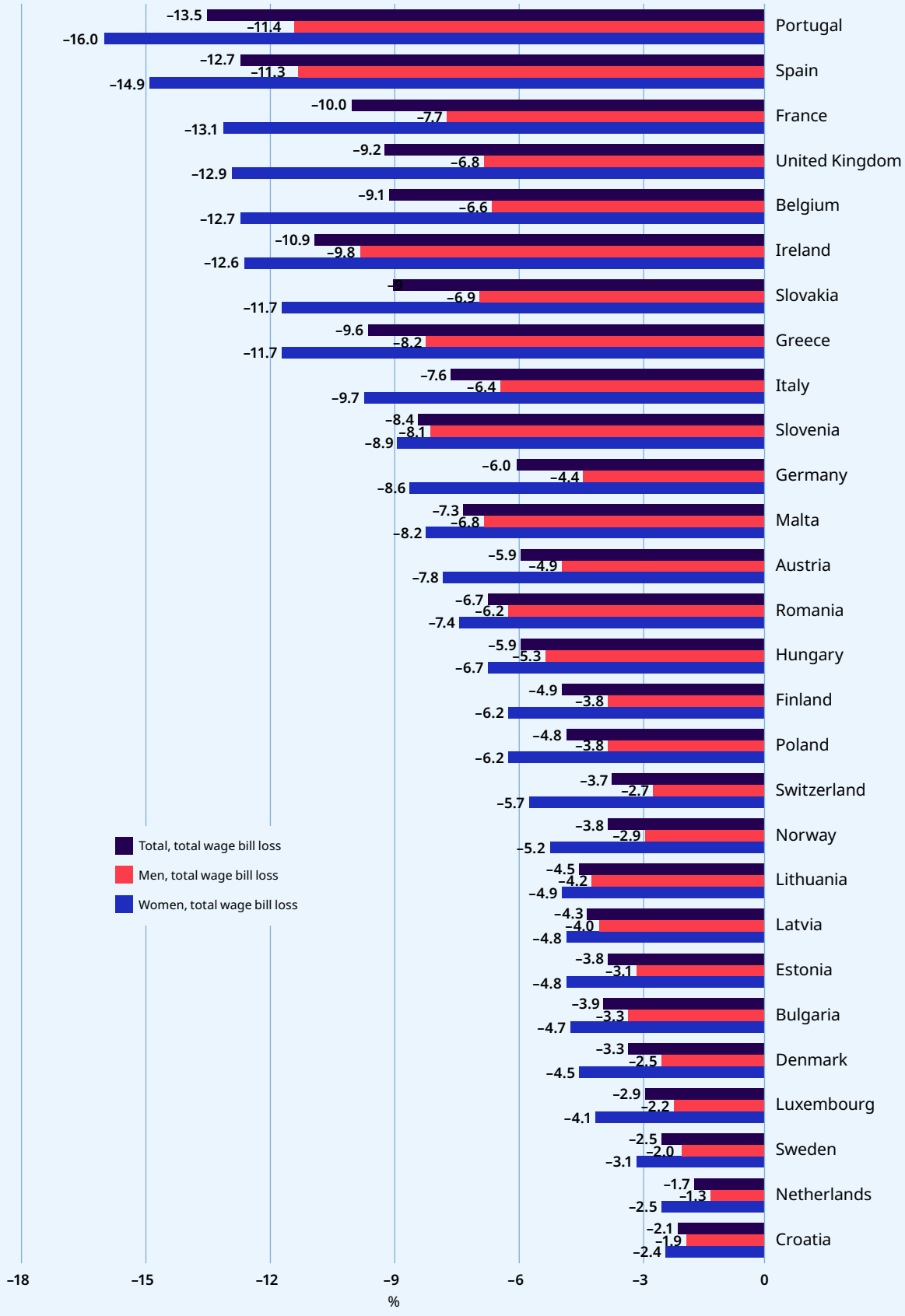
Figure 4.1 Total wage bill loss, and wage bill loss owing to reduced working hours and to employment loss, selected European countries, between first and second quarters of 2020 (percentage)



Note: Eurostat estimates of the number of employment (*"Employment by sex, age and citizenship"*) and the number of actual working hours (*"Index of total actual hours worked in the main job by sex and age group"*) have been used to simulate the wage bill lost.

Source: EU-SILC (2018); Eurostat.

Figure 4.2 Total wage bill losses, by country and by gender, selected European countries, between first and second quarters of 2020 (percentage)



Note: Eurostat estimates of the number of employment (*"Employment by sex, age and citizenship"*) and the number of actual working hours (*"Index of total actual hours worked in the main job by sex and age group"*) have been used to simulate the wage bill lost.

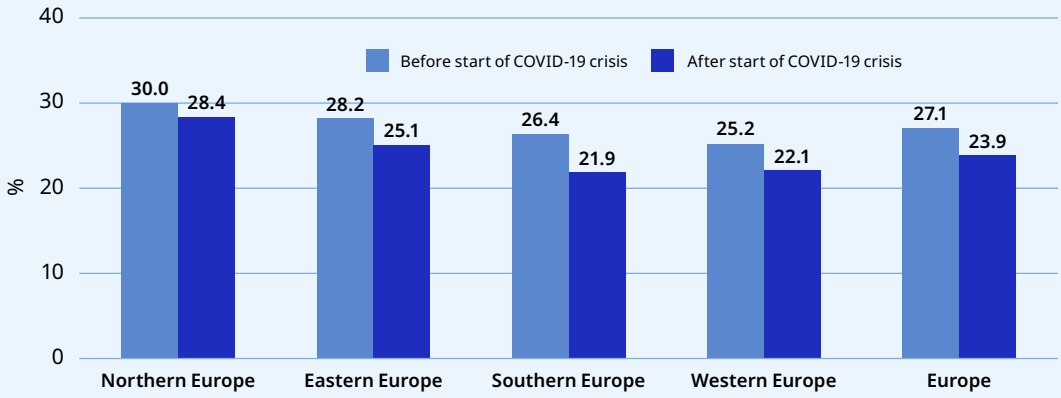
Source: EU-SILC (2018); Eurostat.

Given the disproportionate employment impacts of the crisis on women, who represent a high proportion of workers in essential services and front-line occupations and are over-represented in the hardest-hit sectors, the total wage bill loss is estimated to be much greater for women (–8.1 per cent) than for men (–5.4 per cent) (figure 4.2). In all European countries, women's proportion of the wage bill has been hit more severely by the unprecedented job losses and the reduction in working hours that have occurred as a result of the COVID-19 crisis. Such a discrepancy was mainly caused by the difference in the wage bill loss due to reduced workings hours. While the average difference in wage bill losses caused by lay-offs was smaller than 0.4 percentage points between women and men, the average wage bill loss due to the drop in workings hours was 6.9 per cent for women compared to 4.7 per cent for men. The largest differences between women and men are observed in Belgium, France, Germany, Portugal, Slovakia and the United Kingdom. In contrast, the differences are smaller in Croatia, Latvia, Lithuania and Slovenia.

> Given the disproportionate employment impacts of the crisis on women, the total wage bill loss is estimated to be much greater for women (–8.1 per cent) than for men (–5.4 per cent).

Looking at the impact of the crisis on wage inequality in European countries, the estimated share of the total wage bill received by those at the bottom 50 per cent of the wage distribution has fallen by 3.3 percentage points in Europe, indicating that the crisis has altered the wage distribution in favour of the highest-earning workers, thereby increasing earnings inequality. Figure 4.3 shows the percentage of the total wage bill accounted for by individuals at the bottom 50 per cent of the wage distribution before and after the outbreak of the pandemic within each of the four groupings of European countries. That percentage was greatest in Northern European countries and smallest in Western European countries. Following the onset of the crisis, it is evident that those with wages below the median experienced a reduction in their share of the total wage bill within each group, with the smallest decrease being observed in Northern European countries and the largest in Southern Europe. This outcome reflects the fact that workers in lower-skilled occupations, and in particular those in elementary work, were more likely to experience job losses and reduction in working hours following the start of the pandemic, whereas those in typically higher-paying managerial and professional jobs were less likely to be affected by the crisis.

Figure 4.3 Share of the total wage bill received by those at the bottom 50 per cent of the wage distribution, four groups of European countries, first and second quarters of 2020 (percentage)



Notes: Northern Europe = Denmark, Finland, Norway, Sweden; Southern Europe = Croatia, Greece, Italy, Malta, Portugal, Spain; Western Europe = Austria, Belgium, France, Germany, Ireland, Luxembourg, Netherlands, Switzerland, United Kingdom; Eastern Europe = Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia, Slovakia, Slovenia.

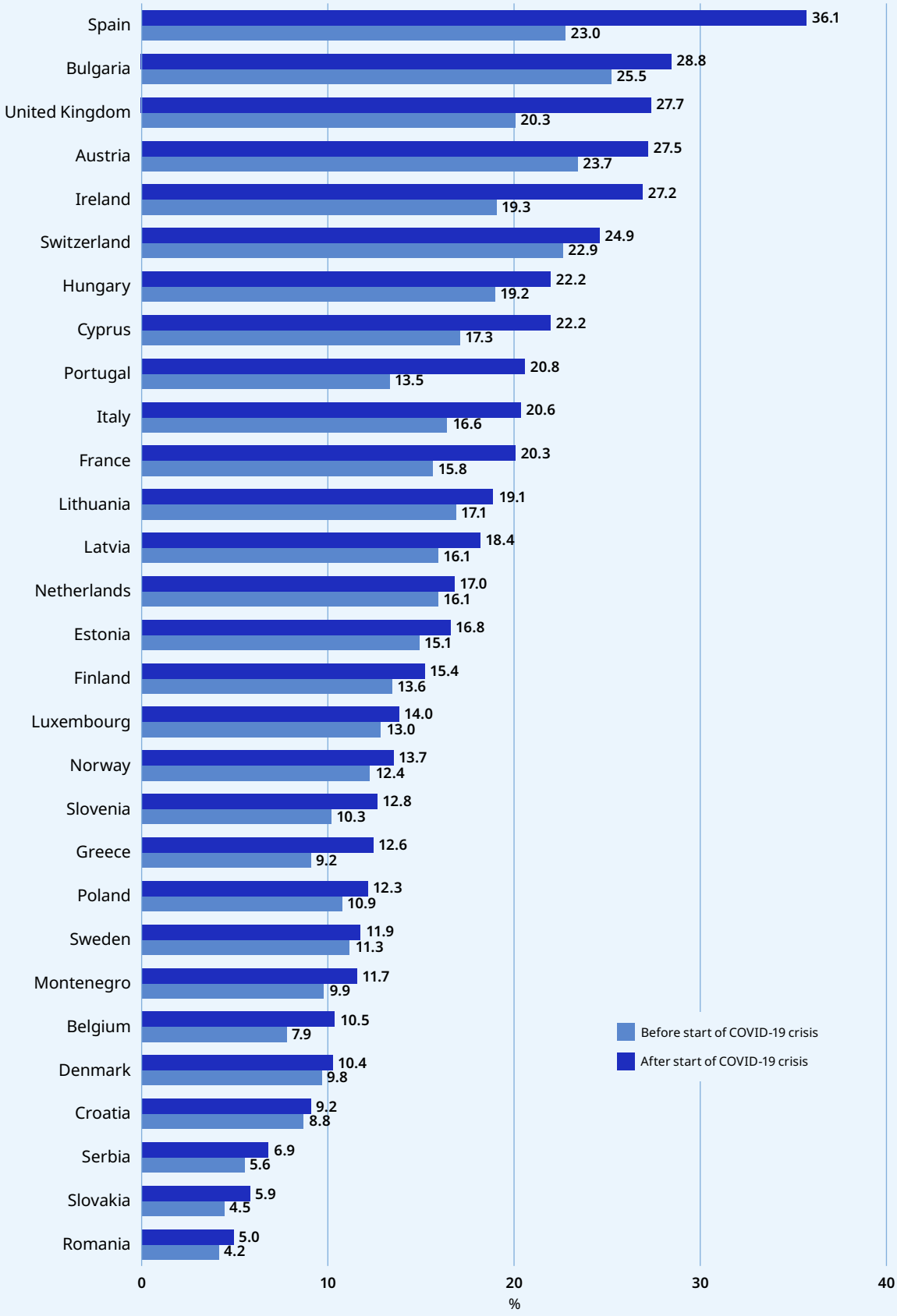
Source: EU-SILC (2018); data from national statistical offices.

Pursuing further the analysis of the impact of the crisis on inequality, figure 4.4 shows an increase, in all European countries, in the P90/P10 ratio of the total wage bill, which suggests that wage inequality has increased in Europe overall since the start of the pandemic. This indicator refers to the ratio of the share of the total wage bill earned by those in the highest decile of the wage distribution to the share earned by those in the lowest decile; figures are presented here for the first quarter of 2020 (before the start of the pandemic) and the second quarter (after the onset of the pandemic). The higher the ratio is, the more wage inequality there is. While before the crisis the ratio ranged between 4.2 in Romania and 25.5 in Bulgaria, by the second quarter of 2020 the range was between 5.0 in Romania and 36.1 in Spain. The P90/P10 is estimated to increase by 21.1 per cent on average, which indicates that the crisis could significantly exacerbate wage inequality in Europe. For all countries in the sample, inequality as measured in this way would increase following the start of the pandemic. The countries with the highest estimated rise in inequality as measured by the percentage increase in the P90/P10 ratio are Ireland, Portugal and Spain. At the opposite end, Croatia, Denmark, Luxembourg, Norway, Sweden and Switzerland have experienced increases in the P90/P10 ratio that are smaller than 10 per cent.

> The analysis of the impacts of the crisis suggests that wage inequality has increased in Europe overall since the start of the pandemic.

iStock.com/AndreyPopov

Figure 4.4 Ratio of 90th percentile of the wage distribution to 10th percentile, selected European countries, first and second quarters of 2020

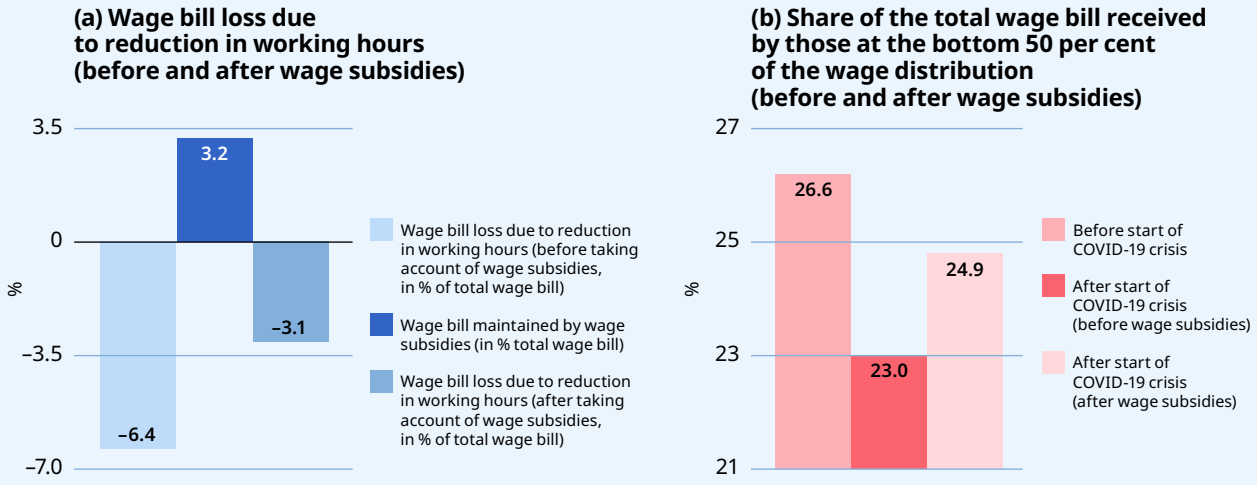


Source: EU-SILC (2018); data from national statistical offices.

> Wage subsidies have been widely used throughout Europe to prevent massive lay-offs and have permitted to compensate around half of the wage bill loss caused by the reduction in working hours, thereby mitigating the increase in inequality.

Wage subsidies have been widely used throughout Europe to prevent massive lay-offs and have permitted to compensate around half of the wage bill loss caused by the reduction in working hours, thereby mitigating the increase in inequality. Most European countries have either introduced or expanded existing wage subsidies to cover all employees or those who were unable to work owing to lockdown measures. For a selected sample of ten European countries with detailed information on wage subsidy schemes, figure 4.5 shows how such job retention measures have permitted to lessen the effects of the crisis on the decline of the wage bill, along with the increase in inequality. On average, while 6.4 per cent of the wage bill would have been lost following a reduction in working hours in those ten selected countries, only 3.1 per cent of the wage bill was eventually lost after taking into account wage subsidies, which suggests that around 51 per cent of the wage bill losses caused by reduction in working hours have been saved by wage subsidies. Wage subsidies have also permitted to mitigate the impact of the crisis on earnings inequality in those countries by reducing the decline in the share of the total wage bill received by those at the bottom 50 per cent of the wage distribution from 3.7 to 1.7 percentage points. Even though the lockdown measures meant that for many industries production and services came to a halt, the relatively small reductions in the total wage bill, after taking account of wage subsidies, suggest that the combination of job retention measures, along with home working, have permitted many parts of the European economy to continue to function.

Figure 4.5 (a) Wage bill loss due to reduction in working hours (before and after wage subsidies); (b) Share of the total wage bill received by those at the bottom 50 per cent of the wage distribution (before and after wage subsidies) (percentage)



Notes : Estimates use wage subsidies information for Belgium, Bulgaria, France, Hungary, Latvia, Portugal, Slovenia, Spain, Sweden and Switzerland.

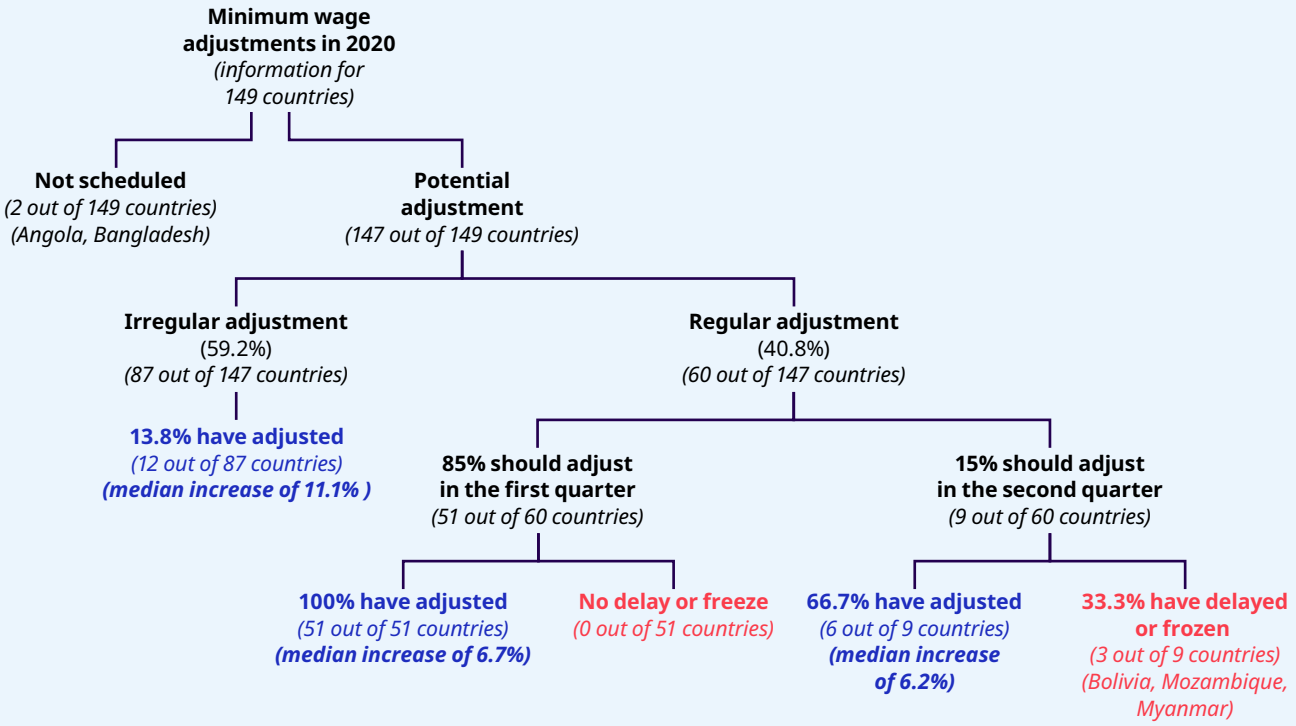
Source: EU-SILC (2018); Eurostat.

5 Minimum wage adjustments in 2020

How have countries adjusted their minimum wages in 2020? In the light of current economic difficulties, have countries decided to postpone or cancel adjustments to minimum wages for 2020? Using information collected on minimum wage adjustments over the past ten years for 149 countries with a statutory minimum wage, figure 5.1 shows the number of countries that have adjusted their minimum wages in the first and second quarters of 2020. Of all the countries, only two countries had already planned not to review minimum wage levels in 2020, including Angola, which undertakes a minimum wage adjustment every two years in March, and which last made an increase in 2019; and Bangladesh, which revises the minimum wage every five years and last did so in December 2018. Leaving aside the two named exceptions, at least 147 countries might adjust their minimum wage in 2020. Most of these (59.2 per cent) have irregular adjustment schedules; the remainder (40.8 per cent) have a regular adjustment planned at some point in the course of 2020.

> Among countries adjusting minimum wages irregularly, 13.8 per cent (12 out of 87 countries) have increased their minimum wage in 2020 compared to around 20 per cent between 2017 and 2019.

Figure 5.1 Overview of minimum wage adjustments in 2020 (first and second quarters of 2020)



Notes: For increases in the minimum wage (in nominal terms), median estimates are preferred to average estimates because of extreme values. The estimates exclude China, India, the Philippines, South Africa and the Bolivarian Republic of Venezuela.

Source: ILO minimum wage database.

Among countries adjusting minimum wages irregularly, 13.8 per cent (12 out of 87 countries) have increased their minimum wage in 2020 compared to around 20 per cent between 2017 and 2019. This suggests that the crisis may have induced some countries to postpone a potential adjustment this year. For example, in Peru, the authorities have cancelled a minimum wage increase, explaining the change with reference to the deterioration in economic conditions (*Gestión*, 2020). It is interesting to note that among the countries that make irregular adjustments, only some Indian states,[12] Algeria and Sudan have adjusted since the first quarter, by which point the COVID-19 pandemic had become a major concern.

[12] The states of Bihar, Chhattisgarh, Goa, Gujarat, Karnataka, Madhya Pradesh, Tamil Nadu, Uttarakhand and Uttar Pradesh adjusted their minimum wage rates on 1 April 2020. See Jha (2020).

Moving on to those countries that adjust minimum wages on a regular basis, analysis reveals that all the adjustments regularly scheduled for the first quarter did occur in 2020 as expected, whereas 67 per cent of those usually adjusting in the second quarter (in the midst of the crisis) have stuck to the scheduled adjustment date. In investigating the occurrence of adjustments in relation to the threat posed by the COVID-19 crisis, it makes sense to pay close attention to the point in the year at which adjustments are usually made. Figure 5.1 identifies two distinct categories of countries: first, those where revision of the minimum wage level would be expected to take place in the first quarter (that is, in 2020, before the severity of the crisis became fully apparent); and second, those where adjustment is usually made in the second quarter (in 2020, at the height of the crisis). The information summarized in figure 5.1 suggests that the great majority of regular adjustments occur in the first quarter (51 out of 60 countries; that is, 85 per cent of those countries that make regular adjustments). Only 9 out of 60 countries adjust regularly in the second quarter. Therefore, ignoring the adjustment calendar for these countries could lead to seriously misleading inferences, underestimating the proportion of countries that have cancelled or delayed minimum wage adjustments and thereby obscuring the negative impact of the crisis.

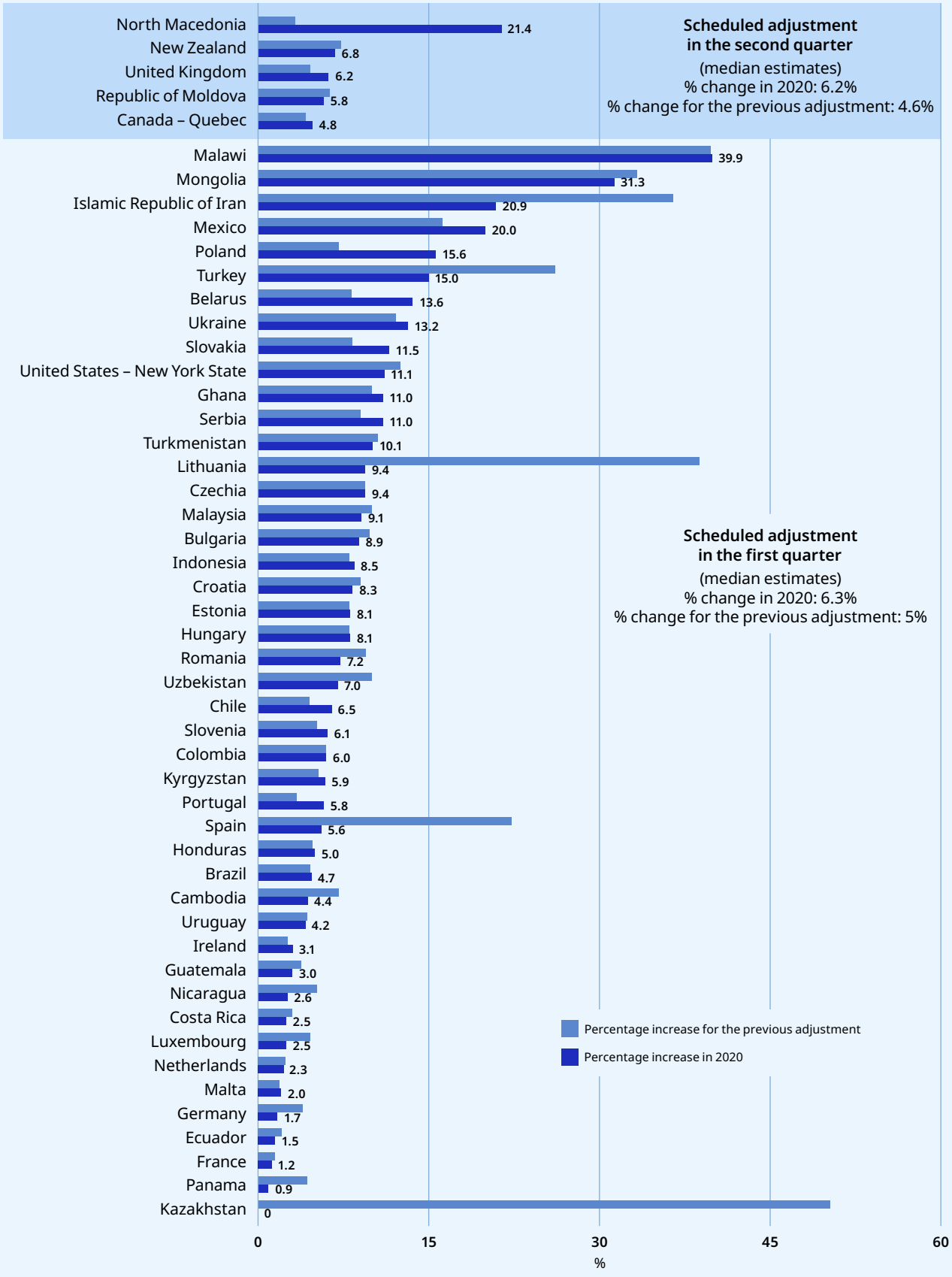
> All the adjustments regularly scheduled for the first quarter did occur in 2020 as expected, whereas 67 per cent of those usually adjusting in the second quarter (in the midst of the crisis) have stuck to the scheduled adjustment date.

Countries that have decided to stick to their scheduled minimum wage adjustment in the second quarter include New Zealand, North Macedonia, the Republic of Moldova, the United Kingdom and the Bolivarian Republic of Venezuela, as well as some parts of Canada.[13] In some of them, there were calls for the planned adjustment to be delayed or cancelled. This was particularly the case in New Zealand, where many voices were raised arguing strenuously that the entry into force of the revised minimum wage should be postponed, citing the daunting challenges COVID-19 poses for the economy. These arguments did not, however, prevent the Government from implementing the adjustment on 1 April 2020, on the basis that this would allow workers to spend more, which in turn would help the economy (Small 2020). Similarly, in the United Kingdom, the minimum wage has been increased as it is scheduled to do each year on 1 April, again despite some calls for a postponement (Atkinson 2020).

On the other hand, as can be seen in figure 5.1, three of the nine countries that were supposed to adjust their minimum wages in the second quarter – the Plurinational State of Bolivia, Mozambique and Myanmar – have opted for a delay or a freeze. In the Plurinational State of Bolivia, while workers were demanding a 15 per cent increase in the minimum wage, the Government decided that the issue should be dealt with after the COVID-19 crisis, arguing that the immediate priority was to stabilize jobs (Montes 2020). A similar situation in Mozambique called forth the same arguments; here, negotiations on a possible adjustment, which usually occurs every year in early April, were suspended (*Euronews* 2020). In Myanmar, discussions on raising the minimum wage have been postponed for at least three months owing to COVID-19 (Wathan 2020).

[13] Seven out of the 13 provinces and territories of Canada have adjusted their minimum wage in 2020 (after the first quarter): see Government of Canada, 2020.

Figure 5.2 Percentage increases in nominal minimum wages, comparing 2020 adjustments with most recent previous adjustments



Notes: Median estimates of increases in minimum wage exclude China, the Philippines, South Africa and the Bolivarian Republic of Venezuela. For New York State, rate applied to New York City - Small Employers (10 or less).

Source: ILO minimum wage database.

It is worth noting that in other countries, delayed increases or freezes in minimum wages because of the COVID-19 crisis have taken place at the local or sectoral level. For example, in the Punjab region of India, the local Government reversed its order announcing a minimum wage increase (Jha 2020). In Costa Rica, while minimum wages were increased in January 2020 across the board, the Government decided to suspend the increase for civil servants, arguing that the money should be used to address more urgent matters raised by the COVID-19 crisis. However, the Attorney-General has since issued an opinion opposing that decision and has ordered the Government to implement the increase as originally planned (Costa Rica, Ministry of Finance 2020). In certain other countries, such as Cyprus and the Maldives, the initial implementation of a new national minimum wage has been put on hold (Aiham 2020; *Miadhu* 2020). In El Salvador, negotiations on the next adjustment of the minimum wage have been suspended because of the pandemic.

Calculations of the extent to which minimum wages have been increased during the pandemic suggest a median rise of 11.1 per cent for countries making irregular adjustments and 6.7 per cent for those that make regular adjustments. It is possible that while some countries might opt to cancel or postpone this year's adjustments, others might prefer to make at least a reduced increase, albeit lower than what it would have been in the absence of COVID-19. The largest increases in minimum wages in 2020 so far have been made by countries that adjust their minimum wages irregularly – possibly because in these countries revisions generally take place after an interval of several years, so that each rise tends to be substantial.

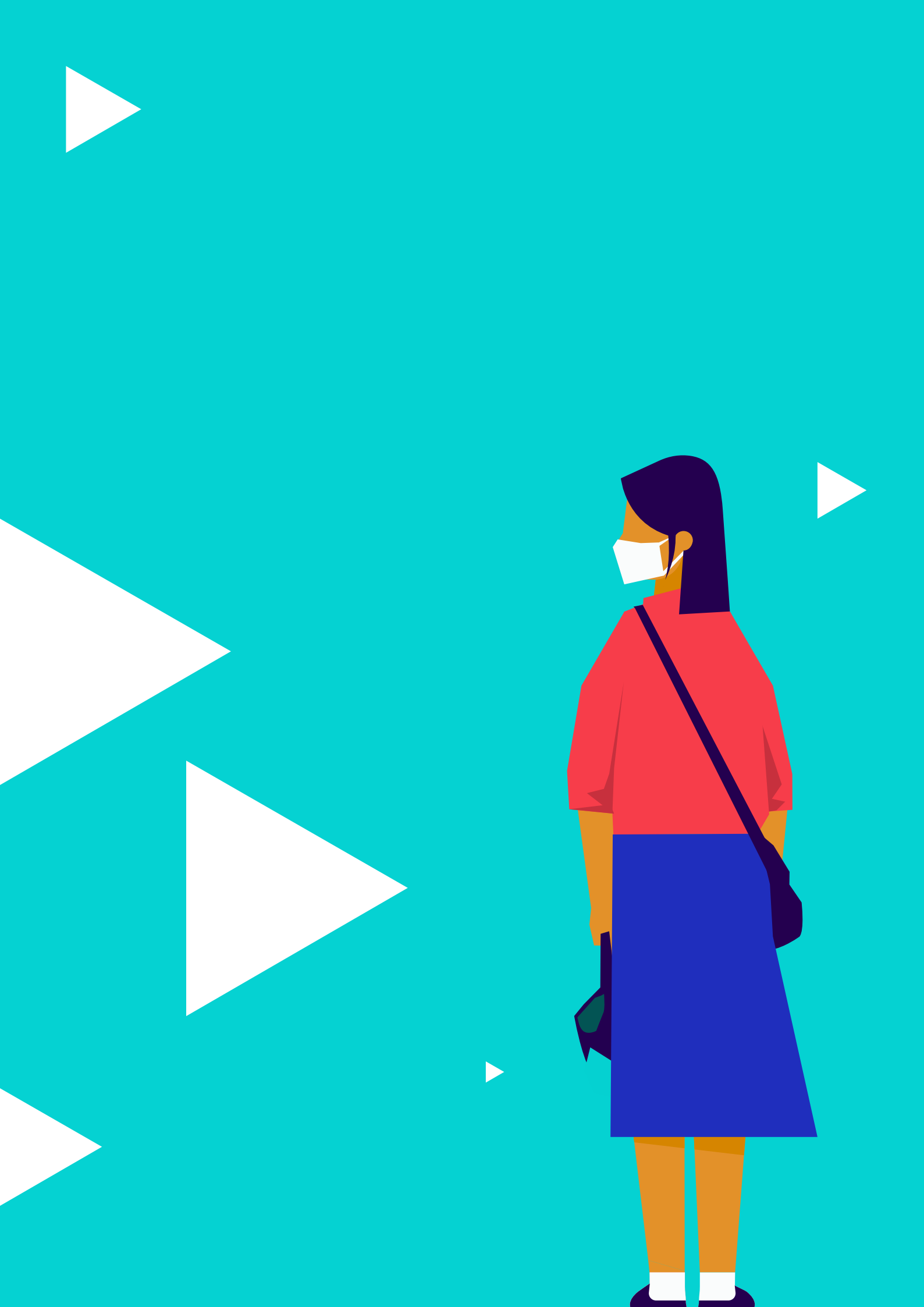
A comparison of this year's planned and actual increases with the immediately previous adjustments reveals that countries that have adjusted their minimum wages during the crisis have not given in to the temptation of making reduced increases. Figure 5.2 shows that minimum wage increases implemented in the first quarter of 2020 (a median rise of 6.3 per cent) are comparable to those made in the same quarter in the most recent previous adjustment (a median rise of 5 per cent). Looking at regular adjustments in the second quarter, a slightly greater increase is observed in 2020 (a median of 6.2 per cent in 2020 against 4.6 per cent for the immediately previous adjustment). Three countries with a regular adjustment schedule have increased minimum wages in the second quarter of 2020 more than previously at the same period: these are Canada (Quebec), North Macedonia and the United Kingdom.

Many policies implemented around the world to avoid mass lay-offs while protecting workers' incomes, among them wage subsidies, have used the minimum wage as a benchmark. As noted above, wage subsidies have been paid to eligible companies, supporting the preservation of jobs for a certain period. In many instances, these contributions by public authorities to the payment of wages have been made at the level of a minimum wage or some proportion of it: for example, in the Cook Islands, Croatia and Latvia the subsidy is 75 per cent of the minimum wage; in Poland, 50 per cent, 70 per cent or 90 per cent of the minimum wage, depending on the level of turnover loss; and in Timor-Leste, 50 per cent of the minimum wage. In other countries, the government has contributed up to a certain percentage of employees' wages, while setting a limit which varies from twice the minimum wage in Argentina to 2.5 times the minimum wage in Luxembourg and 4.5 times the minimum wage in France (ILO 2020j). The adequacy and relevance of the level of minimum wages are therefore of decisive importance to the success and effectiveness of these measures to preserve employment.

Many policies implemented around the world to avoid mass lay-offs while protecting workers' incomes, among them wage subsidies, have used the minimum wage as a benchmark.

Part II

Minimum wages and inequality



6 Introduction

The unprecedented global economic and labour market crisis triggered by the COVID-19 pandemic is likely to have hurt vulnerable groups and put many families at risk of falling into poverty. Consequently, the threat of increased poverty and inequality is more than ever a concern for social justice. It is, therefore, crucial to strengthen measures aimed at protecting workers at risk and to design policies that prevent poverty and inequality levels from rising further. In this respect, adequate minimum wage systems could serve as a particularly valuable tool. The primary objective of a minimum wage is to protect workers against unduly low pay. However, many countries have recognized the additional potential of a minimum wage to promote equality by increasing workers' remuneration and improving the living conditions of those at the lower end of the wage distribution (ILO 2014a).

Past experience can offer useful insights into the potential of minimum wages as a policy option to overcome some of the adverse effects of the current crisis. Back in June 2009, following the international financial and economic crisis, the Global Jobs Pact adopted by the ILO outlined a series of measures to mitigate the impact of that crisis on society and employment. Among other things, it proposed that "[g]overnments should consider options such as minimum wages that can reduce poverty and inequity, increase demand and contribute to economic stability" (ILO 2009, 11) and called for the regular adjustment of minimum wages to avert deflationary wage trends. The Global Jobs Pact also affirmed the relevance of the international labour standards on wages "to prevent a downward spiral in labour conditions and build the recovery" (ILO 2009, 7), making explicit reference to the Minimum Wage Fixing Convention, 1970 (No. 131). More recently, the ILO Centenary Declaration for the Future of Work has emphasized the importance of strengthening labour market institutions and protecting workers through, among other things, the implementation of "an adequate minimum wage, statutory or negotiated" (ILO 2019, 5).

> The ILO Centenary Declaration for the Future of Work calls for the implementation of "an adequate minimum wage, statutory or negotiated".

In the current exceptional circumstances, it appears timely for governments and the social partners to review recent experiences with minimum wages. The central role of social dialogue in the setting of minimum wages, emphasized in Convention No. 131, has acquired particular urgency in the current situation. In support of such social dialogue, the present report identifies the conditions under which minimum wages can help to provide adequate labour protection and reduce inequality, and presents the results of recently conducted empirical analysis of the potential impact of minimum wages on poverty and inequality. The first main chapter in Part II (Chapter 7) begins by reviewing how many countries have minimum wage systems. It then provides global estimates of how many wage workers earn the minimum wage or less, and discusses some of the different minimum wage systems in place around the world. Finally, it identifies three conditions under which minimum wages can best reduce inequality and contribute to social justice: (a) broad legal coverage and compliance with minimum wage legislation (which may be summarized under the concept of "effectiveness"); (b) an adequate minimum wage level; and (c) beneficiaries who are at the lower end of the wage and income distributions. The subsequent chapters discuss these three conditions in turn. Part II concludes with new empirical findings on the potential impact of minimum wages on poverty and inequality. Policy implications are discussed at greater length in Part III of the report.

7 Minimum wages and their potential to reduce inequality

7.1 How many countries have minimum wage systems?

Minimum wages exist in 90 per cent of ILO Member States (see figure 7.1). In 6 per cent of countries, minimum wages are negotiated, that is, they are set exclusively or primarily through binding collective agreements. In a much larger share of countries (84 per cent), minimum wages are statutory, which means that they are set by governments, with or without consultation with the social partners (see figure 7.2). In a number of those countries, statutory minimum wages coexist with higher collectively agreed minimum wages in particular industries or enterprises. Box 7.1 provides further clarification on what exactly is counted as a minimum wage for the purpose of these estimates.

From a regional perspective, the Arab States comprise the region where minimum wages are used the least (see figure 7.3). Statutory or negotiated minimum wages exist in all European and Central Asian countries, and in most countries in the Americas, Africa, and Asia and the Pacific. In Europe and Central Asia, nine countries – Austria, Denmark, Finland, Iceland, Italy, Norway, San Marino, Sweden and Switzerland[1] – rely exclusively or primarily on collectively agreed minimum wages. In the Americas, 94 per cent of countries have statutory minimum wages, the only exceptions being Cuba and Saint Lucia. In Cuba, minimum wages apply only to state-funded units.[2] In Africa, minimum wages exist in 47 of the region's 54 countries, notable exceptions including Egypt and Ethiopia. Out of those 47 countries, only Namibia and Zimbabwe rely exclusively or predominantly on collectively agreed minimum wages. In Asia and the Pacific, 31 ILO Member States have implemented minimum wage systems, all of these being statutory. In the Arab States region, minimum wages exist in 7 out of 11 countries, namely in

[1] In Switzerland, some statutory minimum wages apply, but only in a limited number of cantons; domestic workers are covered by a statutory minimum wage at the federal level. However, for the majority of employees who are covered, wage floors are set through collective bargaining.

[2] In Cuba, all enterprises are publicly owned but some – *unidades presupuestadas* (state-funded units) – are run by the Government, while others are run by private entities.

▶ Box 7.1 What counts as a minimum wage?

How is a minimum wage defined? The ILO defines the concept of a minimum wage as "the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract" (ILO 2014a, 33). This means that minimum wages must have the force of law.

Minimum wages can be statutory or negotiated. The above definition implies that minimum wages can be set by governments (statutory) or can result from a collective agreement between employers' and workers' organizations (negotiated) that is made legally binding. This definition does not necessarily require the existence of an extension mechanism, which applies the negotiated agreement to an entire sector or country; the requirement is only for negotiated minimum wages to be legally binding on the parties. While Finland legally extends the provisions of many collective agreements to entire industries, in other countries – such as Denmark, Sweden or Switzerland – collective agreements are binding only on those parties that sign them.

Countries with wage floors that apply only to the civil service/public sector are not counted as having a minimum wage. The wages of public or civil servants around the world are regulated by pay scales set through administrative law or arrangements, most of which fall outside the scope of minimum wage laws. This means that all public sector workers are normally covered by pay scales that act as de facto wage floors. Counting those countries that have only public sector wage floors as having a minimum wage would make little sense, as it would effectively result in including all countries in the world in that category.

Iraq, Jordan, Kuwait, Lebanon, Oman (where only nationals are covered), Qatar (a recent addition) and the Syrian Arab Republic. No minimum wage exists in Bahrain, Saudi Arabia, the United Arab Emirates or Yemen. Across the Arab States, as shown in figure 7.3, the share of wage workers residing in countries without minimum wage systems is around 52 per cent. In contrast, even though 14 per cent of countries in Asia and the Pacific do not have a minimum wage, the share of the region's wage earners residing in such countries is below 0.5 per cent, since the countries in question are relatively small. At the global level, around 3.1 per cent of wage earners reside in countries without minimum wage systems, which is equivalent to approximately 57 million wage workers.

57 million

wage earners reside in countries without minimum wage systems

When countries are grouped by income level, it may be observed that, even in low-income countries, a vast majority have adopted a minimum wage system. Indeed, figure 7.4 shows that only 13 per cent of low-income countries do not have a minimum wage. In the other income groups this proportion stands at 9 per cent. Negotiated minimum wages are markedly more frequent in high-income countries, 16 per cent of which have minimum wages set by legally binding collective agreements.

In recent years, there has been a positive trend in the development of minimum wages, with many countries adopting new minimum wages or strengthening existing minimum wage systems; an initiative has also been launched to promote adequate minimum wages in the EU Member States. Since 2010, countries such as Cabo Verde, Germany, Malaysia, Myanmar, Suriname and – most recently – Qatar have adopted a minimum wage system. The ILO has provided several of these countries with technical assistance and is continuing to do so for others that have signalled their intention to introduce a minimum wage system, such as the Maldives[3] and Ethiopia. Existing minimum wage systems often evolve and change over time. Countries that have strengthened an established

[3] A minimum wage may come into effect in the Maldives by the end of 2021, since the Economic Committee of the country's parliament approved the necessary amendments to the Employment Act in August 2020 (South Asia Monitor 2020).

Figure 7.1. Distribution of minimum wage systems around the world

Note: This figure covers only ILO Member States. Countries labelled as "Collective bargaining" are those where minimum wages are set exclusively or predominantly through negotiated collective agreements. Countries where the minimum wage applies only to the public sector are classified together with the countries that have no minimum wage (see box 7.1).

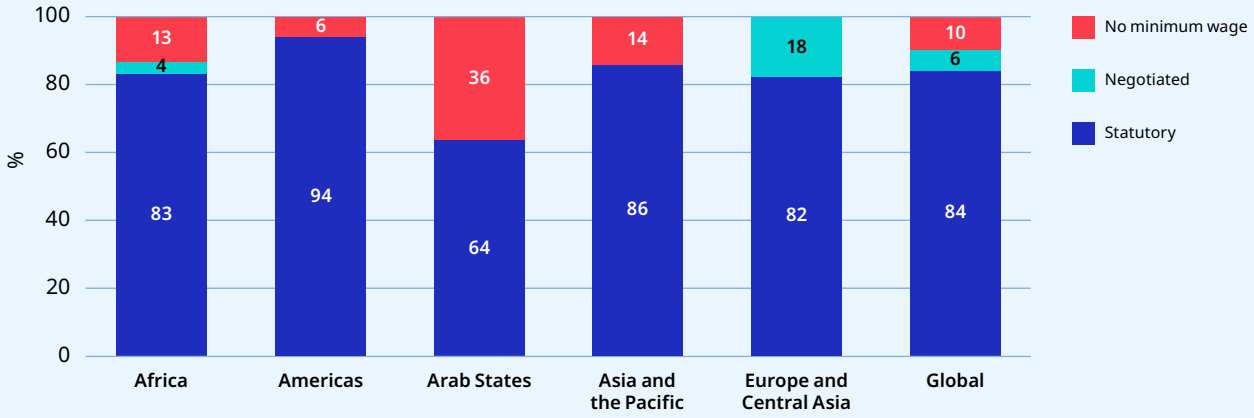
Source: ILO minimum wage database.

90%

of ILO Member States have minimum wages

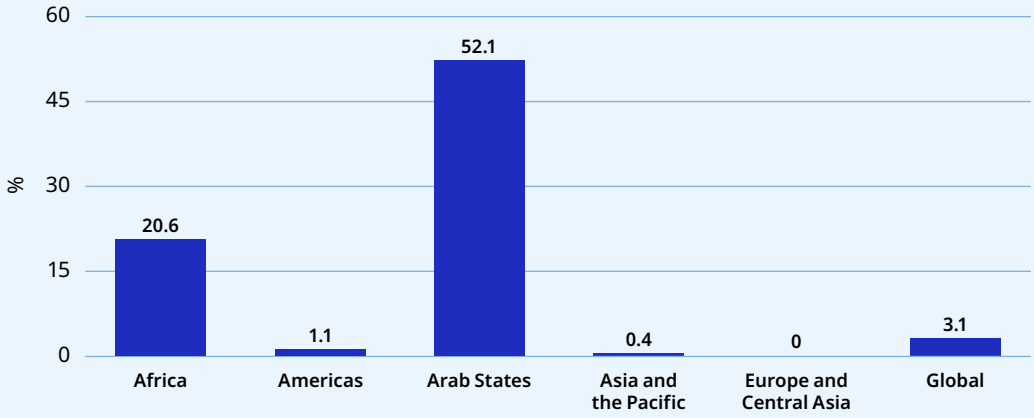

Iceland
Sweden
Finland
Norway
Estonia
United Kingdom
Denmark
Belarus
Ukraine
Switzerland
Italy
Bulgaria
Spain
Tunisia
Lebanon
Morocco
Libya
Egypt
Bahrain
Saudi Arabia
Pakistan
Nepal
India
Myanmar
Thailand
Philippines
Mauritania
Niger
Eritrea
Yemen
Guinea-Bissau
Ethiopia
Nigeria
South Sudan
Sri Lanka
Maldives
Liberia
Somalia
Kenya
Brunei Darussalam
Marshall Islands
Sao Tome and Principe
Seychelles
Indonesia
Papua New Guinea
Tuvalu
Angola
Mozambique
Vanuatu
Zimbabwe
Mauritius
Tonga
Namibia
Madagascar
Australia
South Africa
New Zealand
Russian Federation
Kazakhstan
Mongolia
China
Turkmenistan
Japan
Collective bargaining
No minimum wage
Statutory minimum wage

Figure 7.2 Minimum wages, statutory, negotiated or absent, global and by region, 2020 (percentage)



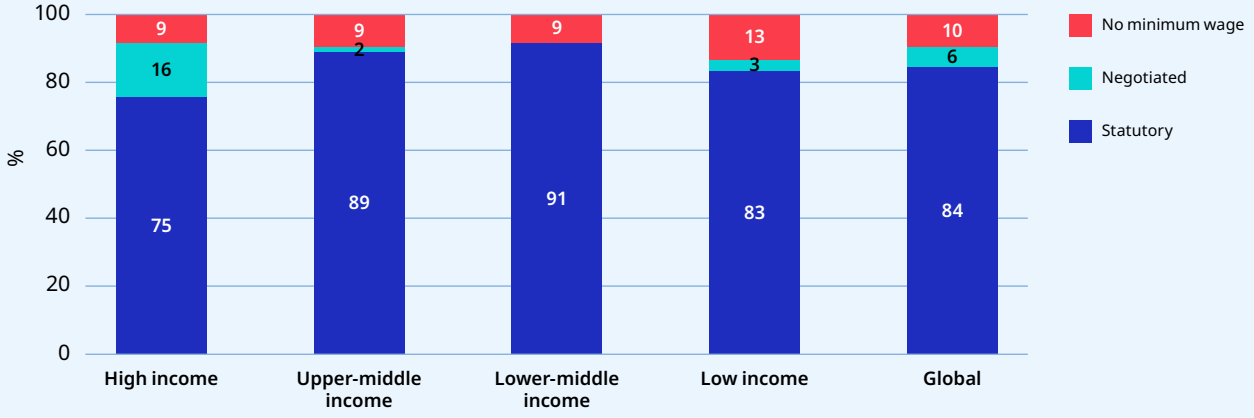
Source: ILO minimum wage database.

Figure 7.3 Proportion of wage earners residing in countries where no minimum wage exists, global and by region, 2020 (percentage)



Source: ILO estimates.

Figure 7.4 Minimum wages, statutory or negotiated, global and by country income group, 2020 (percentage)



Source: ILO minimum wage database.

minimum wage system include India, which has extended minimum wage coverage through a national universal minimum wage (wage floor) stipulated in the recently enacted Code on Wages (August 2019)[4] and South Africa, where a national minimum wage floor came into effect on 1 January 2019. In 2020, the European Commission has launched a two-stage consultation with the European Social Partners to take forward an initiative to ensure that every worker in the EU is entitled to a fair minimum wage (European Commission 2020).

Social dialogue is at the heart of an adequate minimum wage system. Although a majority of ILO Member States set minimum wages only after consultation with employers' and workers' organizations, or with their full participation, such consultations are in practice not always effective**.** Different mechanisms are used around the world to set and adjust minimum wages. These include minimum wages set by public authorities without an obligation to consult the social partners, as in the Plurinational State of Bolivia and Kyrgyzstan; minimum wages set and adjusted in national parliaments, as in Luxembourg and the United States; minimum wages set through national collective agreements, as in Belgium; and minimum wages set after consultation with the social partners (either separately or within the framework of minimum wage commissions) or directly by tripartite bodies, as in Argentina, France, Kenya and many other countries. However, while the legislation of most countries provides for consultation with, or involvement of, the social partners in some form or other, the relevant provisions are not always effective. For many countries, one future priority in efforts to achieve adequate minimum wages should be to improve these consultation mechanisms.

> Social dialogue is at the heart of an adequate minimum wage system.

[4] The Indian Economic Survey 2018–19, whose results were published in July 2019, acknowledged the complexities of the Indian minimum wage system and called for it to be overhauled.

iStock.com/pixelfit

7.2 How many workers earn the minimum wage or less?

Globally, an estimated 327 million wage earners are paid at or below the applicable hourly minimum wage (figure 7.5). This is equivalent to 19 per cent of all wage earners, and includes 152 million women. These estimates are based on microdata for a sample of 72 countries, covering an estimated 73 per cent of all the wage employees in the world.[5] The number of wage employees earning less than the minimum wage is defined in the data as all those earning less than 95 per cent of the minimum wage value; wage employees earning the minimum wage are defined as those earning between 95 and 105 per cent of the minimum wage value. The methodology is further elaborated in box 7.2. These global and regional figures provide an estimate of the number of direct and – in the case of those earning below the minimum wage – potential beneficiaries of minimum wage systems.

Excluding the Arab States, for which insufficient data are available to generate reliable estimates, it may be seen that the proportion of wage earners below or at the minimum wage is highest in Africa and lowest in Europe and Central Asia. In Africa, the share of employees earning the minimum wage or less is estimated at 24 per cent, which translates into 32 million employees, of whom 11 million are women. In absolute terms, however, Asia and the Pacific has the largest number of employees earning the minimum wage or less, with an estimated 160 million employees in that situation, including 72 million women. In the Americas, the proportion of employees paid at or below the minimum wage is estimated at 22 per cent, which is equivalent to 76 million employees, of whom 38 million are women. In Europe and Central Asia, 17 per cent, or 58 million, of employees are paid at or below the minimum wage, of whom 30 million are women.

At the global level, although more men than women earn minimum wages or less, women are over-represented in this category: while women make up 39 per cent of the world's employees paid above the minimum wage, they represent 47 per cent of the world's sub-minimum and minimum wage earners. Figure 7.6 shows that, in all regions, the proportion of women among those earning the minimum wage or less is larger than their share among those earning more than the minimum wage. For instance, in Asia and the Pacific, while women represent 45 per cent of employees earning the minimum wage or less, only 36 per cent of employees receiving more than the minimum wage are women. The lower absolute number of women at or below the minimum wage in some regions is a reflection of their generally lower labour force participation.

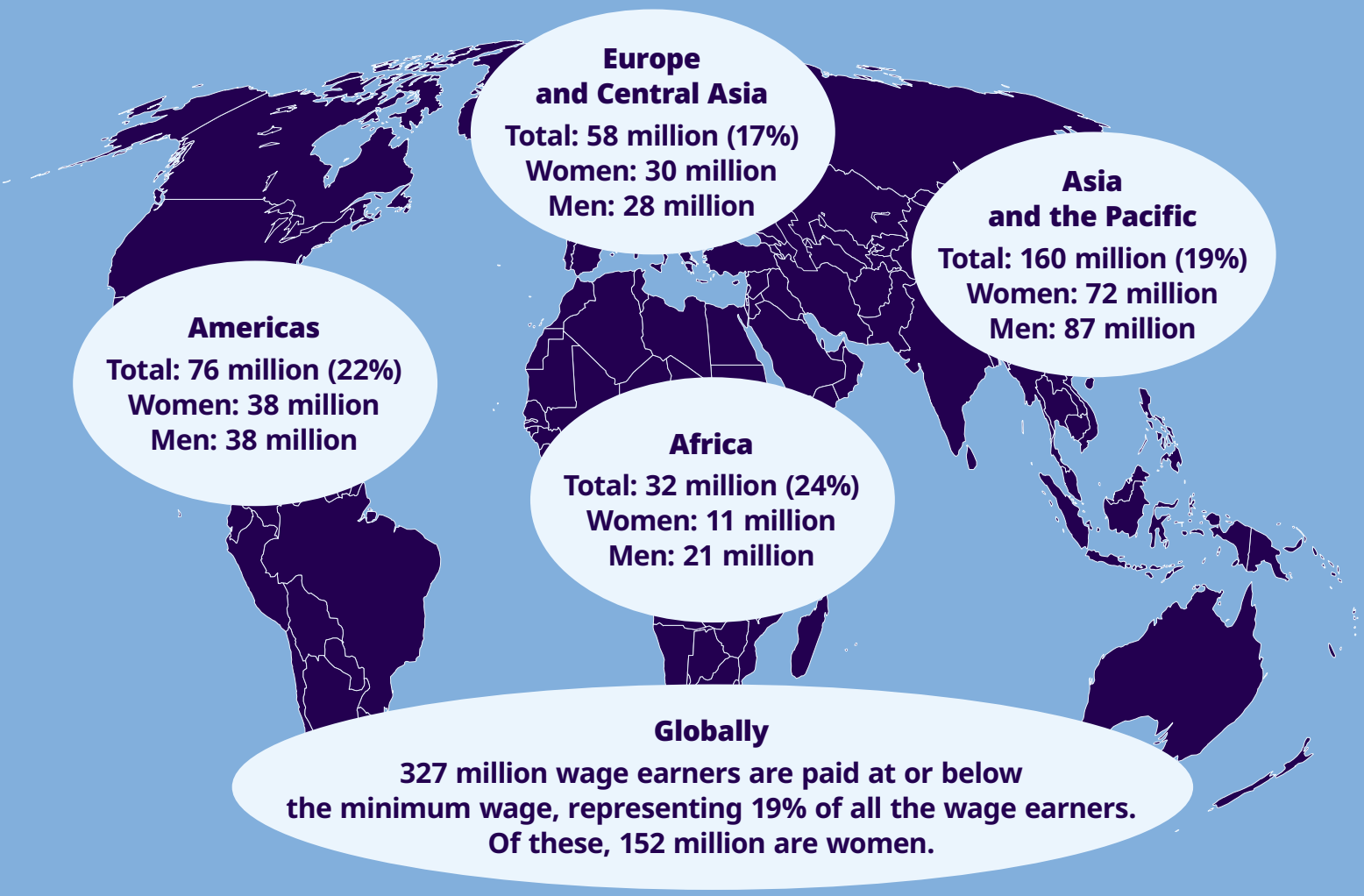
The literature suggests that minimum wages can make a significant contribution towards narrowing gender pay gaps. The link between minimum wages and reduced gender pay gaps has been observed in numerous countries. For example, one study showed that gender wage gaps among production workers in Indonesia were reduced by an increase in minimum wages, with different impacts depending on workers' education levels and the employing firm's position in the wage distribution (Hallward-Driemeier, Rijkers and Waxman 2017). Another study found that a minimum wage increase in Poland significantly reduced the gender wage gap between 2006 and 2010, especially among young workers (Majchrowska and Strawiński 2018). In urban China, research has established that the reduction of the gender wage gap over the long term, especially among the low-paid, is attributable to the implementation of a minimum wage policy (Li and Ma 2015). Finally, a study on the impact of the introduction of minimum wages in the United Kingdom and Ireland (Bargain, Doorley and Van Kerm 2019) found that while the existence of a wage floor narrowed the gender pay gap in Ireland, there was no effect in the United Kingdom.

[5] For details of the microdata sources, see Appendix V.

327 million

wage earners are paid at or below the applicable hourly minimum wage

▶ **Figure 7.5 Number of wage earners below or at the hourly minimum wage, global and by region, 2019**



Note: The percentages in parentheses indicate the proportion of wage workers in each region who earn the minimum wage or less. The global estimates include results for the Arab States in which approximately 1 million wage earners are estimated to receive the minimum wage or less. However, results for the Arab States are not shown because there are not enough data to produce reliable estimates for that region.

Source: ILO estimates.

> Women are over-represented among minimum and sub-minimum wage earners. The literature suggests that minimum wages can make a significant contribution towards narrowing gender pay gaps.

▶ Box 7.2 Methodology for estimating the global and regional numbers of wage earners paid at or below the minimum wage

Using microdata for a set of 72 countries along with information on minimum wages retrieved from the ILO minimum wage database, we estimated the following shares of wage earners for all the countries in the sample:

- **Share of wage earners below the minimum wage:** wage earners earning less than the minimum wage are defined as those receiving a wage per hour that corresponds to less than 95 per cent of the minimum wage level. Because we estimate the hourly wage for each worker, we are able to consider all workers, both full- and part-time, in a single group.[a]
- **Share of wage earners earning the minimum wage:** wage earners earning the minimum wage are defined as those receiving a wage that is between 95 and 105 per cent of the minimum wage level.
- **Share of wage earners above the minimum wage:** wage earners earning more than the minimum wage are defined as those receiving a wage that is over 105 per cent of the minimum wage level.

By applying this classification to the ILO's national estimates for 2019 of the total number of employees for each of the countries covered, we arrived at the absolute number of wage earners falling into each of the above-mentioned categories.

In order to ensure global coverage, we imputed values for the countries where minimum wages exist but for which microdata were not available. To that end, we used the regional average share of each of the categories of wage earners defined above and applied it to the ILO's 2019 estimates of the total number of employees for each country.

The same procedure was followed to obtain the share of women falling into each category.

Table B7.2.1 provides information on the coverage of the microdata by region, showing the extent to which actual microdata, as opposed to imputed values, were used to estimate the share of minimum and sub-minimum wage earners. Globally, we were able to estimate the number of minimum and sub-minimum wage earners in 72 countries, covering an estimated 73 per cent of all the wage earners in the world.

▶ **Table B7.2.1 Microdata coverage of the global estimate**

Region	% of population covered	% of employees covered	No. of countries covered
Africa	16	13	11
Americas	89	92	15
Arab States	6	4	1
Asia and the Pacific	60	76	14
Europe and Central Asia	78	78	31
World	**57**	**73**	**72**

[a] All data sets used provide enough information to identify the hourly wage that workers receive. Most countries specify the minimum wage per month. For these countries, we estimated the corresponding hourly minimum wage by dividing the monthly minimum wage by the average number of weeks per month and then by the specific number of hours worked per week by a full-time worker in that country. See Appendix III for more details on the treatment of the data.

Figure 7.6 Share of women among employees earning the minimum wage or less, and above the minimum wage, global and by region, 2019 (percentage)

MW = minimum wage.

Note: The dark blue bar represents the share of women among employees who earn the minimum wage or less, while the blue bar represents the share of women among employees who earn more than the minimum wage. This means that globally, for example, among wage earners receiving the minimum wage or less, 47 per cent are women and 53 per cent are men, while among wage earners paid more than the minimum wage, 39 per cent are women and 61 per cent are men. Results for the Arab States are not included because there are not enough data to produce reliable estimates for that region.

Source: ILO estimates.

iStock.com/Ralf Liebhold

7.3 How do statutory minimum wage systems differ across countries?

Although they exist in a large majority of countries in the world, minimum wage systems differ widely across countries and range from simple to very complex. Some countries have only one minimum wage that applies to all employees in the country; others have several minimum wage rates, determined by sector of activity, occupation, age of the employee or geographical region. As pointed out in the ILO *Minimum Wage Policy Guide*, simple systems are easier to operate, communicate and enforce, but offer less scope to take into account the particular circumstances of different regions or sectors within a country (ILO 2016). Conversely, more complex systems can be better tailored to the circumstances of different sectors or regions, but require more institutional capacity to administer. Systems that are overly complex tend to be less effective, and may in some instances interfere with collective bargaining between workers and employers.

Globally, around half of the countries that have a statutory minimum wage have a single national minimum wage rate; the other countries have more complex systems (see figure 7.7). In Europe, for example, countries such as France, Greece, Slovenia and Spain all have single national minimum wages that apply to all parts of the country and all (or almost all) sectors and groups of workers. Other countries with single national minimum wages include Algeria, Ghana and Nigeria in Africa; Argentina, Colombia and Peru in Latin America; and Nepal, the Republic of Korea and Sri Lanka in Asia and the Pacific. Another group of countries, including Canada, China, India, the Russian Federation and the United States, have more complex systems of minimum wages characterized by multiple rates.

iStock.com/amtitus

There is a higher prevalence of multiple rates in Africa, the Americas and Asia and the Pacific than in Europe and Central Asia. Figure 7.8 shows that while only 31 per cent of countries (13 countries) in Europe and Central Asia have more than one rate, 61 per cent of countries (20 countries) in the Americas and 53 per cent of countries (24 countries) in Africa have multiple minimum wage rates. However, it is worth mentioning that these statistics exclude countries in which minimum wages are set by collective agreements, a practice that is more prevalent in European countries than in other regions. Significantly, 23 per cent of countries (7 countries) in Asia and the Pacific have highly complex minimum wage systems characterized by more than 50 rates. This level of complexity often occurs when occupational rates are combined with sectoral and/or geographical rates. Figures 7.9 and 7.10 show the global and regional distribution of single and multiple minimum wage rates, differentiated by the criteria of application.

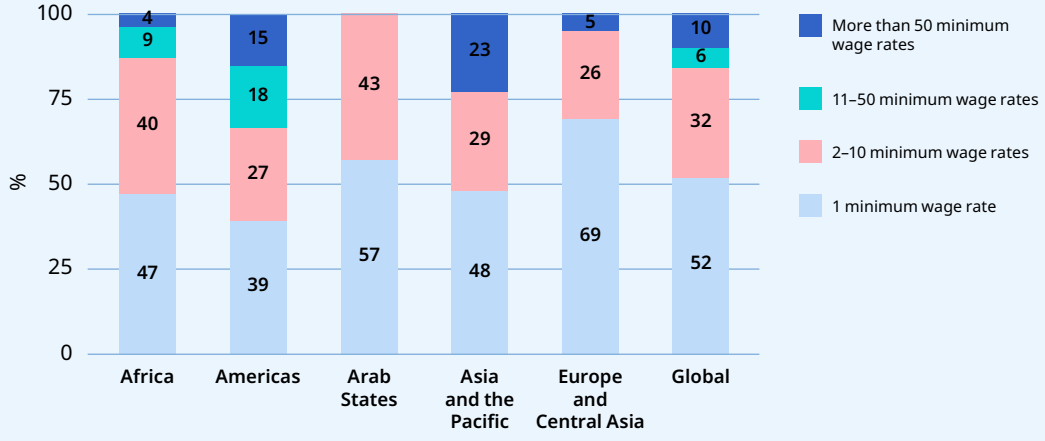
Figure 7.7 Numbers of minimum wage rates around the world, 2020

Note: This figure covers only ILO Member States with a statutory minimum wage. Countries in grey include those that are not ILO Member States, those with minimum wages established by collective bargaining and those with no minimum wage.

Source: ILO minimum wage database.

Globally, around half of the countries with a statutory minimum wage have a single national minimum wage rate; the other countries have more complex systems

Figure 7.8 Share of countries with single and multiple minimum wage rates, global and by region, 2020 (percentage)



Note: This figure covers only ILO Member States with a statutory minimum wage.

Figure 7.9 Map showing global distribution of single and multiple minimum wage rates, 2020

Note: This figure covers only ILO Member States with a statutory minimum wage. Countries in grey include those that are not ILO Member States, those with minimum wages established by collective bargaining and those with no minimum wage. "Mixed system" refers to systems characterized by a combination of rates according to occupation, region and/or sector. The "by region" category includes countries both with and without a national minimum wage floor.

Source: ILO minimum wage database.

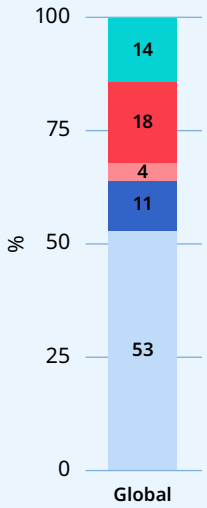
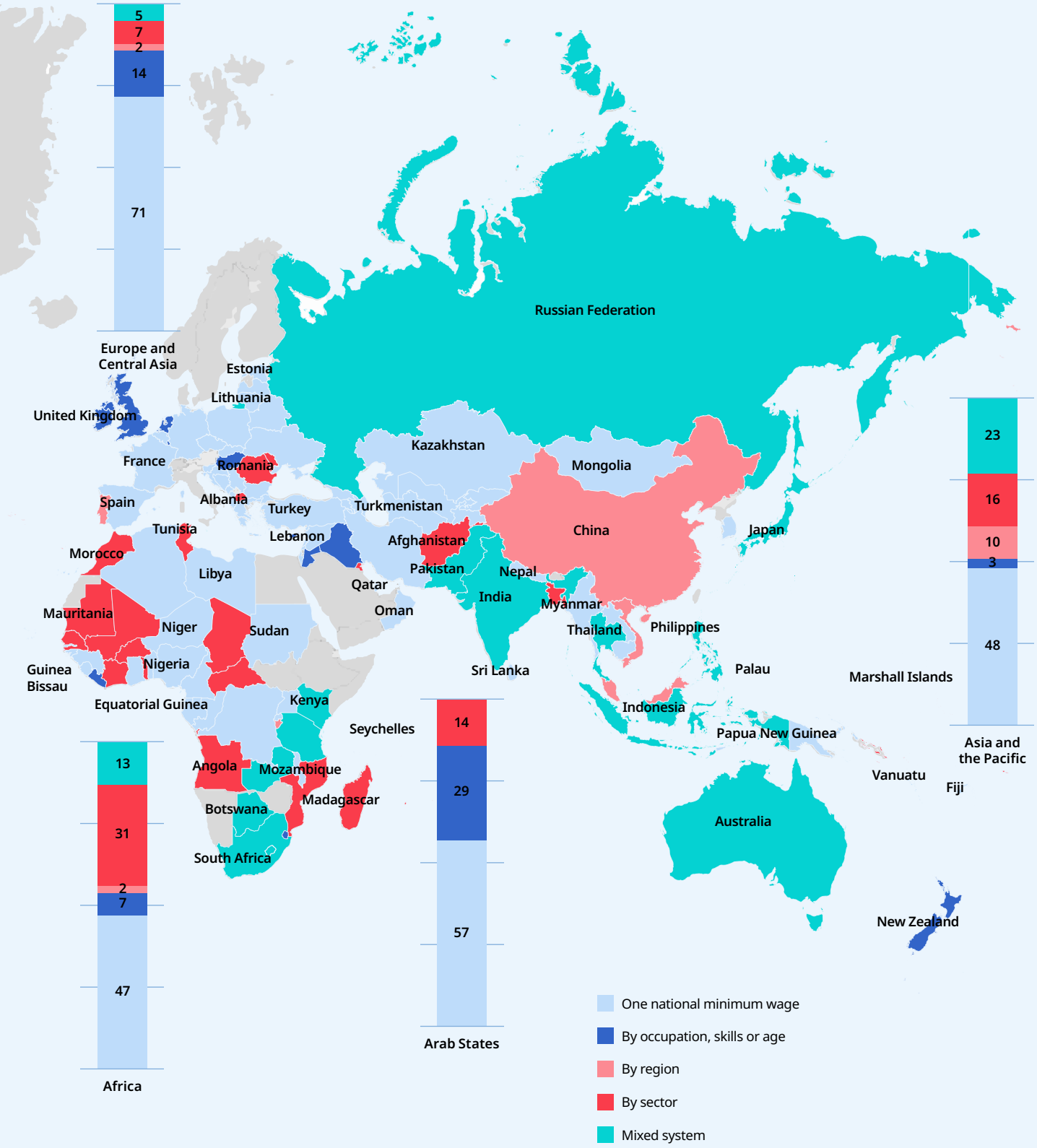


Figure 7.10 Distribution of single and multiple minimum wage rates, global and by region, 2020 (percentage)

Note: This figure covers only ILO Member States with a statutory minimum wage. "Mixed system" refers to systems characterized by a combination of rates according to occupation, region and/or sector. The "by region" category includes countries both with and without a national minimum wage floor.

Source: ILO minimum wage database.


5
7
2
14
71
Europe and Central Asia
Russian Federation
Estonia
Lithuania
United Kingdom
France
Romania
Kazakhstan
Mongolia
Spain
Albania
Turkey
Turkmenistan
China
Japan
Tunisia
Lebanon
Afghanistan
Morocco
Libya
Pakistan
Nepal
Qatar
India
Myanmar
Mauritania
Niger
Sudan
Oman
Thailand
Philippines
Guinea Bissau
Nigeria
Sri Lanka
Palau
Marshall Islands
Equatorial Guinea
Kenya
Indonesia
Seychelles
Papua New Guinea
Angola
Mozambique
Vanuatu
Fiji
Madagascar
Botswana
Australia
South Africa
New Zealand
23
16
10
3
48
Asia and the Pacific
14
29
57
Arab States
13
31
2
7
47
Africa
One national minimum wage
By occupation, skills or age
By region
By sector
Mixed system

Among countries with multiple rates, some have different rates for different sectors of employment. In Africa, as many as 14 countries, representing 31 per cent of the countries with statutory minimum wages, have sectoral minimum wages. Most of these countries, including Burkina Faso, Chad, Côte d'Ivoire, Madagascar, Mali, Morocco, Senegal and Togo, have two rates: one rate for agriculture (SMAG) and one rate for all other sectors (SMIG).[6] In Latin America, countries such as Ecuador, El Salvador, Guatemala, Honduras and Nicaragua have a multiplicity of sectoral rates ranging from three broad groupings in Guatemala to 21 more specific categories in Ecuador. In Asia and the Pacific, Bangladesh is one of the few examples where minimum wages are set entirely according to industry. In Europe and Central Asia, North Macedonia has a lower rate for workers in the textile and leather industry, while Romania has a separate rate for workers in the construction sector.

In some cases, countries have different minimum wage rates for different geographical areas, which may be regions, provinces or cities. These differences may reflect significant regional differences in the cost of living, economic development and the labour market situation within a single country. Countries where minimum wage levels differ only by region include Canada, China, Malaysia, Portugal,[7] the United States and Viet Nam. In the United States, a national minimum wage floor is combined with the scope to set higher regional rates. Here, as shown in figure 7.11, the federal minimum wage is set at US$7.25 per hour and has not been adjusted since 2009. However, as at 2020, 29 states along with the District of Columbia, Guam and the Virgin Islands have minimum wages set above the federal minimum wage, ranging from US$8.25 per hour in Guam to US$15 per hour in the District of Columbia. In China, on the other hand, there is no national minimum wage floor and minimum wage levels are set by local governments. Figure 7.12 shows that, in 2019, the minimum wage was 65 per cent higher in Shanghai, where the rate is highest, than in Qinghai, where it is lowest. Although in some provinces, such as Beijing, Shanghai or Tianjin, there is only one minimum wage rate, in the majority of the provinces there are multiple minimum rates. For instance, in Guangdong Province there are 5 different rates covering 21 municipalities. In Canada, similarly, each province and territory sets its own minimum wage and there is no national minimum wage floor.

In some countries, different rates are set for different types of jobs, skill levels or age categories. In Europe, 14 per cent of countries set different minimum wages according to occupation, skill level or age. For example, in Ireland, Luxembourg, the Netherlands and the United Kingdom, different minimum wages apply to different age categories. Other countries have a multiplicity of occupational rates. Costa Rica, for example, has 14 occupational rates, 5 set in the form of daily rates and 9 as monthly rates (figure 7.13).

[6] The abbreviations refer to the French acronyms for, respectively, *salaire minimum agricole garanti* (minimum wage for agricultural workers) and *salaire minimum interprofessionnel garanti* (interoccupational minimum wage).

[7] In Portugal, a different minimum wage rate exists for the regions of Azores and Madeira.

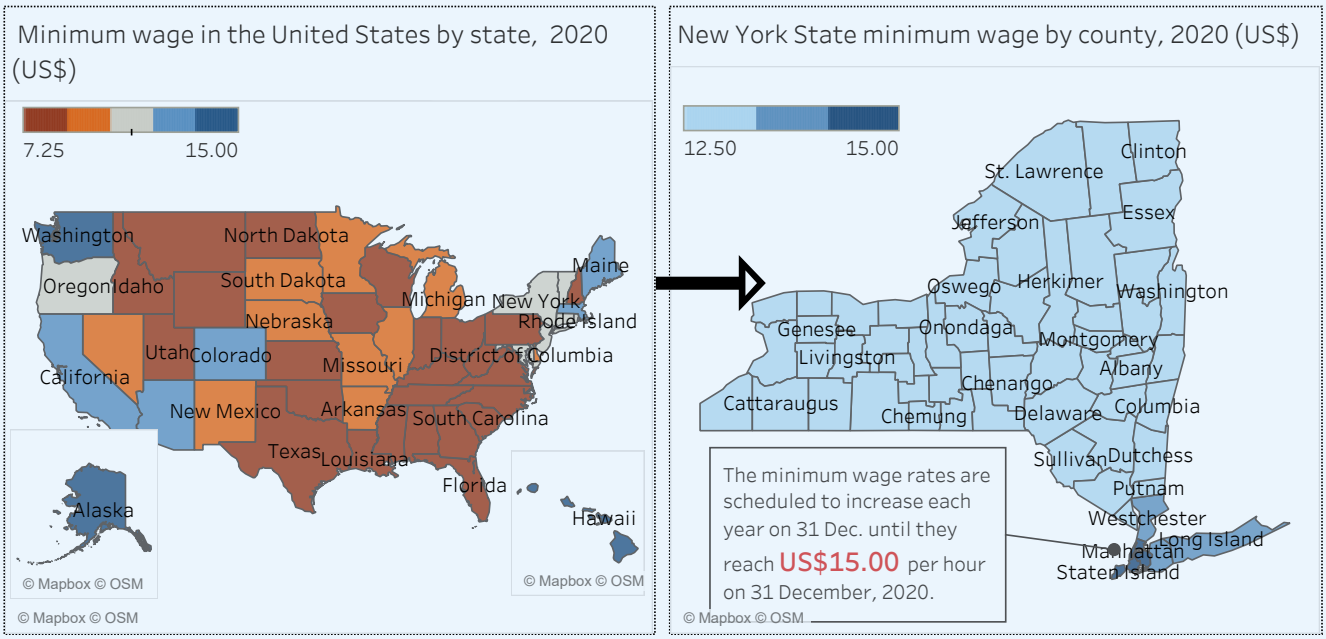
Finally, in some countries occupational rates are combined with sectoral and/or geographical rates, leading to systems that are more complex with a multiplicity of rates. These so-called mixed systems are found in 20 countries around the world, including Brazil, India, Indonesia, the Russian Federation and South Africa. As in the case of regional rates, these systems are sometimes combined with a national minimum wage floor. The examples of countries with mixed systems listed above are illustrated in figures 7.14–7.18. Other countries where minimum wage rates vary by region and sector include Japan, Pakistan and the Philippines.

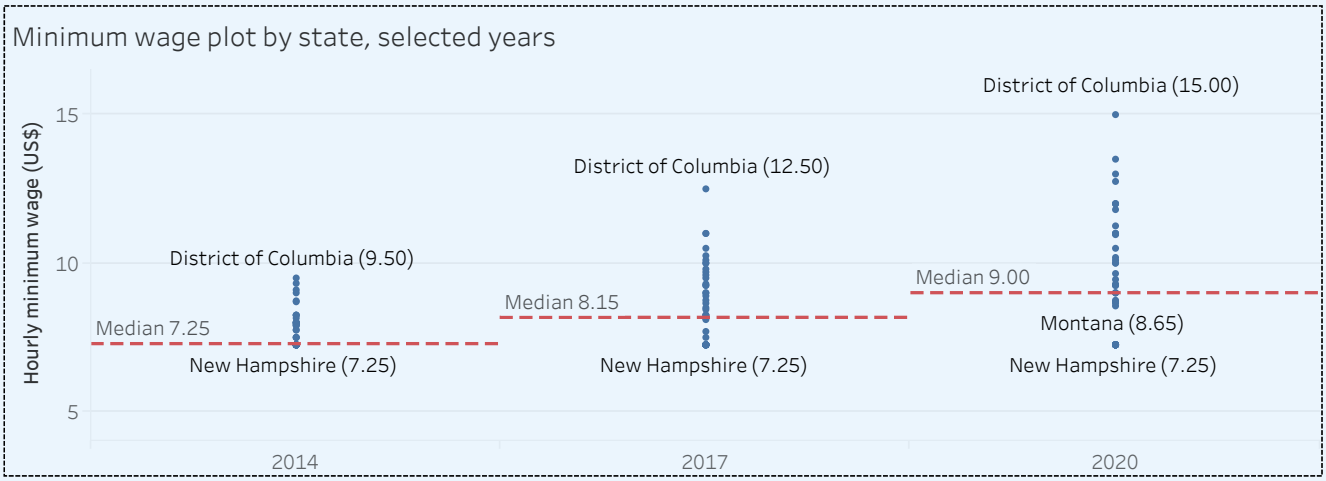
- **In Brazil (figure 7.14), each state has been allowed since 2000 to autonomously determine its own minimum wage above the national level, which was set at 998 Brazilian reais in 2019.** Currently, five states, all located in the south-east of the country, have adopted higher minimum wages. States can also establish different rates for different categories of workers. For example, in 2019, in Rio de Janeiro there were nine different rates, ranging from 1,238 reais for agricultural workers to 3,159 reais for lawyers. In Paraná there were six different rates; in Rio Grande, five; in São Paulo, three; and in Santa Catarina, four.
- **In India (figure 7.15), before the recent reform aimed at extending coverage of the minimum wage through a universal national "floor wage" and reducing the number of rates, each state used to set different minimum wage rates for employees in each occupation and in "scheduled" employment.** This gave rise to over 1,915 occupational minimum wage rates across state spheres and 48 minimum wages in the central sphere, according to the Economic Survey 2019–20 (India, Ministry of Finance 2020), which covered two thirds of all wage earners. The implementation of the Code on Wages will reduce the number of rates to a minimum of 4 and a maximum of 12 per state (Estupiñan, Satpathy and Malick 2020), and is intended to make the wage-setting process in India more efficient and dynamic.
- **In Indonesia (figure 7.16), there is no national minimum wage floor and the setting of minimum wages is decentralized, allowing for the establishment of minimum wages by province and district.** Many provinces have set a basic minimum wage that applies to all sectors (ILO 2015). However, provinces are entitled to set separate minimum wages for each sector. Several provinces have set sectoral minimum wages for agriculture, utilities, and the mining, manufacturing, forestry and rubberware industries, among others, which has led to a multiplicity of minimum wage rates that vary considerably.
- **In the Russian Federation (figure 7.17), there is a federal minimum wage that applies to all groups of workers, irrespective of age, occupation or industry.** Since September 2007, regions have the right to define their own regional minimum wages, which may be sector-specific, as long as they are above the federal threshold.
- **In South Africa (figure 7.18), before the introduction of the national minimum wage of 20 South African rand per hour in 2019, rates were set only for different occupations within a limited number of sectors and for three geographical zones.** Figure 7.18 provides a visual summary of the effects of the newly implemented national minimum wage in selected occupations. It is also worth noting that pay in some sectors (especially domestic and agricultural work) will take some time to reach the wage floor of 20 rand per hour.

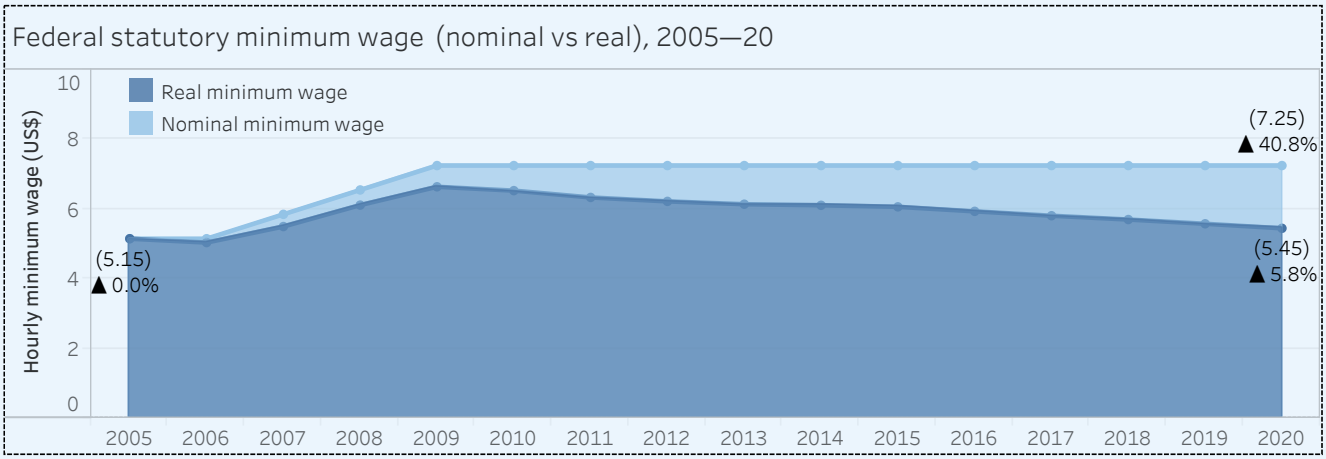
Figure 7.11 The minimum wage system in the United States (minimum levels by state, 2005–20)

The minimum wage in the United States is set by US labour law and a range of state and local laws. Since 24 July 2009, the federal minimum wage is US$7.25 per hour.

When the state and federal minimum wages differ, the higher wage prevails. As of January 2020, 29 states and the District of Columbia paid a minimum wage higher than the federal minimum wage.







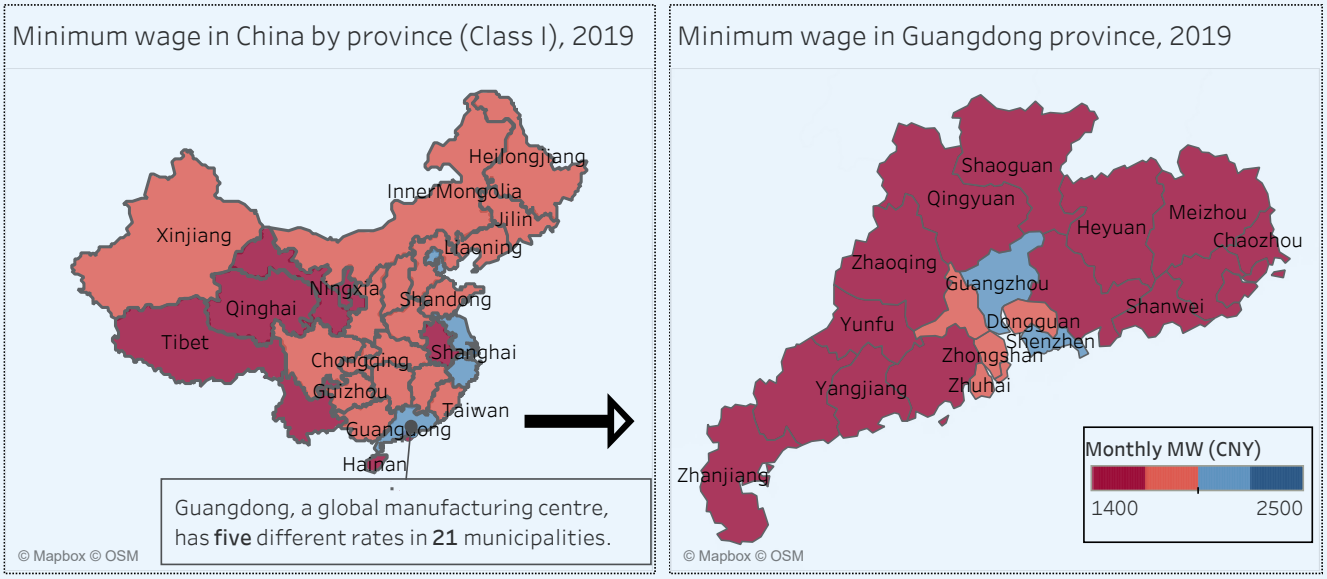
Note: In 21 states the minimum wage is US$7.25 per hour, either because there is no state minimum wage or because the state minimum wage is set at the same level as the federal minimum wage.

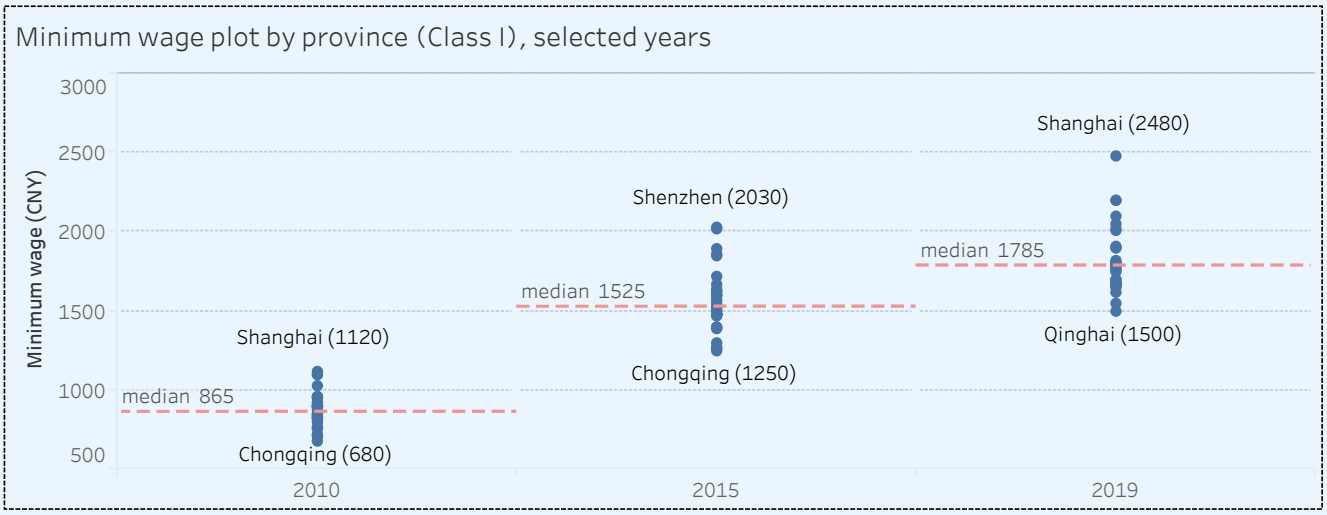
Source: US Department of Labor; New York State Department of Labor.

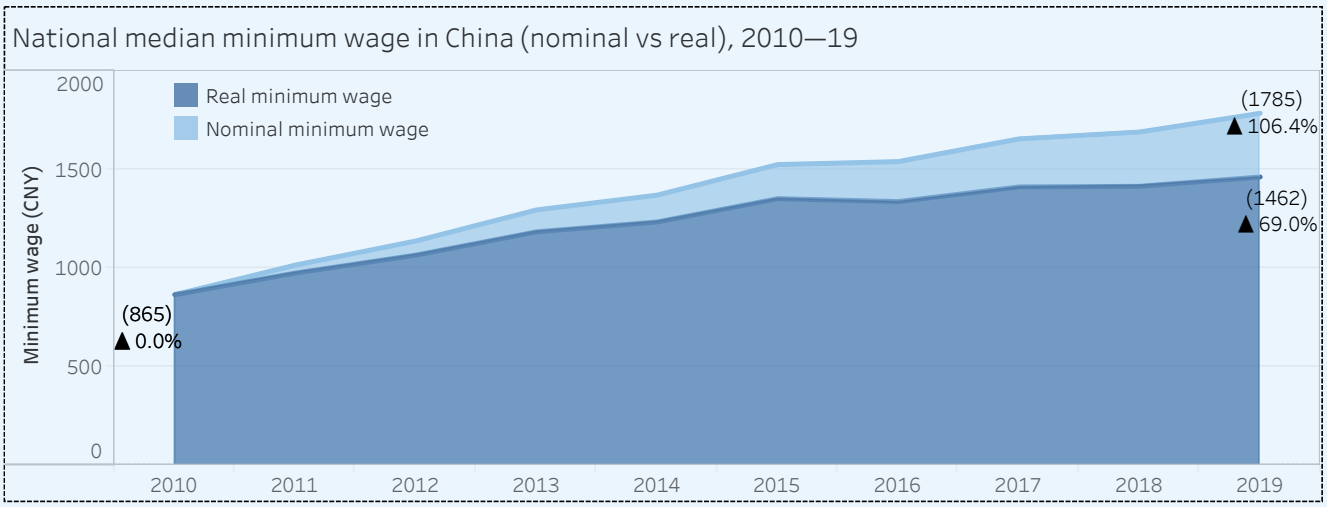
Figure 7.12 The minimum wage system in China (minimum levels by province, 2010–19)

In China, setting minimum wages is delegated to local governments. Each province, municipality or region sets its own minimum wage in accordance with local conditions.

The minimum wage is adjusted at least once every two years (some regions reduced the adjustment frequency during the last few years).







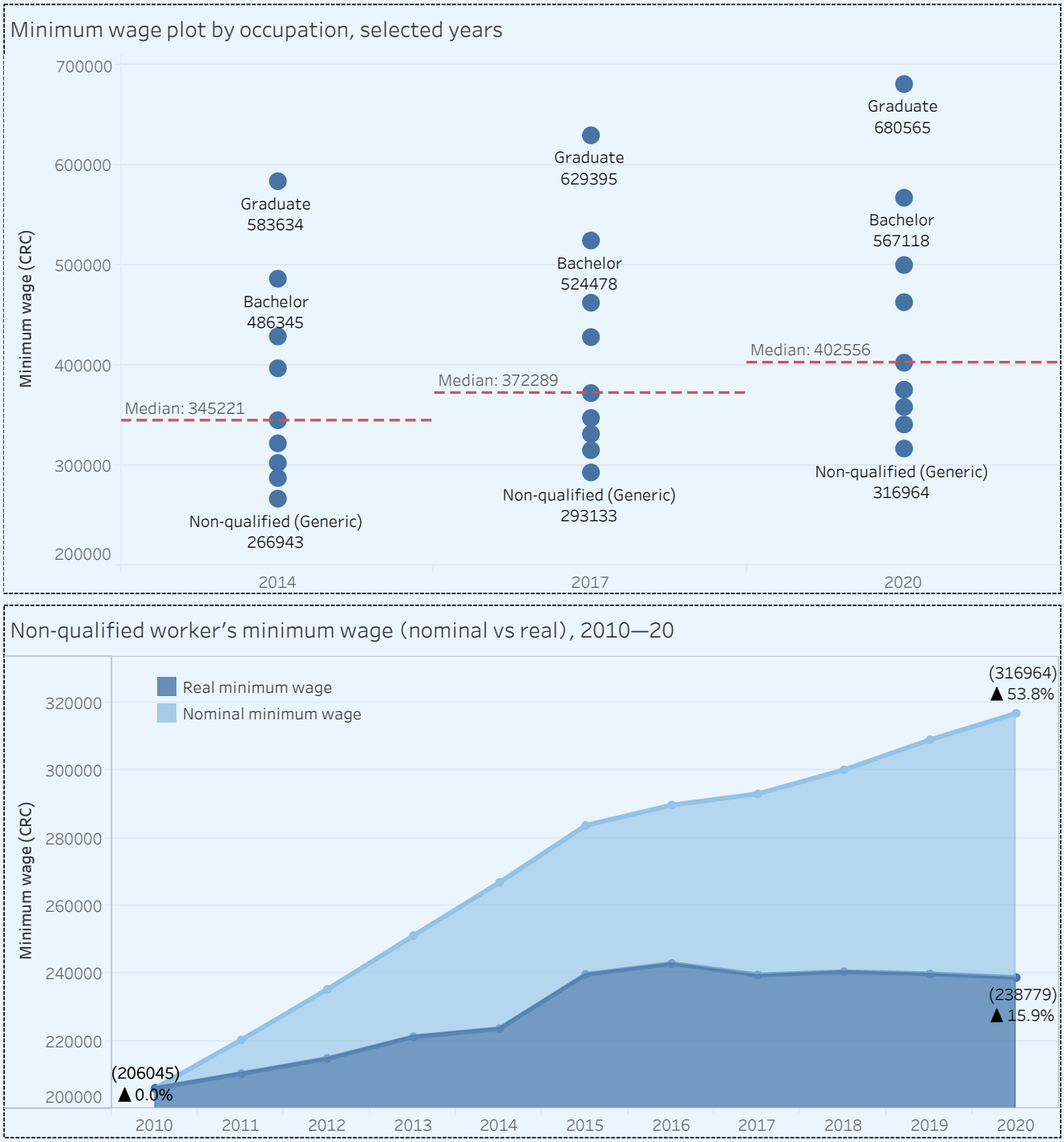
CNY = yuan.

Note: Class I refers to the highest minimum wage within each province. In Guangdong Province there are four regional rates; the city of Shenzhen independently sets its own minimum wage.

Source: China, Ministry of Human Resources and Social Security.

Figure 7.13 The minimum wage system in Costa Rica (minimum levels by occupation, 2010–20)

RATES	COMPLIANCE	ADJUSTMENT
The number of rates has been reduced from 520 in 1982 to 14 occupational categories in 2020. There is also a lower rate that applies to domestic workers.	The National Minimum Wage Campaign was undertaken in 2010, with a new telephone hotline allowing workers to report wage violations.	The Government increases the minimum wage annually by inflation plus a share of past economic growth, which is subject to an exit clause.



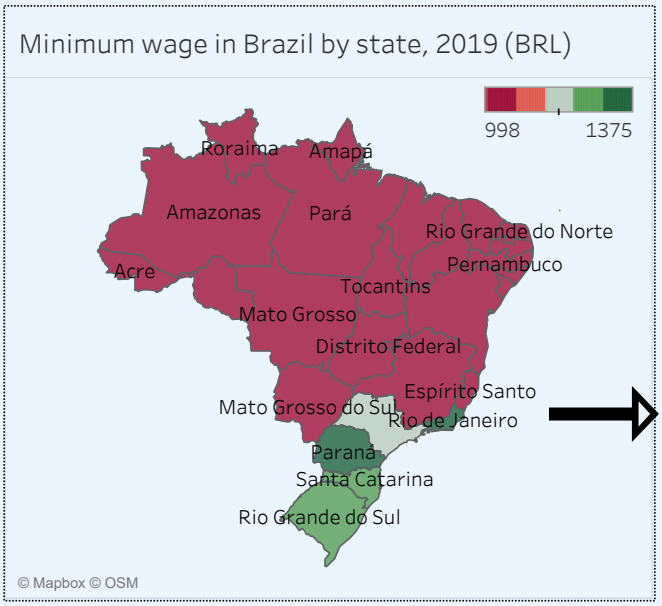
CRC = Costa Rican colones.

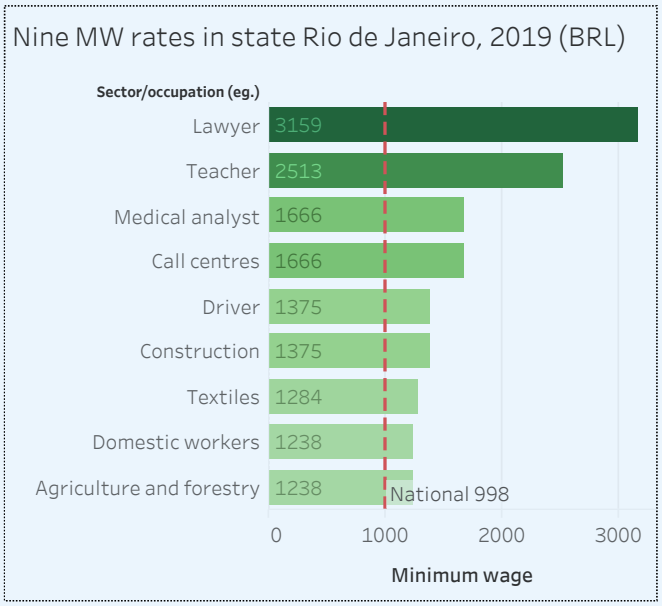
Source: Costa Rica, Ministry of Labour and Social Security.

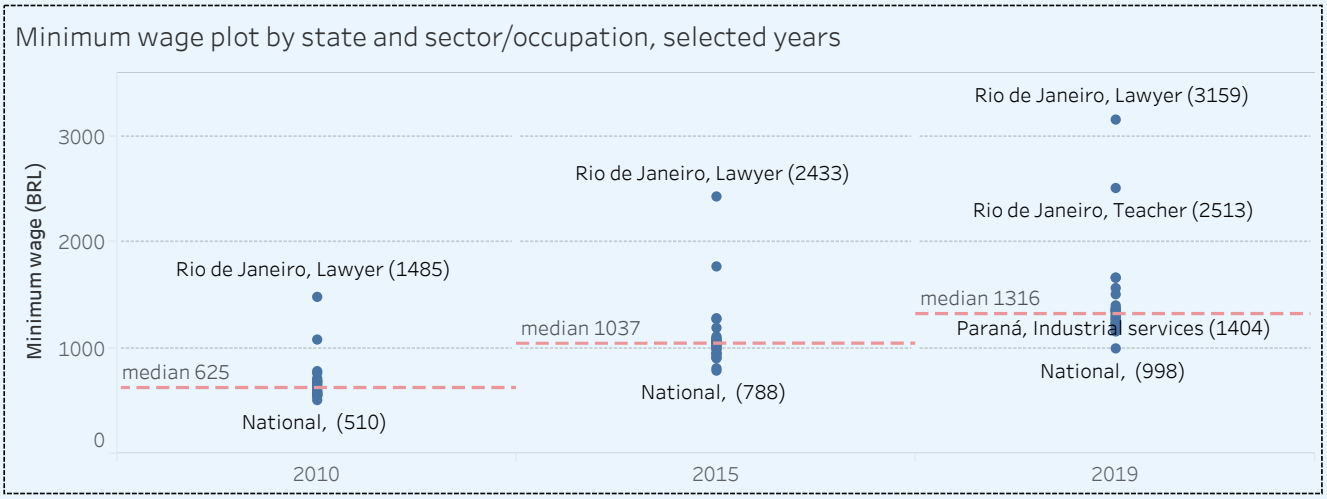
Figure 7.14 The minimum wage system in Brazil (minimum levels by state, 2008–19)

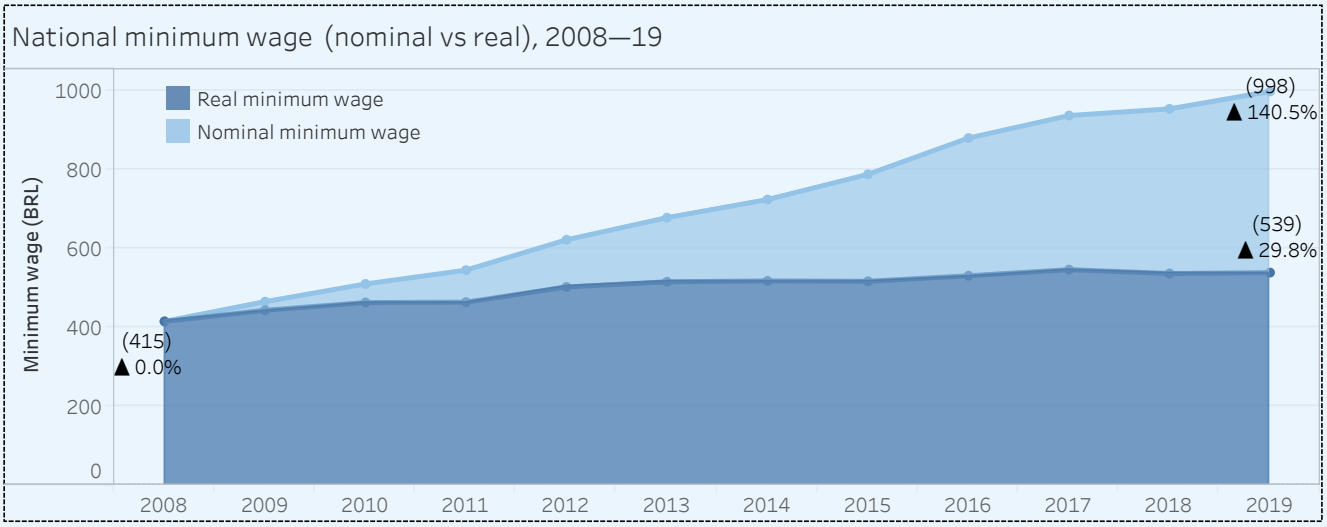
Since 2000, Law 103 allows regions (states) to set their own minimum wage levels, but always above the national level established by law.

The Brazilian minimum wage sets the floor for wages; it is used to be adjusted annually by a mathematical formula.









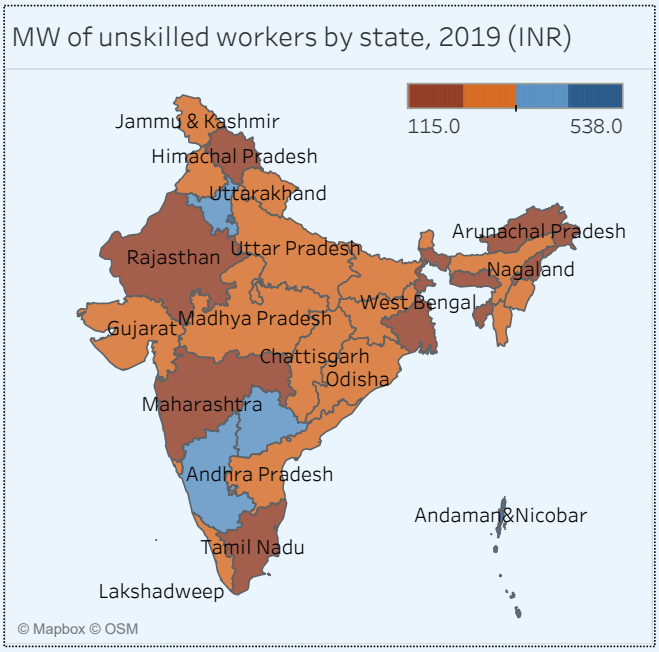
BRL = Brazilian reais. MW = minimum wage.

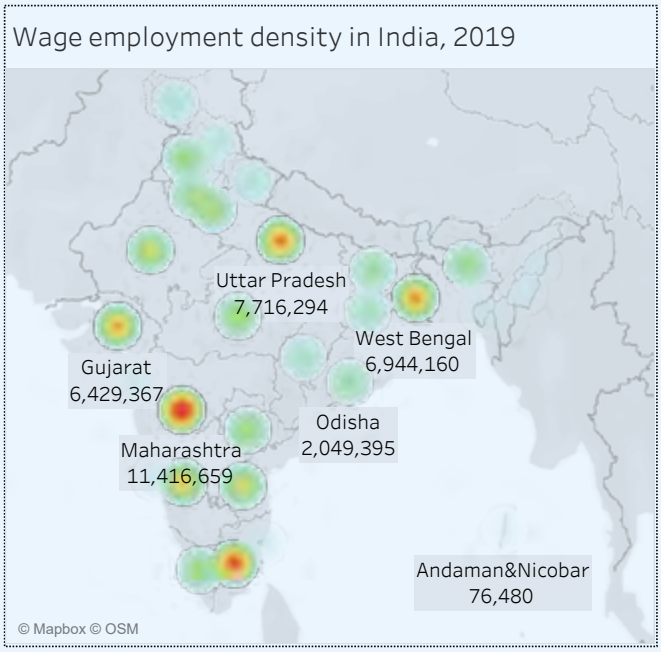
Source: Brazil, Ministry of Labour and Employment.

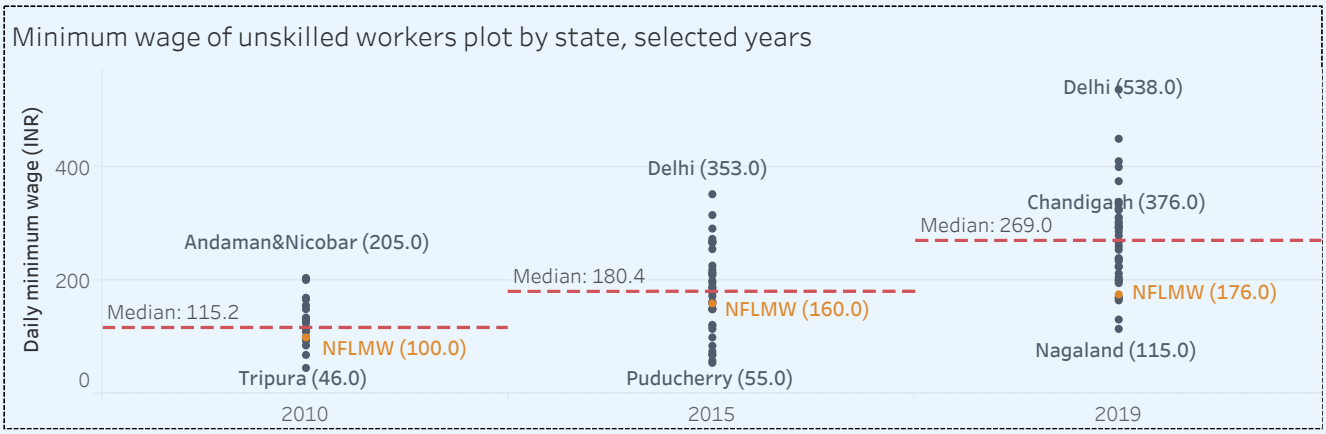
Figure 7.15 The minimum wage system in India (minimum levels by state, 2008–19)

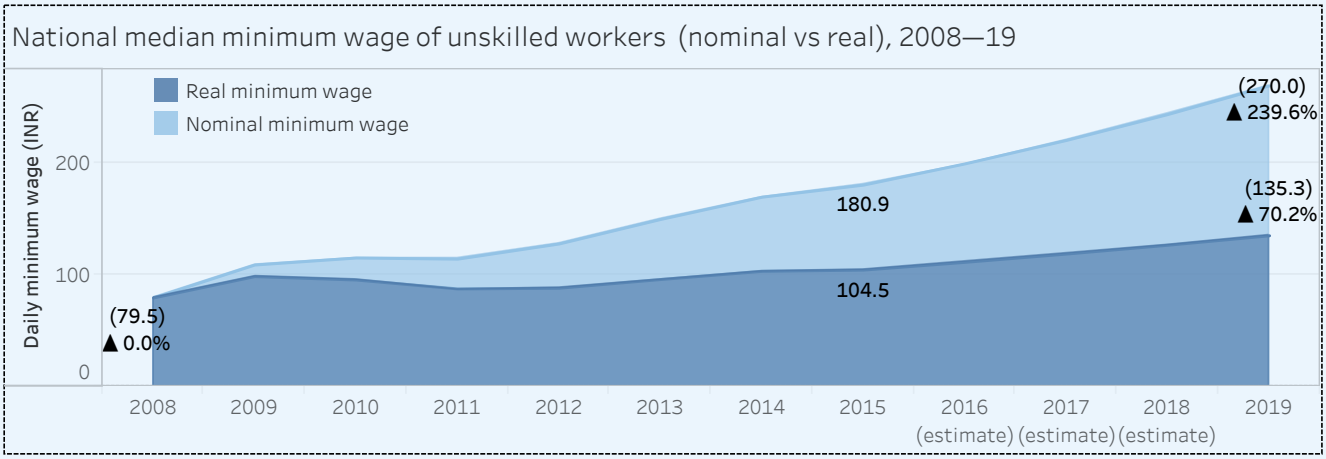
Minimum wage rates vary widely, not only for unskilled workers; the variations across states in the number of prescribed wage rates indicates the high level of complexity of the minimum wage system in India.

In India, an ongoing reform is aimed at extending the minimum wage coverage through a national universal "floor wage" and a reduction in the number of rates to a minimum of four and a maximum of 12 rates per state. A needs-based wage floor at national or regional level has also been proposed.









INR = Indian rupees. MW = minimum wage. NFLMW = national floor-level minimum wage (an indicative non-binding national wage floor).

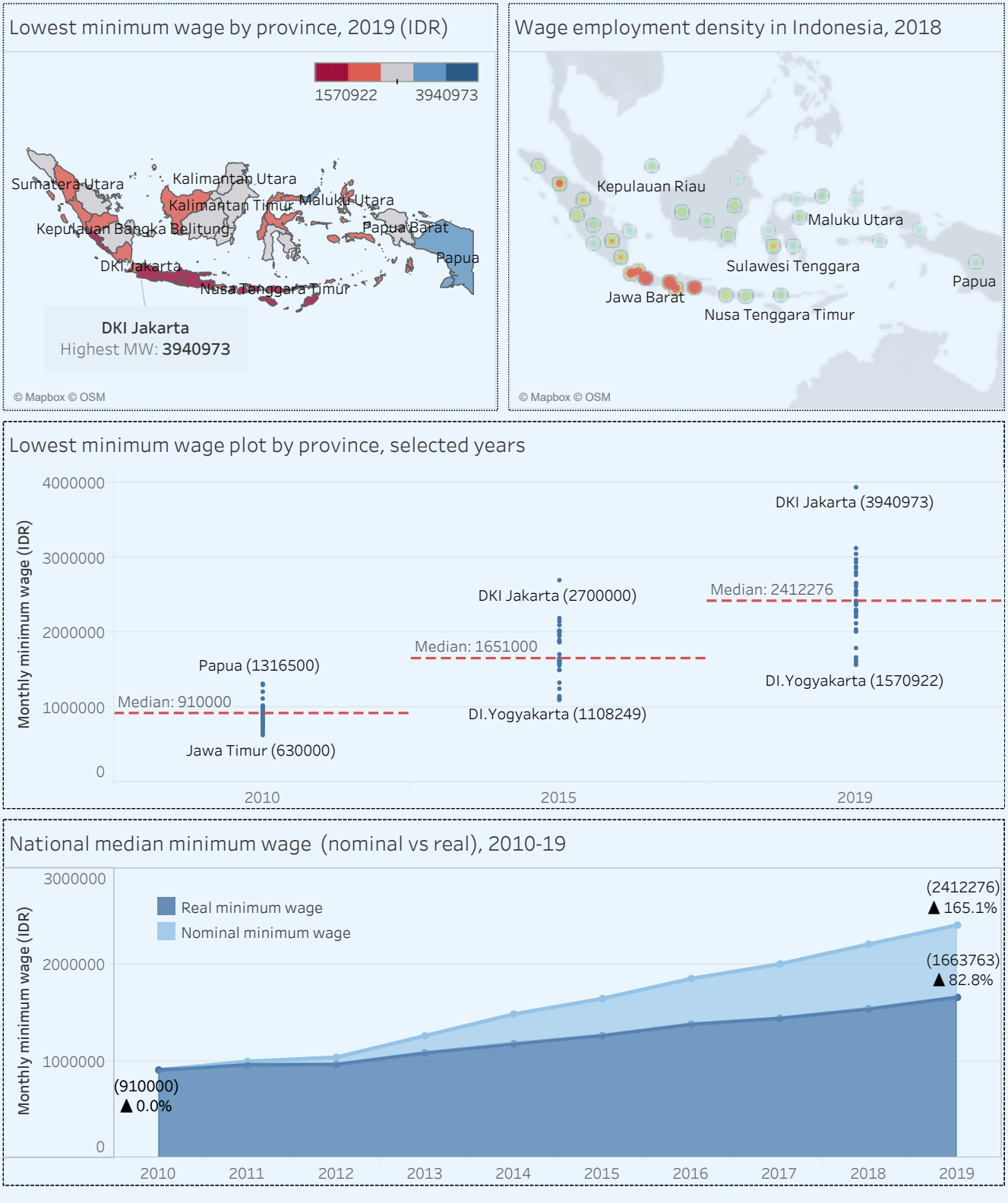
Note: Linear imputation was performed for the years 2016, 2017 and 2018, as no granular data were available on the evolution of the median minimum wage of unskilled workers during these years.

Source: India, Labour Bureau; Ministry of Finance; and Ministry of Statistics and Programme Implementation.

Figure 7.16 The minimum wage system in Indonesia (minimum levels by state, 2010–19)

The minimum wage system in Indonesia involves tripartite consultations at national and local levels and is characterized by its extreme heterogeneity. There are about 250 different rates that are defined for districts within provinces.

While some provinces have one single rate that applies to all districts, most have multiple rates. No prevailing national minimum wage exists. Since 2015, all rates are being adjusted by a formula combining the inflation rate and the rate of growth of GDP.



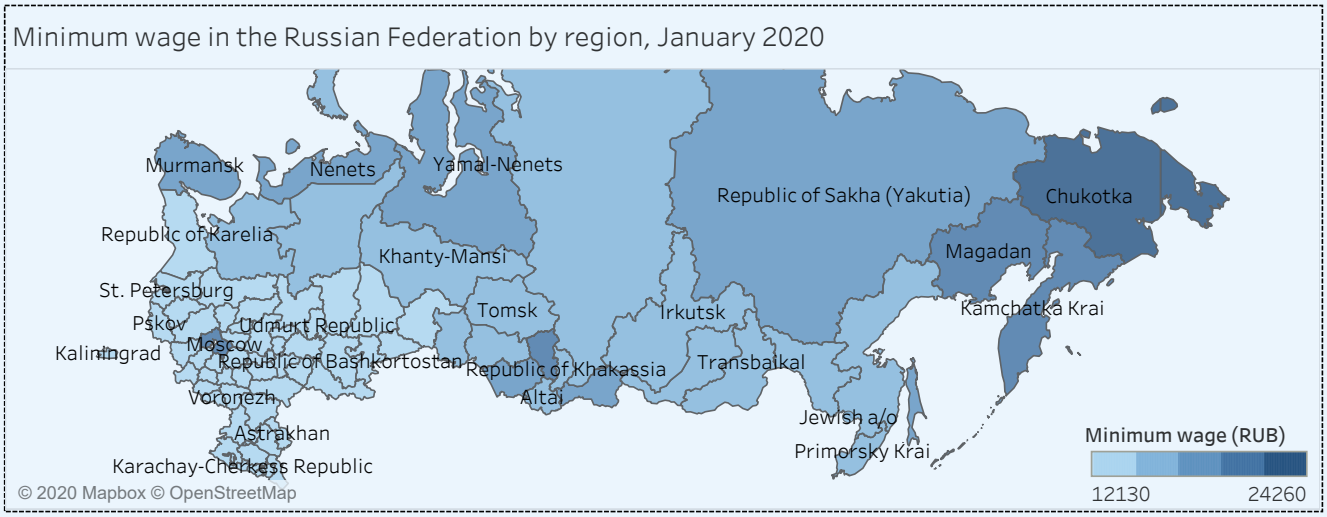
IDR = Indonesian rupiah. MW = minimum wage.

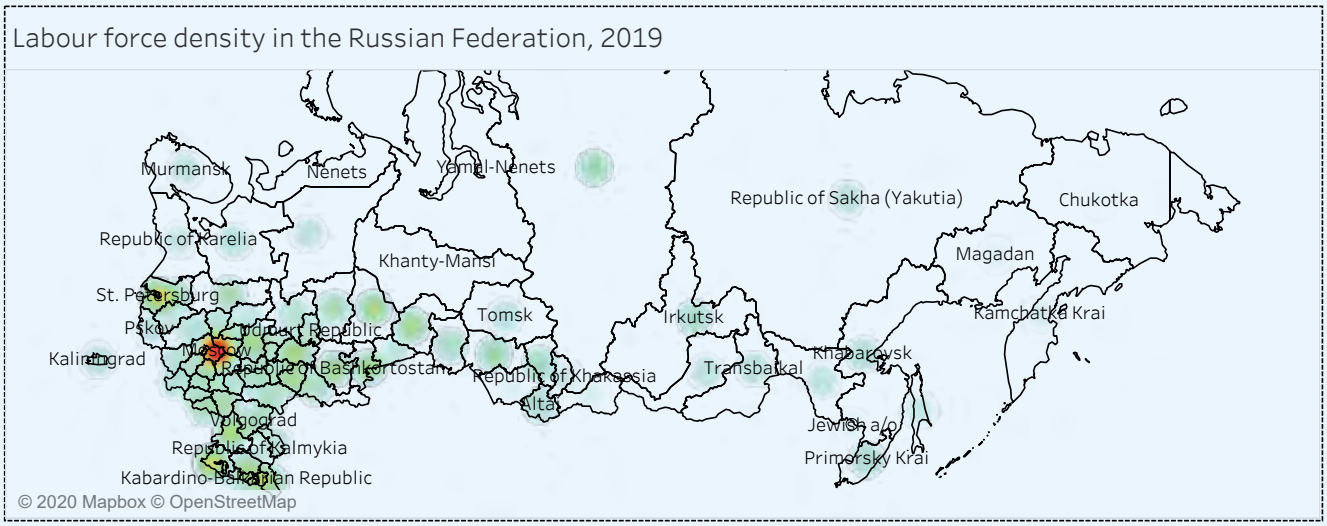
Source: Indonesia, Ministry of Manpower and Transmigration; Statistics Indonesia.

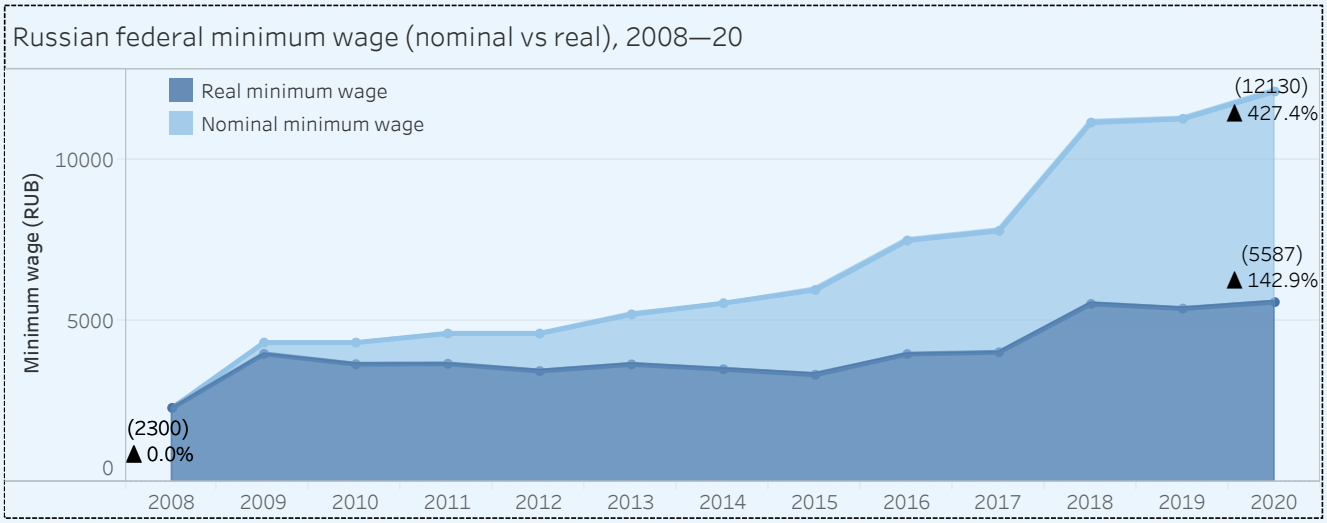
Figure 7.17 The minimum wage system in the Russian Federation (minimum levels by occupation, 2008–20)

In many regions the federal minimum wage is multiplied by a regional multiplier, which varies from 1.15 to 2; there can be additional variation within the regions. Regions and cities can also set their own sector-specific levels.

In the past 20 years, the frequency of adjustment has generally been once a year, except in 2001, 2005, 2016 and 2018, when the minimum wage was adjusted twice, and 2008, 2010 and 2012, when the minimum wage was not adjusted.







RUB = Russian roubles.

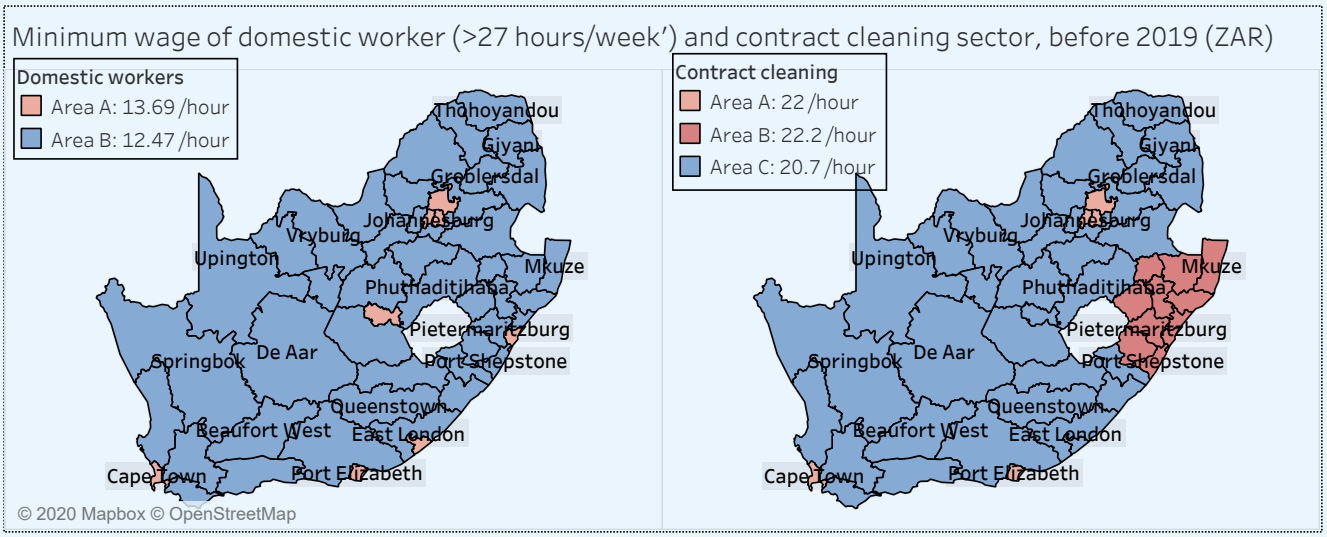
Note: Minimum wage rates refer to the rates in the private sector.

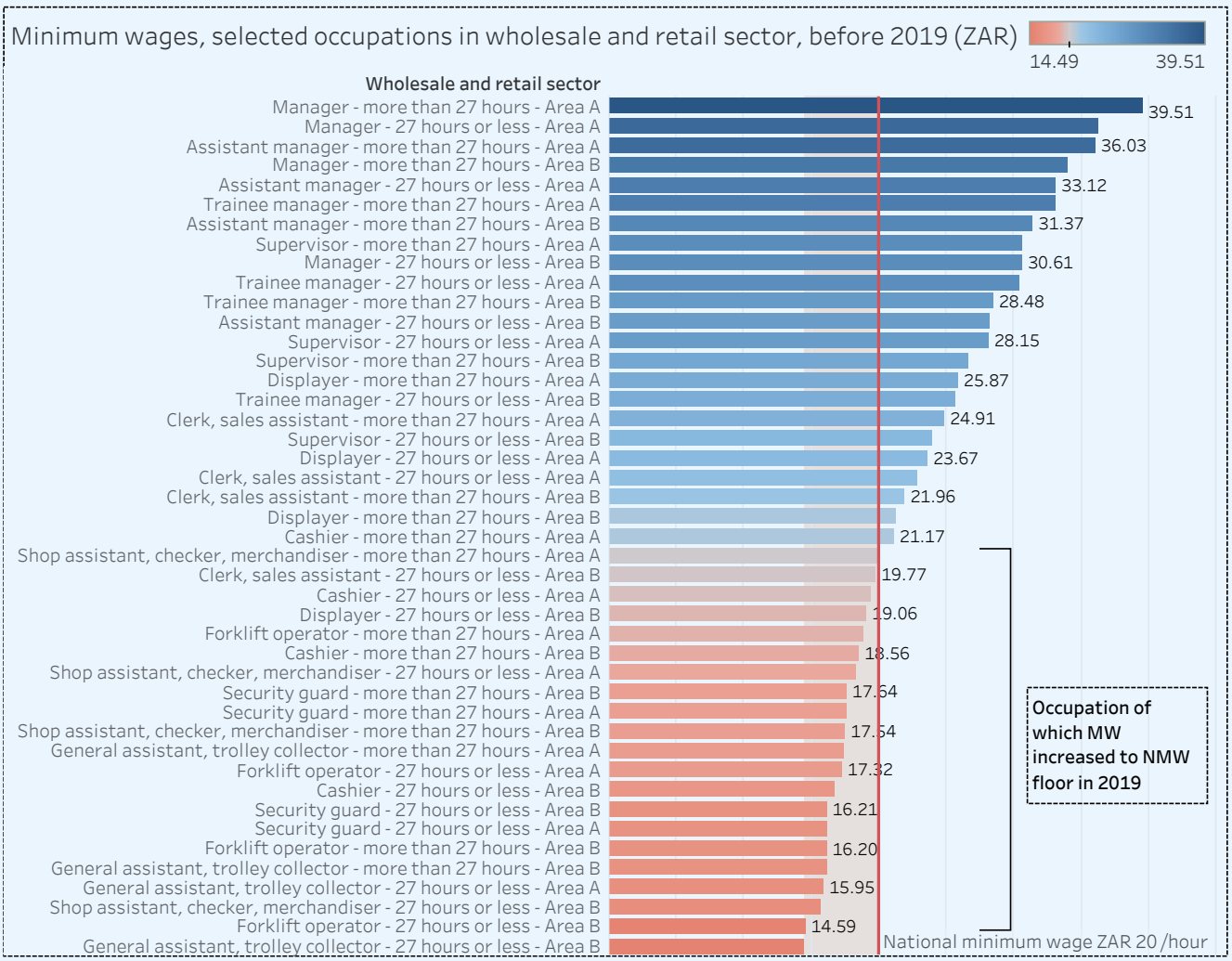
Source: Russian Federation, Federal Security Service; Federal Portal of Draft Laws and Regulation. The visualization of the minimum wage levels in the constituent entities of the Russian Federation is based on material prepared by consultants and specialists.

Figure 7.18 The minimum wage system in South Africa (minimum levels, selected sectors, by region, before and after 2019)

South Africa has multiple minimum wages, according to sectors, occupations and regions. In some industries, bargaining councils and/or sectoral determinations regulate minimum wages for employees.

South Africa's new national minimum wage took effect from January 2019 at ZAR 20 (US$1.42) an hour, equal to ZAR 3,500 per month. The new NMW rose to ZAR 20.76 per hour (ZAR 3,633 per month) from March 2020.





MW = minimum wage. NMW = nominal minimum wage. ZAR = South African rand.

Source: South Africa, Department of Employment and Labour.

7.4 Three conditions to be met if minimum wages are to reduce inequality

Is there evidence of minimum wages reducing inequality and, if so, under what conditions can this effect be maximized? A growing body of literature has emerged over the past two decades examining the empirical evidence for the link between minimum wages and income inequality. Most analysts seem to agree that wage floors have the capacity to reduce both wage and income inequality in advanced economies and developing countries alike. The literature review summarized in box 7.3 provides evidence that, for the most part, minimum wages can have an equality-enhancing effect by bolstering the relative earnings of low-paid employees, albeit to different degrees. As is clear from the previous section, minimum wage systems vary widely across countries and can be highly complex. A similarly wide variation can be observed in the structures of the labour markets in which minimum wages are implemented.

Box 7.3 The empirical link between minimum wages and income inequality

In the United States, many studies have found that minimum wages contribute to reducing inequality. For example, Card and Krueger (1995) found that increases in the federal minimum wage halted and temporarily reversed the trend of growing income inequality in the United States from the late 1960s onwards. Another study (Lee 1999) used consumer population data from 1979 to 1989 to examine how the declining purchasing power of the minimum wage influenced income inequality, and found that the erosion of the minimum wage explained at least 70 per cent of the growth in inequality, for both men and women. More recently, Engelhardt and Purcell (2018) investigated the impact of the minimum wage on annual earnings inequality in the United States from 1981 to 2016. They found that a typical increase in the minimum wage was associated with a 13.2 per cent increase in annual earnings for minimum wage earners, resulting in a reduction in inequality by 1.85 per cent in the bottom tail of the annual earnings distribution. These results are in line with those of Levin-Waldman and Lerman (2017), who found that US states with higher minimum wages were less likely to experience higher levels of income inequality. A further study (Dube 2019) used a different estimation strategy to assess the impact of minimum wages on inequality in the United States. Specifically, by estimating family income elasticities with respect to the minimum wage, the author found robust evidence to support the notion that higher minimum wages lead to increases in income at the bottom end of the family income distribution, thereby reducing income inequality as well as alleviating poverty.

In Europe, several studies have found that the erosion of minimum wages is correlated with considerable increases in overall inequality (Beramendi and Rueda 2014; Checchi and García-Peñalosa 2008). According to Jaumotte and Osorio Buitron (2015), in the Netherlands over the period 1980–2010, a 16.5 per cent decrease in the minimum wage contributed to a 2.4 per cent increase in inequality, as measured by the Gini coefficient. In Romania, Militaru et al. (2019) conducted an income distribution analysis based on two simulations using household survey data from 2013. Both approaches led to similar findings, indicating that the minimum wage tended to reduce wage inequality – especially for women, who are over-represented among lower-paid employees – and that household disposable incomes become less unequal when the minimum wage increases.

Some studies have suggested that the relationship between the minimum wage and inequality is non-linear. One of these (Litwin 2015) calibrated an econometric model, controlling for a broad range of determinants of inequality, to investigate the role of minimum wages using a panel of 17 member countries of the Organisation for Economic Co-operation and Development (OECD) over the period 1980–2010. Although the study concluded that increases in the minimum wage caused income inequality to decrease, the estimated relationship was non-linear. Indeed, the author highlights that when minimum wages are set beyond a "maximum effectiveness value", equitable returns diminish and the positive effects of minimum wages start to be reversed. Similarly, Karakitsios and Matsaganis (2018) find that inequality decreases when minimum wages are increased, but that the redistributive effect is markedly weaker when the minimum wage is set above an optimal level.

While a similar picture can be observed in developing countries, an additional concern for many of these is the prevalence of the informal economy. In some cases, informality represents up to 80 per cent of a country's workforce, meaning that large numbers of workers may

The remainder of this section and the following three chapters (Chapters 8–10) focus on three key factors that influence the extent to which a minimum wage may realize its full redistributive potential:

- The first factor comprises the extent of the *legal coverage* and the *level of compliance* – which, combined, may be called the "effectiveness" of minimum wages. Although minimum wages are almost ubiquitous, in many instances the legal coverage is too restricted and excludes those most in need of labour protection, such as domestic workers, agricultural workers, home workers and other groups of workers at the bottom end of the wage distribution. In such instances, minimum wages may help to reduce inequality and poverty, but their impact is constrained by the fact that a large proportion of workers are not covered by the minimum wage (see, for example, Marinakis and Bueno 2014; Gindling 2018). The other determinant of the effectiveness of a minimum wage – and thus of its potential impact on inequality – is the level of compliance, which in turn is closely related to the level of informality in a country. Indeed, where informality is high and labour inspection services are weak, non-compliance rates may soar. This is particularly the case in low-income countries, where sub-minimum wage earners are mostly workers in the informal economy (see section 8.3 below).

▶ **Box 7.3 (cont'd)**

be excluded from any minimum wage support. At the same time, the capacity for enacting and enforcing labour laws, including those relating to minimum wages, tends to be weaker in developing countries. However, in some cases the implementation of a minimum wage in the formal sector can trigger wage increases in the informal sector through the so-called "lighthouse effect", thereby reducing income inequality. This has been demonstrated by a panel study of 19 Latin American countries over the period 1997–2001 (Kristensen and Cunningham 2006). The authors found that minimum wages increased pay at the bottom end of the earnings distribution and were generally associated with lower dispersion of earnings, since minimum wages lifted earnings in both the formal and informal sectors. Another study focusing on Latin American countries (Cornia 2012) highlighted that increases in legally mandated minimum wages over the previous decade had reduced the disparity between minimum and average earnings, tending to equalize the distribution of earnings across the informal and formal sectors.

Empirical evidence from emerging economies suggests that minimum wages can effectively reduce inequality in these countries. One study of Brazil (Engbom and Moser 2018) developed an equilibrium search model to assess the impact of an increase in the minimum wage on the dispersion of earnings. The study used the estimated model to evaluate the distributional effects of an increase in the real minimum wage by 119 per cent over the period 1996–2012. The authors found that this increase explained a large decline in earnings inequality. Meanwhile, employment and output fell only modestly as workers reallocated to more productive firms. In a study using household data from urban Mexico to analyse the contribution of the decline in the real value of the minimum wage to earnings inequality from the late 1980s to the 2000s, Bosch and Manacorda (2010) found not only robust evidence of a negative relationship between the real value of the minimum wage and earnings inequality in Mexico, but also that essentially all of the growth in inequality at the bottom end of the income distribution could be explained by the steep decline in the minimum wage. In China, Lin and Yun (2016) investigated the relationship between the minimum wage and the rise in earnings inequality over the period 2004–09 using city-level minimum wage panel data and representative China household survey data. Interestingly, the authors found convincing evidence that increasing the minimum wage reduces inequality by closing the earnings gap between the median and bottom deciles.

Other contributors in the literature are less convinced by the potential impact of the minimum wage in reducing income inequality. In New Zealand, for instance, Alinaghi, Creedy and Gemmell (2019) examined the potential impact of an increase in the minimum wage on inequality and poverty using a microsimulation model, which also allows for the effects of that increase on labour supply. The results suggest that the increased minimum wage had only a marginal impact on the dispersion of the income distribution. The authors argue that this finding, which is consistent across several measures of inequality, can be explained by the composition of household incomes: many minimum wage earners are secondary earners in high-income households, while many low-income households have no wage earners at all. A study of Colombia between 1984 and 2001 (Arango and Pachón 2004) found that the minimum wage improved the earnings only of those in the middle and upper parts of the income distribution. This, however, appears to be a result of the high value of the minimum wage.

- Second, the *level* at which minimum wages are set also plays a crucial role. Adequate minimum wage levels are required to ensure "a just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection", as emphasized in the Declaration of Philadelphia (ILO 1944, Article III(d)), without jeopardizing employment and the survival of sustainable enterprises. Setting an adequate minimum wage level is thus a balancing act between the needs of workers and their families on the one hand, and economic factors on the other. When minimum wages are set too low in relation to economic factors and the level of productivity in a country, they may fail to reduce wage inequality and may also fail to provide workers and their families with a decent standard of living. In contrast, rates that are too high in relation to the prevailing economic factors and labour productivity may lead to widespread non-compliance and/or reduce the demand for formal employment, pushing workers into the informal economy, with potentially negative impacts on income equality and poverty.
- Third, the potential of minimum wage systems to reduce inequality depends on the *structure of a country's labour force* and the *characteristics of the beneficiaries* of the minimum wage, and particularly on whether these live in low-income households. Some minimum wage sceptics have argued that minimum wage earners in some countries tend to be "secondary earners" or very young people who supplement the primary sources of income in relatively well-off households. If a significant proportion of minimum wage earners do indeed live in well-off households, this would imply that minimum wages have only a limited potential to reduce income inequality by increasing the incomes of poor households. Moreover, in low-income countries where a majority work in the informal economy, the poorest households may not have many wage earners. Self-employment is the main form of employment in the informal economy, and labour incomes in the informal economy tend to be even lower for the self-employed than for wage employees. In such circumstances, most individuals in low-income households may be own-account workers in the informal economy. In these contexts a minimum wage policy may not be able to significantly compress the income distribution and reduce poverty unless accompanied by efforts to generate wage employment and reduce informality.

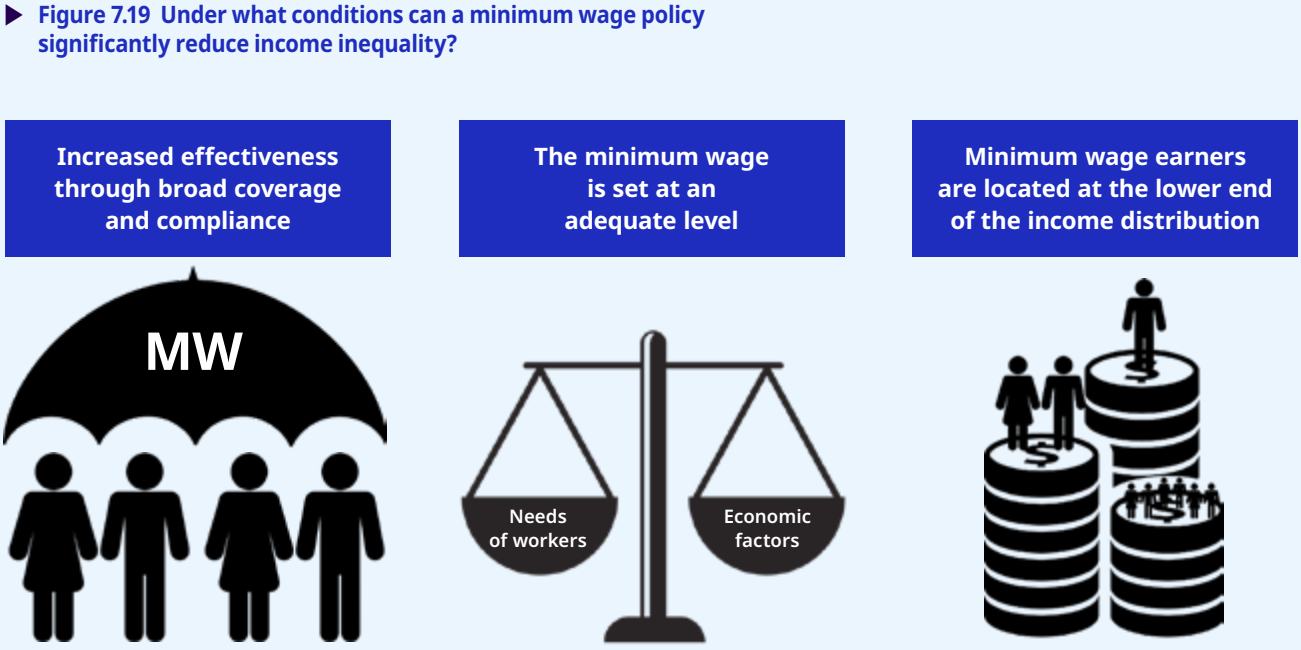
The above three factors points towards a set of policy implications, summarized in figure 7.19, which governments and social partners may wish to take into account in their deliberations; these factors are discussed further in the next sections of this report. In particular, these factors point to the necessity of (a) adopting effective minimum wage systems with broad legal coverage and measures to promote compliance; (b) setting adequate minimum wage levels that take into account both the needs of workers and their families, and the economic factors prevailing in a country, and that are adjusted from time to time to reflect changes in the cost of living and other economic conditions; and (c) ensuring that minimum wages are accompanied by measures that seek to generate wage employment, higher productivity and the formalization of the informal economy. Many of these aspects are reflected in international labour standards, such as the Minimum Wage Fixing Convention (No. 131) and Recommendation (No. 135), 1970, and the Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204). Other important aspects, however, such as the need to increase the productivity of low-paying enterprises and improve the skills of low-paid workers, are beyond the scope of these particular instruments.

In developing countries, a minimum wage policy may not be able to significantly compress the income distribution and reduce poverty unless accompanied by efforts to generate wage employment and reduce informality.

Three key factors

- Legal coverage and the level of compliance
- The level at which minimum wages are set
- The structure of a country's labour market and the characteristics of the beneficiaries

Figure 7.19 Under what conditions can a minimum wage policy significantly reduce income inequality?



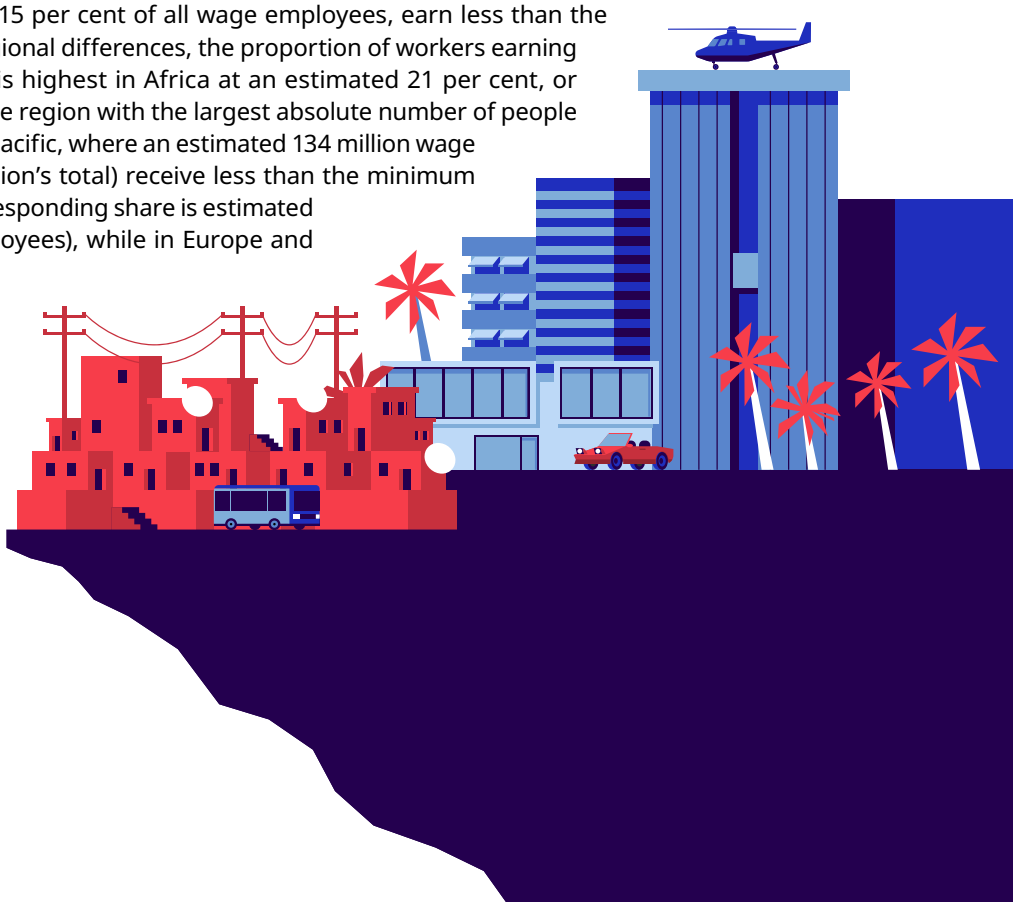
Policy implications

- Increased legal coverage
- Increased compliance
- Balanced and evidence-based minimum wage setting
- Regular adjustment
- Transition from the informal to the formal economy
- Creation of wage employment
- Measures to increase productivity

8 The effectiveness of minimum wages: Legal coverage and compliance

8.1 How many wage workers earn less than the minimum wage?

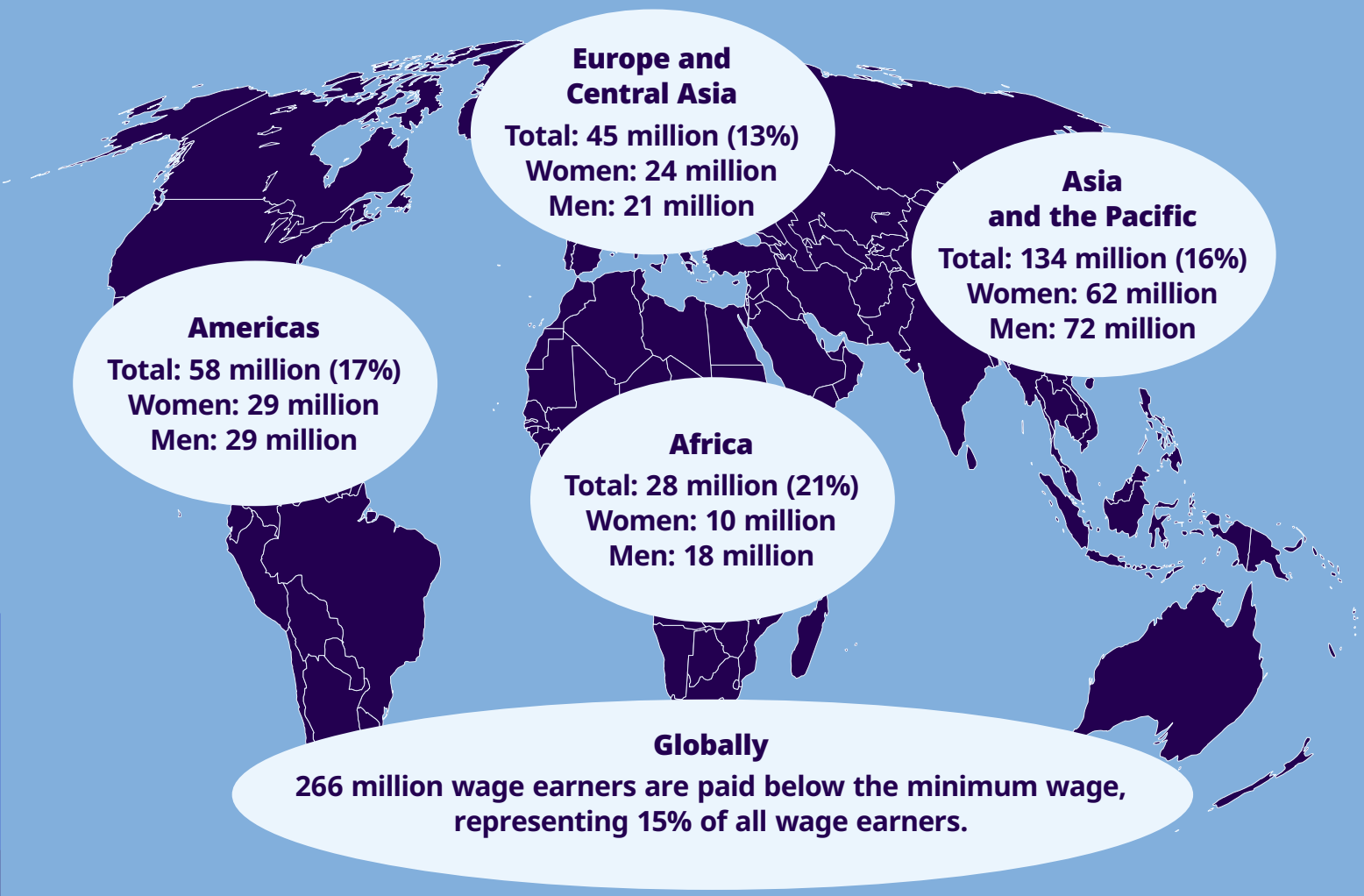
Broad legal coverage and compliance are key determinants of the effectiveness of a minimum wage. Unfortunately, an estimated 266 million wage earners worldwide earn less than the hourly minimum wage in place in their countries – either because they are not legally covered, or because of non-compliance. While figure 7.5 in the preceding chapter showed that 327 million wage earners are paid below or at the minimum wage, figure 8.1 further down focuses on wage earners who earn *less* than the minimum wage. As this figure shows, 266 million wage earners around the world, representing some 15 per cent of all wage employees, earn less than the minimum wage. In terms of regional differences, the proportion of workers earning less than the minimum wage is highest in Africa at an estimated 21 per cent, or 28 million workers. However, the region with the largest absolute number of people in this situation is Asia and the Pacific, where an estimated 134 million wage earners (16 per cent of the region's total) receive less than the minimum wage. In the Americas, the corresponding share is estimated at 17 per cent (58 million employees), while in Europe and Central Asia it stands at around 13 per cent (45 million) of the region's employees.



266 million

wage earners around the world are estimated to earn less than existing minimum wages – either because they are not legally covered, or because of non-compliance.

▶ **Figure 8.1 Number of wage earners paid less than the hourly minimum wage, global and by region, 2019**



Note: The percentages in parentheses indicate the proportion of wage workers in each region who earn less than the minimum wage. The global estimates include results for the Arab States in which approximately 1 million wage earners are estimated to receive less than the minimum wage. However, results for the Arab States are not shown because there are not enough data to produce reliable estimates for that region.

Source: ILO estimates.

8.2 The legal coverage of minimum wage systems

While some minimum wage systems provide legal coverage for all wage employees, others have multiple exceptions or cover only limited groups of workers in particular industries or occupations. To date, the two groups most frequently excluded from the legal coverage of minimum wage systems are agricultural and domestic workers. Who exactly is excluded varies from country to country, but other groups often excluded are employees of family businesses and/or small enterprises, apprentices and trainees, and workers with disabilities (ILO 2014a). When not excluded, these groups of wage earners are often subject to specific minimum wage rates that tend to be lower than those applied to other categories of workers (see box 8.1 on domestic workers). As agricultural and domestic workers are among the most frequently excluded categories of workers, our illustrative analysis in this section focuses on these two groups.

As of 2020, around 18 per cent of countries (29 countries) with statutory minimum wages exclude agricultural workers, domestic workers or both categories from minimum wage regulations. Of these, seven countries – namely, Bangladesh, Cambodia, Jordan, Lebanon, Pakistan, Sudan and the Syrian Arab Republic – exclude both agricultural and domestic workers. Five other countries – namely, the Plurinational State of Bolivia, Cyprus, Samoa, Timor-Leste and the United States – exclude all or some agricultural workers while including domestic workers. The remaining 17 countries – China, the Dominican Republic, El Salvador, the Gambia, Guinea-Bissau, Honduras, Indonesia, Japan, Malaysia, Mozambique, Nepal, Oman, Peru, the Republic of Korea, Sri Lanka, Thailand and Tunisia – exclude domestic workers while including agricultural workers (figure 8.2).

Box 8.1 Domestic workers

Domestic workers earn some of the lowest wages among all employees, typically being paid around 40 per cent of average wages, although the level relative to average wages varies between 63.8 per cent in Honduras (2006) and just 14 per cent in Botswana (2005–06). Such workers are also frequently excluded from minimum wages and other labour protections – ILO estimates for 2011 suggest that, overall, some 22.4 million domestic workers (42.6 per cent of the total) are not covered by any minimum wage provisions. In some cases, they are excluded explicitly, while in others either they are excluded from the scope of the definition of an employee, or private households fall outside the scope of the definition of a workplace. Even where domestic workers do enjoy minimum wage protection, their minimum wage level is often set below that of the national minimum wage. ILO data for 2011 show that 3.1 million domestic workers (5.9 per cent of the total) are covered by a minimum wage that is lower than that applied to other workers (ILO 2013).

The low valuation of domestic work and its widespread exclusion from minimum wage protection are often attributed to pervasive social norms that treat such work not as real work but, rather, as unskilled labour and a natural part of a woman's role as an unpaid worker in the home. To address the exclusion of domestic workers and promote decent work in that sector, the Domestic Workers Convention, 2011 (No. 189), calls on ILO Member States to extend protections to domestic workers equal to those enjoyed by other workers. Article 11, in particular, calls on Member States to ensure that domestic workers enjoy minimum wage coverage, where such coverage exists, and that remuneration is established without discrimination based on sex. Since the adoption of Convention No. 189, many countries have introduced or increased minimum wages for domestic workers, or have sought to improve compliance with existing legislation among households employing domestic workers. (For more information on policies and practices, see the forthcoming ILO report on domestic work, to be published in 2021.)

Extending minimum wages to cover domestic workers can contribute to reducing inequality. The low wages of domestic workers, along with the large number of members in their households on average, means that domestic workers' households make up a significant proportion of the bottom 40 per cent of the total population in many countries. Ensuring an effective minimum wage for domestic workers can therefore reduce such inequality. For instance, a study in Cabo Verde shows that single household earners who are domestic workers receive less labour income per capita than single earners in other economic sectors; the disparity is especially marked for female domestic workers (Cabo Verde Ministry of the Economy and ILO 2017). The net take-home pay of a domestic worker was just slightly above that of agricultural workers, and a little more than 50 per cent of the average wage. The minimum wage was extended to domestic workers in an effort to improve their working conditions. If there were compliance with minimum wage legislation in respect of domestic work, wage inequality would decrease significantly. Given that most domestic workers (80 per cent) are women, the application of minimum wages to this sector would also serve to reduce gender pay gaps, particularly at the bottom of the wage distribution (ILO 2013). Where domestic workers are largely migrants, a minimum wage that is applicable to the whole sector, regardless of migration/residency status, can also serve to reduce inequalities between migrant and non-migrant workers.

iStock.com/FG Trade

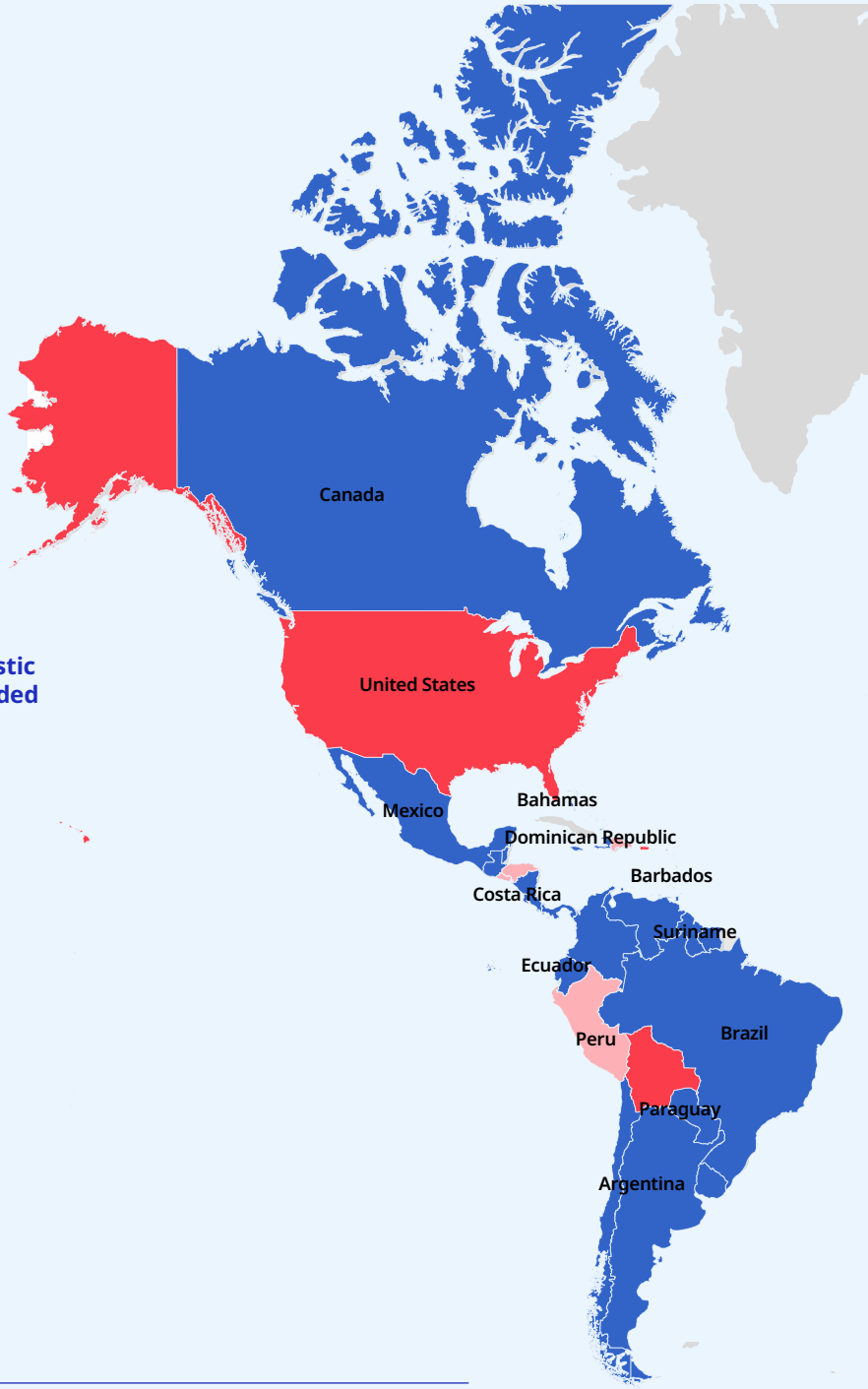
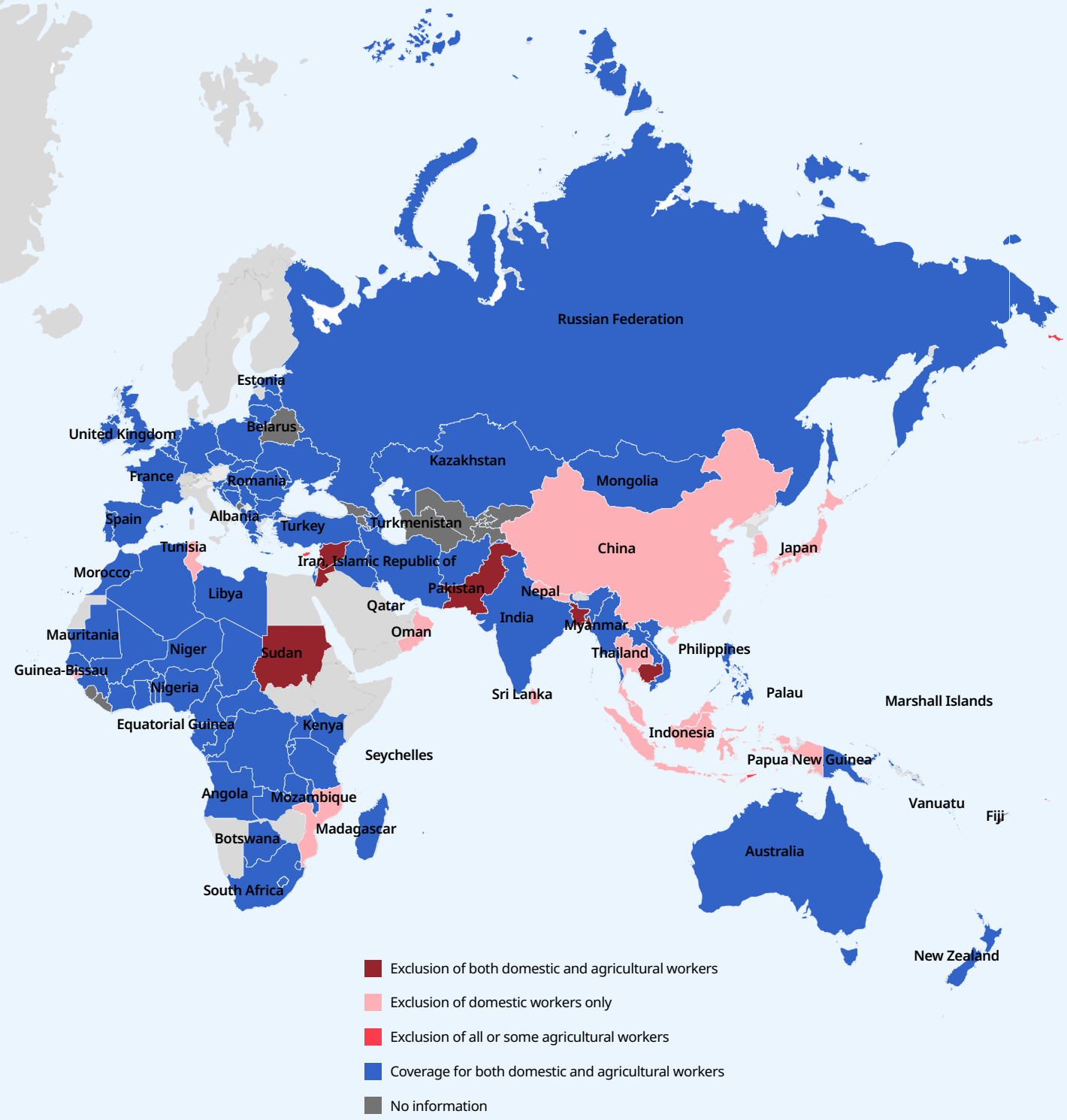


Figure 8.2 Map showing where domestic and/or agricultural workers are excluded from minimum wage policies, 2020

Note: This figure covers only ILO Member States with a statutory minimum wage. Countries in grey include those that are not ILO Member States, those with minimum wages established by collective bargaining, and those with no minimum wage.

Source: ILO minimum wage database.

An estimated 18 per cent of countries (29 countries) with statutory minimum wages exclude either agricultural workers, domestic workers or both from minimum wage regulations.


Russian Federation
Estonia
United Kingdom
Belarus
Kazakhstan
France
Romania
Mongolia
Spain
Albania
Turkey
Turkmenistan
China
Japan
Tunisia
Iran, Islamic Republic of
Morocco
Pakistan
Nepal
Libya
Qatar
India
Myanmar
Mauritania
Oman
Niger
Sudan
Thailand
Philippines
Guinea-Bissau
Nigeria
Sri Lanka
Palau
Marshall Islands
Equatorial Guinea
Kenya
Indonesia
Seychelles
Papua New Guinea
Angola
Mozambique
Vanuatu
Fiji
Madagascar
Botswana
Australia
South Africa
New Zealand
Exclusion of both domestic and agricultural workers
Exclusion of domestic workers only
Exclusion of all or some agricultural workers
Coverage for both domestic and agricultural workers
No information

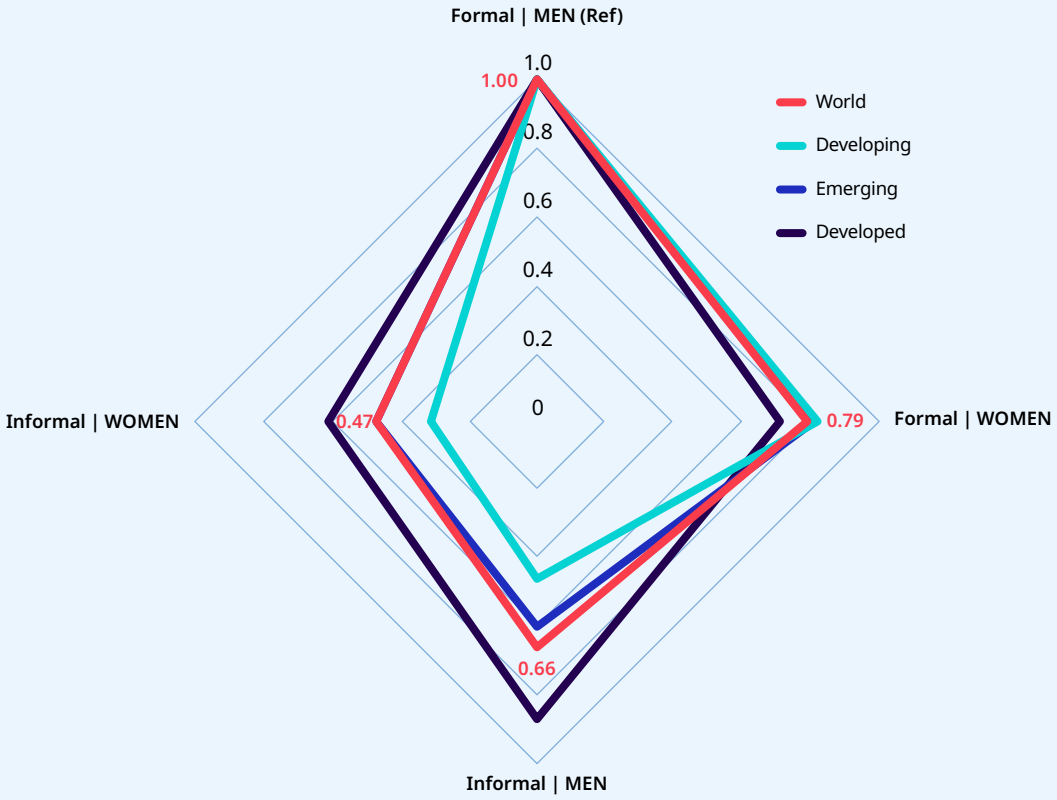
8.3 Non-compliance and the informal economy

High rates of non-compliance also reduce the effectiveness of minimum wages. Non-compliance has 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. Rates of non-compliance vary widely across countries and depend on many factors, such as the design of minimum wage policies, the structure of the system (including the number of rates in place), the level of the rate(s), the level and efficiency of consultation with employers' and workers' organizations, and the use of appropriate implementation measures. On the last point, there are a number of implementation measures that can be put in place in order to increase compliance with minimum wage legislation. These include targeted labour inspections, information and awareness-raising campaigns, capacity-building activities for employers' and workers' representatives, channels enabling workers to claim their rights through individual complaints as well as collective action, sanctions that act as a deterrent to non-compliance, monitoring and responsible purchasing practices within global supply chains, and public employment programmes that pay minimum wages (ILO 2016).

One of the most significant indicators of non-compliance is a high incidence of informality, which poses a major challenge for the rights of workers generally, including for the enforcement of minimum wages. Across the world, 2 billion workers, representing 61.2 per cent of the world's employed population, are in informal employment (ILO 2018a). This includes not only the many millions of own-account workers but also an estimated 724 million wage workers – among them, many domestic workers, casual workers and workers in microenterprises. A common characteristic of these workers is that they are not recognized or sufficiently protected, in law or in practice, under the relevant legal and regulatory frameworks, and as a result tend to face a higher degree of vulnerability (ILO 2002). Informal workers are likely to lack labour rights such as access to collective bargaining, and in consequence tend to suffer poor working conditions, including pay below the minimum wage. It is thus clear that in countries with high levels of informality, if minimum wages are to be effective, they need to be accompanied by measures to encourage formalization.

High rates of informal employment undermine the role of minimum wages in protecting women against gender-based wage discrimination. Informal wage workers, particularly women, earn on average substantially less than formally employed workers. On a worldwide basis, the average earnings of workers in informal wage employment are 62 per cent of the average earnings of wage workers in the formal economy. This disparity has significant consequences at the low end of the wage distribution, where those paid minimum wages are normally found. There are significant gender-specific variations in this overall picture. As illustrated in figure 8.3, a woman employee in informal employment earns on average 47 per cent of the average monthly wage of a man in formal employment, whereas a man in informal wage employment earns 66 per cent of the wage of a formally employed man, and a woman in formal employment is paid on average 79 per cent of her male counterpart's wage. The average monthly wages of informally employed women workers are lowest, compared to those of men in formal wage employment, in developing countries.

Figure 8.3 Ratio of average monthly wages of women in formal and informal wage employment, and of men in informal wage employment, to the average monthly wage of men in formal employment



Note: Global estimates are weighted by the number of employees. The figure has been prepared using data from 92 countries representing 81 per cent of global employment (66 per cent of total employment in developing countries, 87 per cent in emerging economies and 65 per cent in developed countries). The ILO's common operational definition of informal employment was applied (see ILO 2018a, box 2).

Source: ILO calculations based on microdata sets from national household surveys.

Efforts to raise productivity are also necessary to promote compliance. Low productivity is one of the drivers of informality and has repercussions for the level of non-compliance with minimum wage legislation. Low earnings in the informal economy often reflect the low productivity of informal employment. The vast majority of enterprises in the informal economy are small units. Over 75 per cent of total informal employment takes place in businesses employing fewer than ten workers (ILO 2018a; Bonnet, forthcoming). On average, labour productivity in enterprises in the informal economy is less than half that of enterprises in the formal economy (OECD and ILO 2019). This reflects to some extent the low levels of education among both business owners and employees in enterprises in the informal economy. Other factors that explain these productivity gaps include a lack of access to financial services, which results in capital constraints on informal enterprise and operation below the efficient scale of production; and a lack of access to business development services, markets and key public goods. Without measures to raise productivity at the less productive end of the economy, there is a risk that too many enterprises will find it impossible to comply with minimum wage legislation.

9 The level of minimum wages

9.1 What is an adequate level of minimum wage?

The second main factor that determines the impact of a minimum wage on inequality is the level at which it is set. Setting and adjusting this level are perhaps among the most challenging parts of operating a minimum wage policy, and should be done with full participation of the social partners and through evidence-based social dialogue. If set too low, minimum wages will have little effect in protecting workers and their families against unduly low pay or poverty. If set too high, compliance will be poor and/or there will be adverse employment effects. Setting an adequate minimum wage level between these two extremes is not an easy task, and has to take into account the social and economic context of the country, as well as the number of rates that are in place. In order to ensure an adequate minimum wage – an aspect that is singled out in the ILO Centenary Declaration for the Future of Work (ILO 2019) – the Minimum Wage Fixing Convention, 1970 (No. 131), calls for a balanced and evidence-based approach to setting minimum wage levels which considers, on the one hand, the needs of workers and their families and, on the other, economic factors. An appropriate balance between these two sets of considerations is essential to ensure that minimum wages are adapted to the national context, and that both the effective protection of workers and the development of sustainable enterprises are considered.

What are the existing levels of minimum wages around the world? While this question seems simple enough, in some cases the answer turns out to be quite complex, and comparison across countries must be made with caution. First of all, given the complexity of some of the minimum wage systems reviewed in Chapter 7, one crucial question concerns which rate should be selected as indicative in countries where multiple minimum wage rates exist. Second, there are many ways in which minimum wage levels can be analysed. Overall, measurements of the levels can be divided into two broad groups: absolute (monetary values) and relative (comparing the level of the minimum wage with the wage distribution in the country). In terms of absolute measures, the next section presents gross minimum wage levels in both nominal US dollar values and in constant purchasing power parity (PPP) values.[8] The use of PPP values, which take into account the different purchasing power of minimum wages across countries, makes it possible to draw some comparisons between countries and also in relation to international poverty lines set by the World Bank.[9] As for relative measures, section 9.2 presents the levels of minimum wages relative to the median wage (that is, the wage in the middle of the distribution) and the average (mean) wage in each country.

[8] The PPP conversion factor is the number of units of a country's currency required to buy the same amounts of goods and services in the domestic market as US$1 would buy in the United States. This conversion factor is for private consumption (that is, it is calculated on the basis of household final consumption expenditure). For most economies, PPP figures are extrapolated from the 2011 International Comparison Program (ICP) benchmark estimates or imputed using a statistical model based on the 2011 ICP. For 47 high- and upper-middle-income countries, conversion factors are provided by Eurostat and the OECD.

[9] These poverty lines are set in terms of individual daily income levels. The three of interest here are US$1.9 per day, which is the poverty line typical of the world's poorest countries; US$3.2 per day, the corresponding threshold for lower-middle-income countries; and US$5.5 per day, the equivalent figure for upper-middle-income countries.

The gross minimum wage is used for all the analyses in the next section. However, it should be noted that gross minimum wages can significantly deviate from net minimum wages in some countries. One of the interesting features of the Minimum Wage Fixing Convention, 1970 (No. 131), lies in its particular concern for workers' living conditions: in Article 3 it emphasizes the necessity of taking into consideration the needs of workers and their families, including the cost of living and the relative living standards of other social groups. In this sense, the minimum wage should provide individuals with sufficient income to guarantee a decent living and a satisfactory level of social inclusion. It is important to consider the net levels of minimum wages because, to satisfy their immediate needs, individuals can only use that part of their wages that remains available to them after the payment of income taxes, social security contributions and any other levies. Accordingly, box 9.1 highlights practices regarding income taxation and social security contributions in 42 countries representing all parts of the globe and all country income levels.

iStock.com/gece33

▶ Box 9.1 Personal income taxation and social security contributions for minimum wage earners

Looking beyond the gross values of minimum wages allows us to obtain a more accurate picture of the extent to which a given level of wages could cover the needs of workers and their families.[a] In general, minimum wages are defined as gross amounts and are accordingly subject to personal income taxes. Although social security contributions are not the same as income taxation – because they provide the employee with various cash or in-kind benefits in the event of life's hazards – they nevertheless reduce the take-home pay. Taking into account social security contributions, which are generally compulsory, further refines the process of calculating the net monthly disposable income of minimum wage earners.[b] Figure B9.1.1 provides the decomposition of the gross minimum wage for a single individual with no children, highlighting the part that remains after income taxation and social security levies, the take-home minimum wage. These estimates are based on accessible tax information for 42 selected countries representing all parts of the globe (figure B9.1.1(a)) and all country income levels (figure B9.1.1(b)). Figure B9.1.2 shows the rates at which income tax and social security contributions are levied for the individual countries in the sample.

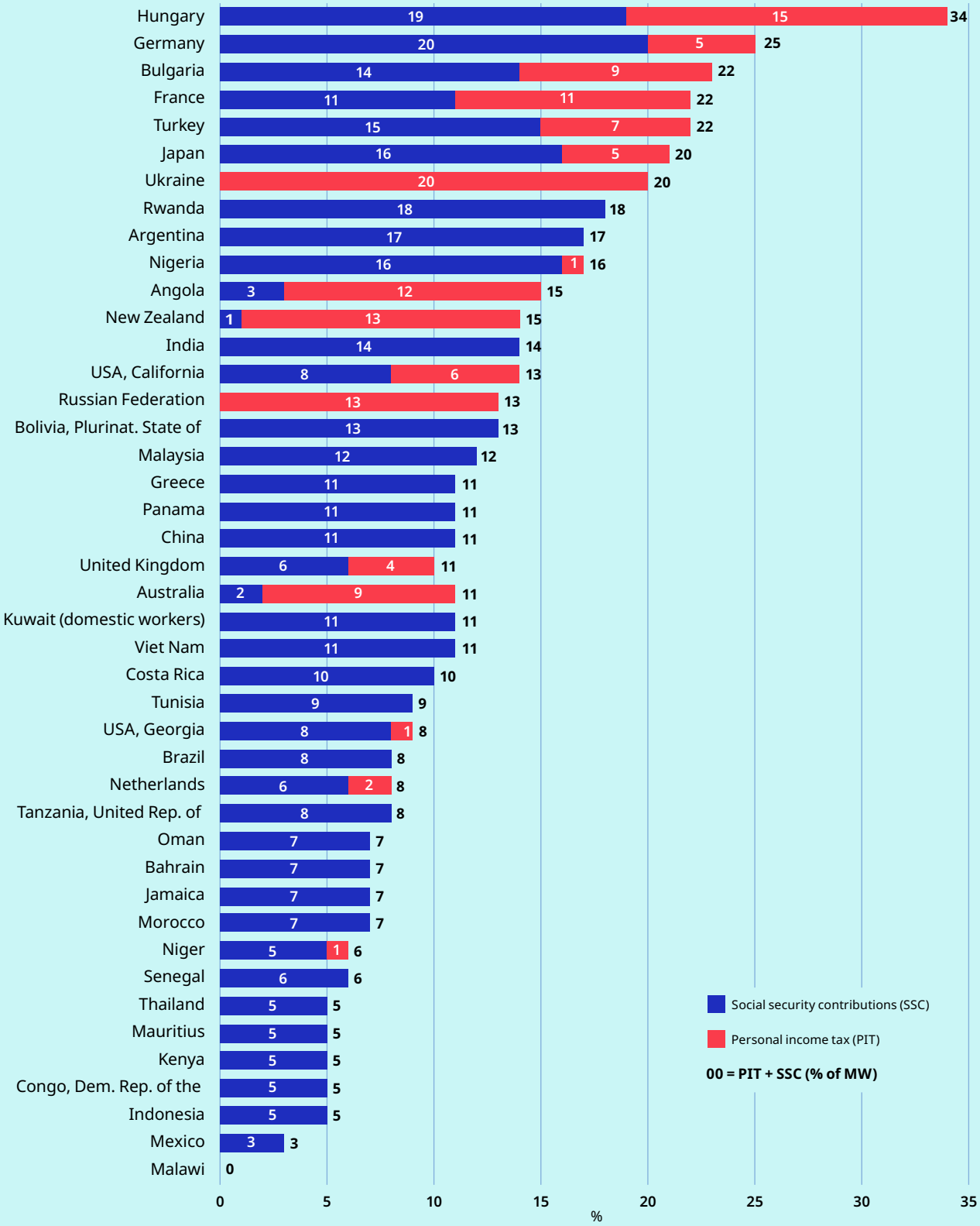
▶ Figure B9.1.1 Decomposition of gross minimum wage in a sample of 42 countries, by (a) region and (b) country income level, 2019 (percentage)

SSC = social security contributions.

Note: Estimates are for a single individual with no children.

Source: ILO calculations based on accessible tax information for 42 countries.

Figure B9.1.2 Personal income tax and social security contributions for a single minimum wage earner with no children (% of gross minimum wage), 42 countries, 2019



MW = minimum wage. PIT = personal income tax. SSC = social security contributions.

Note: The difference in totals is due to rounding of the estimates. Malawi, the Russian Federation and Ukraine are the only countries in the sample where employees are exempted from social security contributions. For the following countries, the calculation of personal income tax takes into account the tax credits for which minimum wage earners are eligible (sources are given in parentheses): Australia (Australian Taxation Office n.d.); Greece (OECD 2019b), Kenya (Ernst and Young Global 2019); Mexico (OECD 2019b); Netherlands (OECD 2019b); New Zealand (Inland Revenue n.d.); Turkey (PwC 2019); United States, California (US Department of Agriculture, National Finance Center 2019).

Source: For social security contributions: ISSA (n.d.).

▶ **Box 9.1 (cont'd)**

Taking into account only income taxation, the net minimum wage is what is left after personal income tax alone is deducted from the gross minimum wage. Defined in this way, net minimum wages for a single minimum wage earner with no children range from almost 100 per cent of the gross minimum wage in low-income countries to 95 per cent in high-income countries, the global average being around 97 per cent. However, the ratio is much lower in some countries, particularly those with flat-rate taxes. In terms of regional differences, the lowest net minimum wages are observed in Europe and Central Asia, where they amount to around 91 per cent of the gross minimum wage, while Africa and the Americas have the highest ratio at around 99 per cent in both cases. Employees in Asia and the Pacific "capture" 97 per cent of their gross minimum wage after deduction of personal income tax. There is no personal income taxation in the Arab States, which explains the net minimum wage of 100 per cent in the region's countries. This same level of 100 per cent after allowing for personal income tax is achieved in 25 other countries, because minimum wage earners – being at the bottom end of the income distribution – are offered various tax deductions, tax credits and even tax exemptions. Moreover, lower personal income tax rates have also helped to improve net minimum wages in countries that use progressive taxation, which is the case for 84 per cent of the countries in the sample. Conversely, a flat-rate income tax appears to be detrimental to minimum wage earners, as suggested by the significant variation in net minimum wages between flat-rate and progressive taxation systems: 92 per cent and 98 per cent of the gross minimum wage, respectively. Countries using flat rates for personal income tax include the Plurinational State of Bolivia, Bulgaria, Hungary, Jamaica, Mauritius, the Russian Federation and Ukraine.

In order to arrive at the whole picture it is necessary to take into consideration social security contributions as well as personal income tax. Take-home minimum wages are obtained by deducting employees' contributions from net minimum wages. Again, for a single minimum wage earner with no children, Europe and Central Asia levies the highest social security contributions on minimum wages and therefore exhibits the lowest take-home minimum wages at around 81 per cent of the gross minimum wage (figure B9.1.1(a)).[c] This ratio is considerably below the global average of 88 per cent. "Capturing" about 90–92 per cent of their wages after income taxes and social security contributions, minimum wage workers in Africa, the Americas and the Arab States have the highest take-home minimum wages. Turning to differences across country income groups, one may observe less stark variations, with high-income countries averaging a ratio of 86 per cent as the take-home minimum wage, whereas the average ratio for middle-income countries is around 89 per cent. However, these average figures hide considerable variations within the groups, especially within the high-income group, where take-home ratios range from 66 per cent in Hungary to 92 per cent in the Netherlands and the US state of Georgia, and 93 per cent in Bahrain and Oman (figure B9.1.2).

Interestingly, although social security contributions are capped and a flat rate is generally used to calculate them, they nevertheless account for around three quarters of the total levies on minimum wages (income tax plus social security contributions). That share ranges from 54 per cent in Europe and Central Asia to 93 per cent in the Americas and 100 per cent in the Arab States. It averages 73 per cent in Asia and the Pacific and 86 per cent in Africa. Yet, social security contributions are generally levied at a flat rate, with no deductions or credits (direct reductions of the amounts owed).[d] In addition, in more than half of the countries in the sample, social security contributions are calculated on the basis of a capped amount.[e] The Social Security (Minimum Standards) Convention, 1952 (No. 102), stipulates, in Article 71, that social security contributions should be levied in a manner that "avoids hardship to persons of small means" and takes into account their economic situation.

Consequently, there is considerable room for improving the livelihoods of minimum wage earners through income tax and social security policies. While income tax policies could introduce more progressive rates for the taxing of personal income and avoid flat rates, social security measures could take the form of reductions subsidized by the government or achieved by cross-subsidization within the social security system. Such reductions could also benefit employers by helping to lessen labour costs for minimum wage workers, accelerating the transition to formality and improving minimum wage compliance rates. The shortfall in revenue resulting from such measures could be compensated for by raising the caps used to calculate social security contributions, following an evidence-based approach which ensures that high earners' productivity is not impaired.

[a] Early studies on the taxation of minimum wage earners include a chapter in the OECD's *Taxing Wages* report covering 2005–06 (OECD 2007) and its precursor working paper. The author of the latter observed that minimum wage earners face considerable fiscal burdens (Immervoll 2007). Similar conclusions were reached by Marx, Marchal and Nolan (2012), who focused on European countries and the United States, and compared net income packages at the minimum wage level depending on family situations.

[b] Financial measures in support of low-income households, such as exist in many countries, could also raise the monthly disposable income. However, such measures need to be treated with great caution, as the uptake of such benefits is limited, even in developed countries. See Dubois and Ludwinek (2015).

[c] It is important to note that the heavier burdens of social security contributions observed in Europe and Central Asia are generally associated with higher social protection floors and coverage (ILO 2017).

[d] Except in the Netherlands, where employees can reduce their social security liabilities by a certain fraction of their tax credits.

[e] This is the case in 25 of the selected 42 countries: Argentina, Bahrain, Plurinational State of Bolivia, Brazil, Bulgaria, France, Germany, Greece, India, Indonesia, Japan, Kenya, Kuwait, Malaysia, Mauritius, Mexico, Morocco, Niger, Oman, Senegal, Thailand, Turkey, United Kingdom, United States, Viet Nam.

9.2 At what level are minimum wages set?

Absolute levels

Globally, the median value of gross minimum wages for 2019 is US$486 (PPP) per month, meaning that half of the countries in the world have minimum wages set lower than this and half have minimum wages set higher. The full range of monthly minimum wages extends from US$5 (PPP) in Uganda to US$2,433 (PPP) in Luxembourg. If these levels are compared with the World Bank international poverty lines, one may observe that five countries have minimum wage levels that are below the extreme poverty line, which is currently defined as US$1.90 (PPP) per person per day. Eight countries have minimum wages set at a level below the poverty line of US$3.2; this number increases to 18 countries if one takes the threshold of US$5.5.

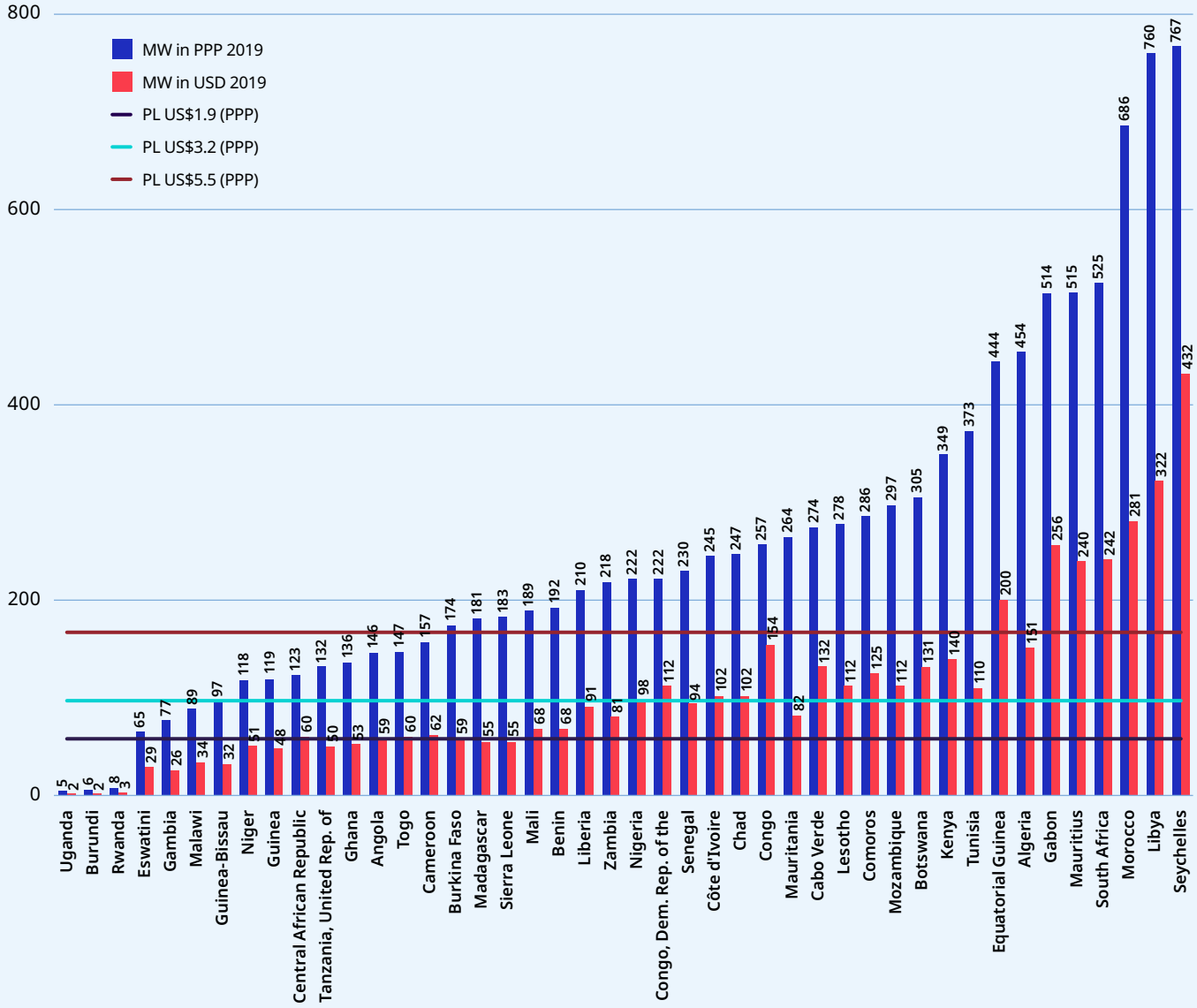
US$486 PPP/month

Globally, the median value of gross minimum wages for 2019 is equal to US$486 PPP per month, meaning that half of the countries in the world have minimum wages set lower than this and half have minimum wages set higher.

In Africa, the median value of the monthly minimum wage is US$220 (PPP), with values ranging from US$5 (PPP) in Uganda to US$767 (PPP) in the Seychelles (figure 9.1). The highest minimum wages are found in the Seychelles, Libya, Morocco and South Africa; the lowest in Uganda, Burundi and Rwanda. In these three last countries, minimum wages are set at a level that does not provide an income matching even the extreme poverty line of US$1.90 per day (figure 9.1). In Eswatini, the Gambia and Malawi, rates are below the poverty line of US$3.2 per day, while in several more countries, the minimum wage does not reach the higher poverty line of US$5.5 per day.

In the Americas, the median value of the monthly minimum wage is US$668 (PPP), with values ranging from US$289 (PPP) in Mexico to US$1,612 (PPP) in Canada (figure 9.2). The highest minimum wages are found in Canada and the United States, the lowest in Mexico, Haiti and Jamaica. All the countries in the Americas have minimum wages set above the three international poverty lines when converted to PPP values.

▶ Figure 9.1 Gross monthly minimum wage levels in Africa, 2019 (US$ actual and PPP values)

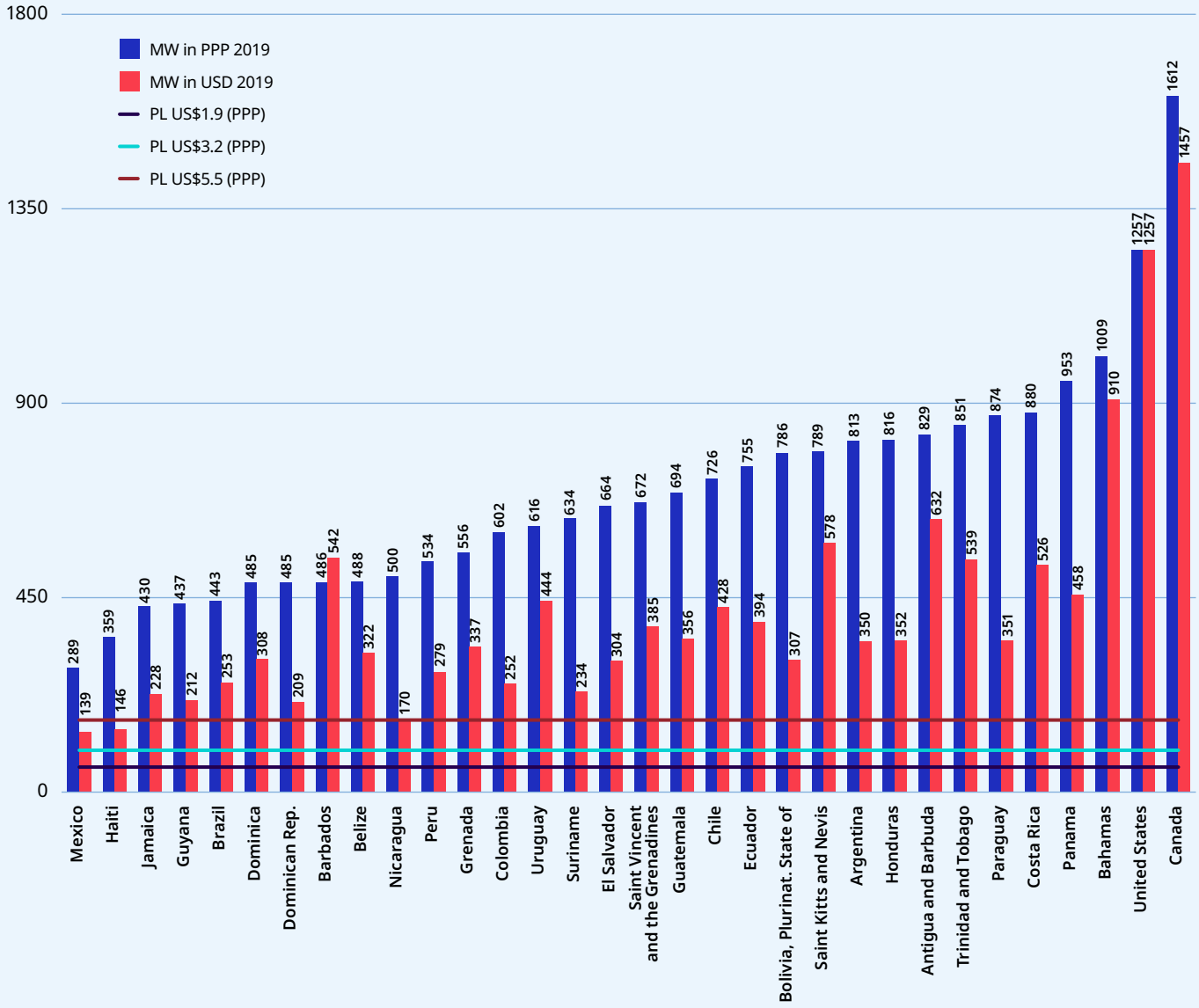


MW = minimum wage. PL = poverty line. PPP = purchasing power parity.

Note: The data refer to national minimum wage rates where they exist. For countries with multiple minimum wage rates, the rate selected refers to: the national minimum wage floor where it exists; the urban rate where there are different rates in urban and rural areas; the industrial rate (e.g. SMIG) when different rates apply to industrial and agricultural workers (e.g. SMIG/SMAG systems); the rate for unskilled workers or the lowest occupational category where rates differ by skill level or occupation; the rate applied to domestic enterprises where there are different rates for domestic and foreign enterprises; the lowest regional rate when there are different rates in different regions and no national minimum wage floor exists; the rate applied to small enterprises when rates vary depending on firm size; and the rate for the manufacturing sector when rates differ by sector (if multiple rates exist within the manufacturing sector, the lowest rate is selected). For more information, see Appendix II.

Source: ILO minimum wage database for the minimum wage levels, International Monetary Fund's World Economic Outlook database (Oct. 2020) for the PPP conversion rates and World Bank's World Development Indicators (Oct. 2020) for the exchange rates.

▶ Figure 9.2 Gross monthly minimum wage levels in the Americas, 2019 (US$ actual and PPP values)



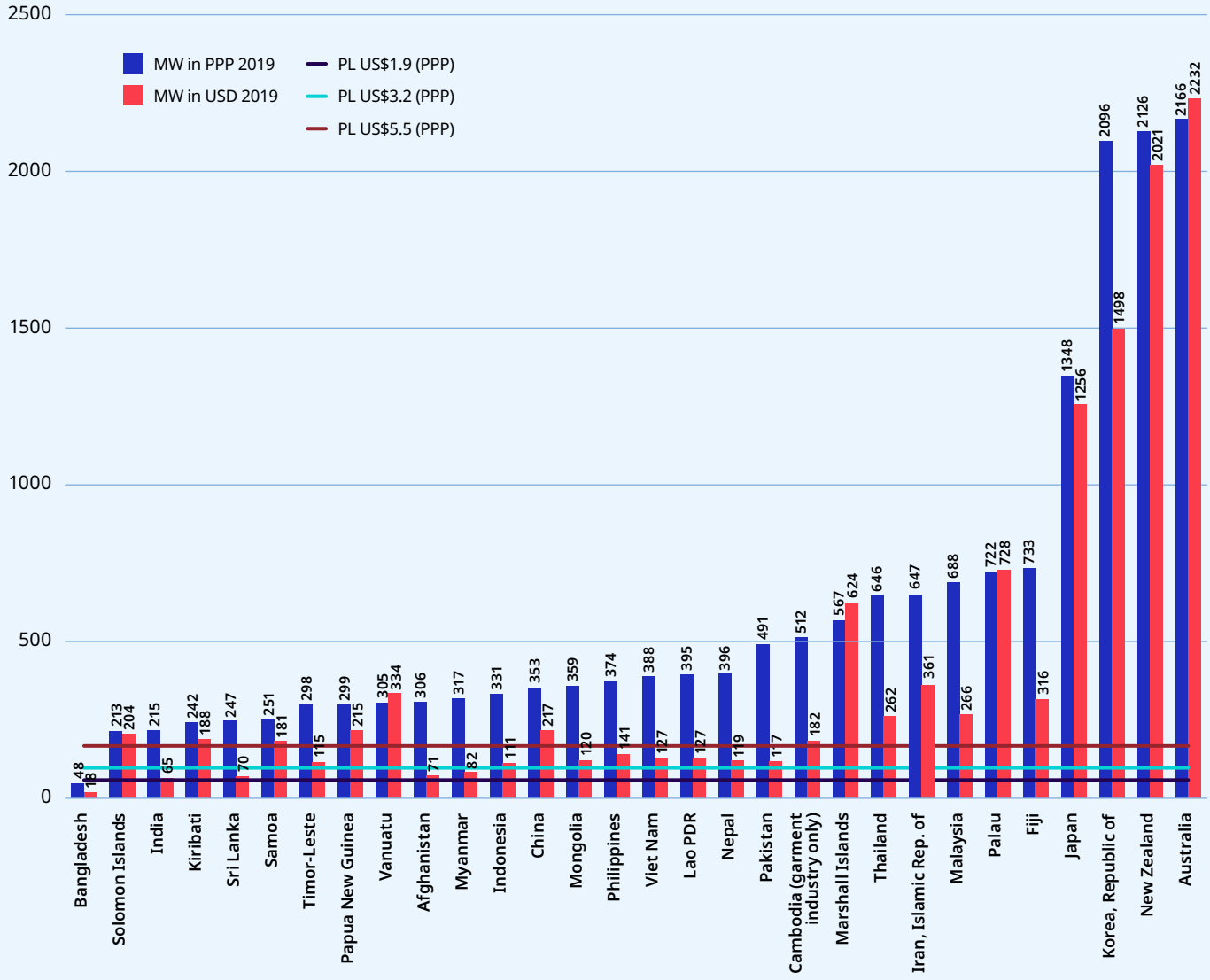
MW = minimum wage. PL = poverty line. PPP = purchasing power parity.

Note: The data refer to national minimum wage rates where they exist. For countries with multiple minimum wage rates, the rate selected refers to: the national minimum wage floor where it exists; the urban rate where there are different rates in urban and rural areas; the industrial rate (e.g. SMIG) when different rates apply to industrial and agricultural workers (e.g. SMIG/SMAG systems); the rate for unskilled workers or the lowest occupational category where rates differ by skill level or occupation; the rate applied to domestic enterprises where there are different rates for domestic and foreign enterprises; the lowest regional rate when there are different rates in different regions and no national minimum wage floor exists; the rate applied to small enterprises when rates vary depending on firm size; and the rate for the manufacturing sector when rates differ by sector (if multiple rates exist within the manufacturing sector, the lowest rate is selected). For more information, see Appendix II.

Source: ILO minimum wage database for the minimum wage levels, International Monetary Fund's World Economic Outlook database (Oct. 2020) for the PPP conversion rates and World Bank's World Development Indicators (Oct. 2020) for the exchange rates.

In Asia and the Pacific, the median value of the monthly minimum wage is US$381 (PPP), with values ranging from US$48 (PPP) in Bangladesh to US$2,166 (PPP) in Australia (figure 9.3). In this region, one may observe a distinct split between developed and developing economies, with four developed countries, namely Japan, the Republic of Korea, New Zealand and Australia standing out with higher minimum wage levels, ranging from US$1,348 (PPP) to US$2,166 (PPP) per month. Minimum wages in most other countries of the region are set between US$200 (PPP) and US$800 (PPP) per month. The only country in Asia and the Pacific whose minimum wage does not reach even the lowest international poverty line is Bangladesh. Note, however, that higher rates apply in the garment sector in Bangladesh.

Figure 9.3 Gross monthly minimum wage levels in Asia and the Pacific, 2019 (US$ actual and PPP values)



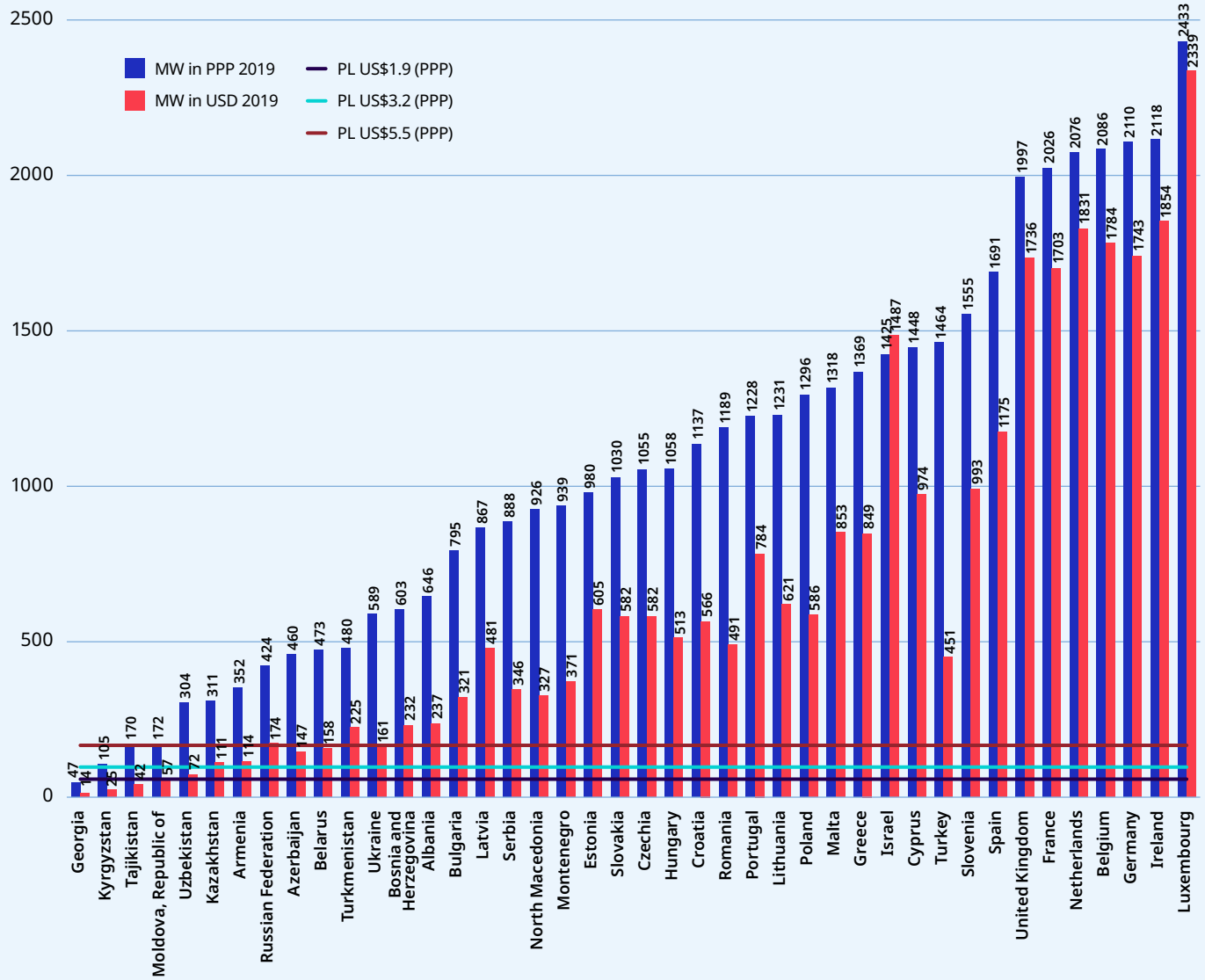
MW = minimum wage. PL = poverty line. PPP = purchasing power parity.

Note: The data refer to national minimum wage rates where they exist. For countries with multiple minimum wage rates, the rate selected refers to: the national minimum wage floor where it exists; the urban rate where there are different rates in urban and rural areas; the industrial rate (e.g. SMIG) when different rates apply to industrial and agricultural workers (e.g. SMIG/SMAG systems); the rate for unskilled workers or the lowest occupational category where rates differ by skill level or occupation; the rate applied to domestic enterprises where there are different rates for domestic and foreign enterprises; the lowest regional rate when there are different rates in different regions and no national minimum wage floor exists; the rate applied to small enterprises when rates vary depending on firm size; and the rate for the manufacturing sector when rates differ by sector (if multiple rates exist within the manufacturing sector, the lowest rate is selected). For more information, see Appendix II.

Source: ILO minimum wage database for the minimum wage levels, International Monetary Fund's World Economic Outlook database (Oct. 2020) for the PPP conversion rates and World Bank's World Development Indicators (Oct. 2020) for the exchange rates.

In Europe and Central Asia, the median value of the monthly minimum wage is US$1,043 (PPP), with values ranging from US$47 (PPP) in Georgia to US$2,433 (PPP) in Luxembourg (figure 9.4). The highest minimum wages are found in Luxembourg, Ireland and Germany; the lowest in Georgia, Kyrgyzstan, Tajikistan and the Republic of Moldova. In Georgia, the minimum wage is set at a level that does not provide an income matching even the extreme poverty line of US$1.90 per day, while in Kyrgyzstan the minimum wage falls short of the second international poverty line of US$3.2 per day.

Figure 9.4 Gross monthly minimum wage levels in Europe and Central Asia, 2019 (US$ actual and PPP values)

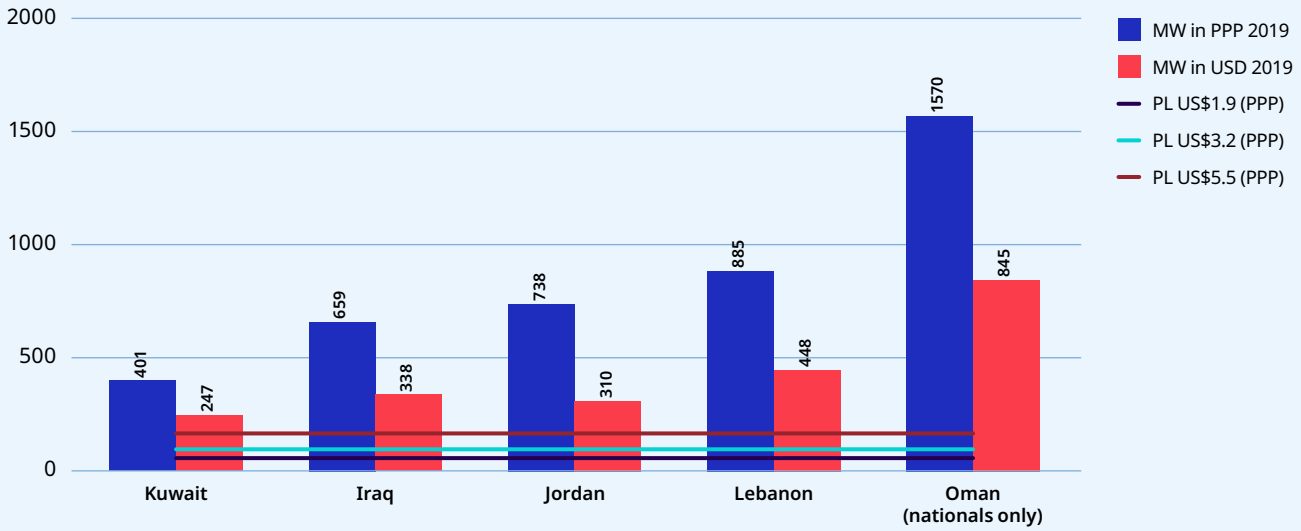


MW = minimum wage. PL = poverty line. PPP = purchasing power parity.

Note: The data refer to national minimum wage rates where they exist. For countries with multiple minimum wage rates, the rate selected refers to: the national minimum wage floor where it exists; the urban rate where there are different rates in urban and rural areas; the industrial rate (e.g. SMIG) when different rates apply to industrial and agricultural workers (e.g. SMIG/SMAG systems); the rate for unskilled workers or the lowest occupational category where rates differ by skill level or occupation; the rate applied to domestic enterprises where there are different rates for domestic and foreign enterprises; the lowest regional rate when there are different rates in different regions and no national minimum wage floor exists; the rate applied to small enterprises when rates vary depending on firm size; and the rate for the manufacturing sector when rates differ by sector (if multiple rates exist within the manufacturing sector, the lowest rate is selected). For more information, see Appendix II.

Source: ILO minimum wage database for the minimum wage levels, International Monetary Fund's World Economic Outlook database (Oct. 2020) for the PPP conversion rates and World Bank's World Development Indicators (Oct. 2020) for the exchange rates.

Figure 9.5 Gross monthly minimum wage levels in the Arab States, 2019 (US$ actual and PPP values)



PPP = purchasing power parity.

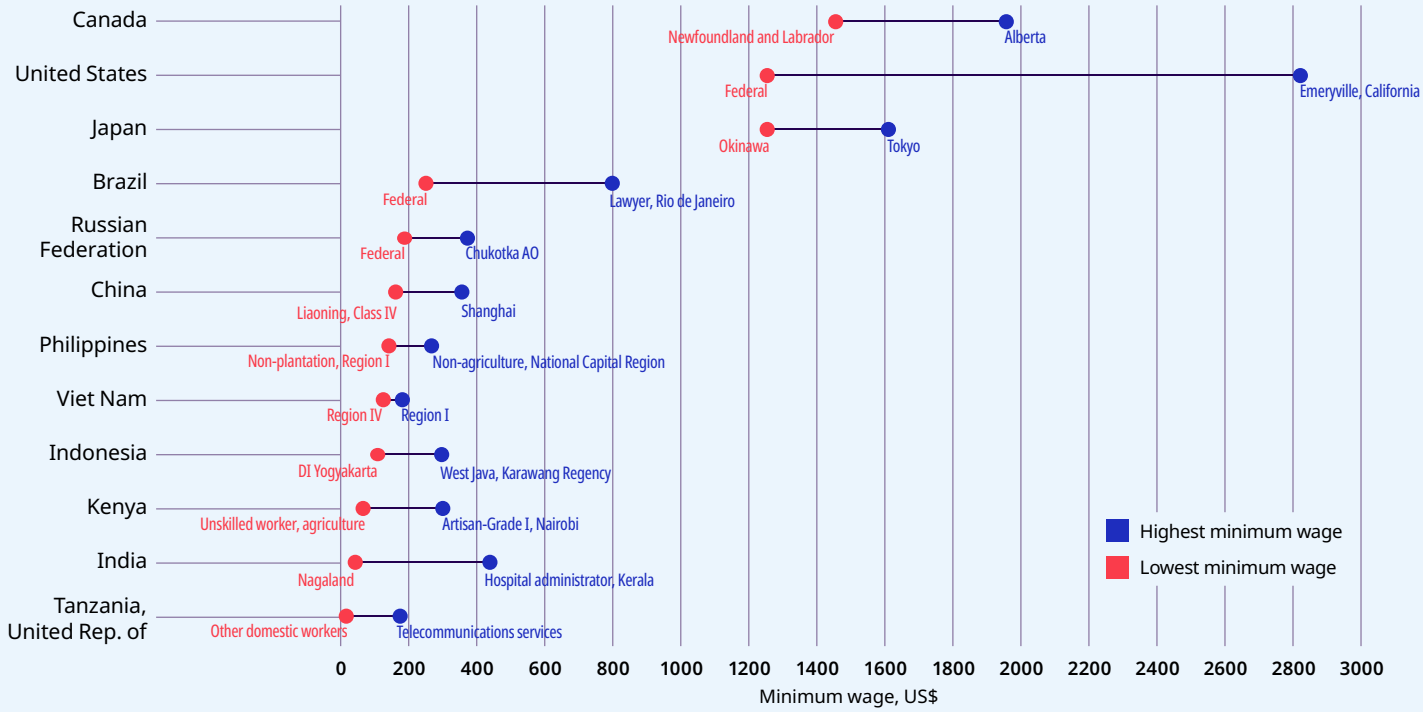
Note: The data refer to national minimum wage rates where they exist. For countries with multiple minimum wage rates, the rate selected refers to: the national minimum wage floor where it exists; the urban rate where there are different rates in urban and rural areas; the industrial rate (e.g. SMIG) when different rates apply to industrial and agricultural workers (e.g. SMIG/SMAG systems); the rate for unskilled workers or the lowest occupational category where rates differ by skill level or occupation; the rate applied to domestic enterprises where there are different rates for domestic and foreign enterprises; the lowest regional rate when there are different rates in different regions and no national minimum wage floor exists; the rate applied to small enterprises when rates vary depending on firm size; and the rate for the manufacturing sector when rates differ by sector (if multiple rates exist within the manufacturing sector, the lowest rate is selected). For more information, see Appendix II.

Source: ILO minimum wage database for the minimum wage levels, International Monetary Fund's World Economic Outlook database (Oct. 2020) for the PPP conversion rates and World Bank's World Development Indicators (Oct. 2020) for the exchange rates.

In the Arab States, the median value of the monthly minimum wage is US$738 (PPP), with values ranging from US$401 (PPP) in Kuwait to US$1,570 (PPP) in Oman, where the minimum wage, however, applies only to nationals (figure 9.5). In Iraq and Jordan, monthly minimum wage levels are set at, respectively, US$659 (PPP) and US$738 (PPP), while in Lebanon the minimum wage is set slightly higher, at US$885 (PPP) per month. In Qatar a new minimum wage covering all employees – including domestic workers – was set in 2020 at 1,000 Qatari riyals, equivalent to roughly US$275, if food and accommodation are provided by employers, and at 1,800 riyals (approximately US$495) if they are not (ILO 2020m).

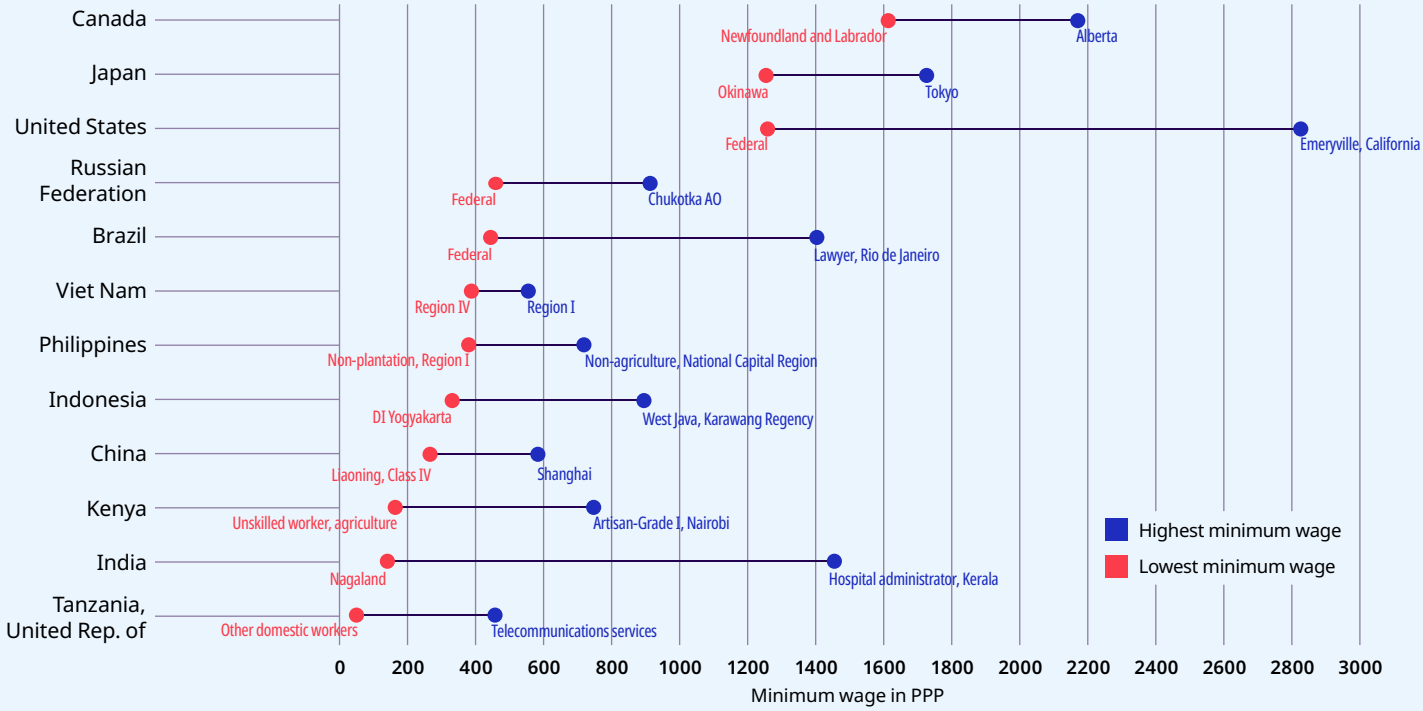
When comparing minimum wage levels across countries, the rate selected for the comparison in countries that have multiple minimum wages can make a significant difference. This is illustrated by figures 9.6 and 9.7, which show the gap between the lowest and highest rates in selected countries with multiple minimum wages. In figure 9.7, which displays minimum wages in US dollars (PPP), one may observe that the ranges of minimum wage rates often overlap across countries, and that minimum wages may be significantly higher within the same country in certain regions and/or highly skilled occupations. For instance, the minimum wage for a hospital administrator in Kerala (India) is higher in US dollar PPP terms than the minimum wage in Okinawa (Japan). Similarly, a lawyer in Rio de Janeiro (Brazil) is entitled to a minimum wage that exceeds the federal minimum wage in the United States.

▶ Figure 9.6 Highest and lowest minimum wages in selected countries with multiple rates, 2019 (US$ actual values)



Source: ILO minimum wage database for the minimum wage levels and World Bank's World Development Indicators (Oct. 2020) for the exchange rates.

▶ Figure 9.7 Highest and lowest minimum wages in selected countries with multiple rates, 2019 (US$ PPP values)



MW = minimum wage.

Source: ILO minimum wage database for the minimum wage levels and International Monetary Fund's World Economic Outlook database (Oct. 2020) for the PPP conversion rates.

Relative levels

Differences in minimum wage levels reflect not only national policy decisions but also, to a large extent, differences among countries in their level of economic development and average wage levels. In order to evaluate the level of minimum wages relative to national economic and social circumstances, a relative measure is used. The statistical indicator most frequently used for this purpose is the ratio of the minimum wage to the median wage (sometimes called the "Kaitz index"). An alternative measure is the ratio of the minimum to the mean wage. In both advanced and developing economies, the ratios of the minimum to the mean or median wage has become an increasingly prominent consideration in setting or revising the level of minimum wages. Debates frequently revolve around the question of which level of these ratios is most appropriate in a given country's circumstances in order to maximize the social and economic benefits of a minimum wage while minimizing possible adverse employment or inflation effects. However, caution is required when making and interpreting cross-country comparisons of such ratios because different countries have different labour market structures and different ways of computing mean or median wages. In addition, as noted above, some countries have multiple minimum wage rates, which complicates the calculation of these indicators. Hence, while cross-country indicators can be useful in evaluating minimum wage levels at national level, they should be complemented by more refined country-specific analysis. Using available microdata, this section of the report provides estimates of the ratio of the minimum wage to the median and mean wages for a sample of 60 developed and developing countries from all regions of the world.[10]

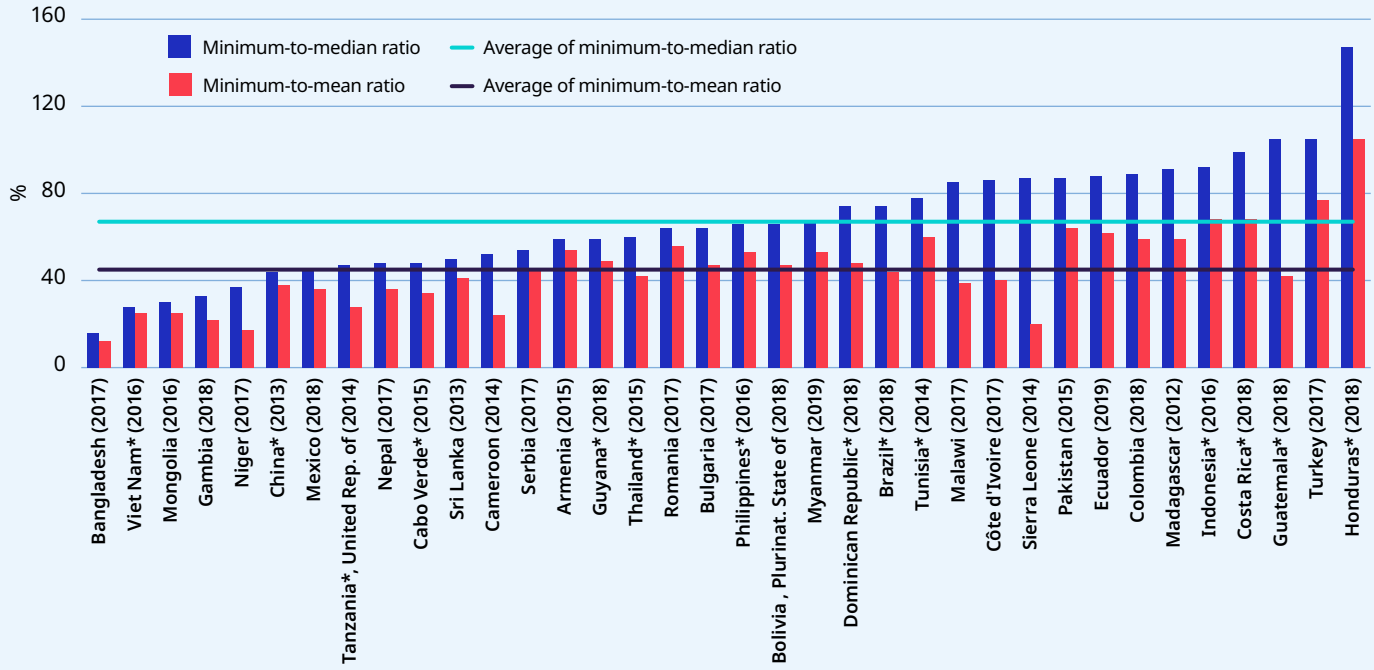
Globally, results shows that minimum wages are set, on average, at around 55 per cent of the median wage in developed countries and at around 67 per cent of the median wage in developing and emerging economies. Among the countries for which data are available, one may observe that minimum-to-median ratios vary from 16 per cent in Bangladesh to as high as 147 per cent in Honduras (figure 9.8), and that the median value of these ratios is equal to 59 per cent. The ratios of minimum to mean wages are systematically lower because mean wages are higher than median wages. On average, ratios based on the mean wage are 26 per cent lower than ratios based on the median wage. This difference is greater in developing and emerging economies than in developed countries. In developed countries, ratios based on the mean wage are, on average, 19 per cent lower than ratios based on the median wage. In emerging and developing economies, by contrast, ratios based on the mean wage are, on average, 30 per cent lower than ratios based on the median wage, reflecting higher inequality.

Among developed countries, a large majority of countries have minimum wages set somewhere between 50 and 65 per cent of the median wage. In figure 9.9, which shows estimates for countries with available data, one may observe that minimum-to-median wage ratios range from 40 per cent in Czechia to 71 per cent in Hungary. Apart from a few additional exceptions such as Estonia and Uruguay, where minimum-to-median ratios are below 50 per cent, or Chile and Portugal, where minimum-to-median ratios are higher than 65 per cent, all other countries have minimum wages set somewhere between 50 and 65 per cent of the median wage.

In developing and emerging economies, minimum-to-median wage ratios range from 16 per cent in Bangladesh to 147 per cent in Honduras (figure 9.8). In this group of countries, one may observe significant differences across countries with, for instance, minimum wages set at 30 per cent of the median wage or less in Bangladesh, Viet Nam and Mongolia, and above the median in Guatemala, Turkey and Honduras. Developing and emerging economies are also characterized by a greater difference between the ratio based on the median wage and the ratio based on the mean wage. This difference is particularly large in Cameroon, Sierra Leone and Guatemala. In Sierra Leone, for instance, the minimum-to-median wage ratio is 87 per cent, while the minimum-to-mean wage ratio is 20 per cent.

[10] For more information on the methodology, see Appendix III; for details of the microdata sources, see Appendix V.

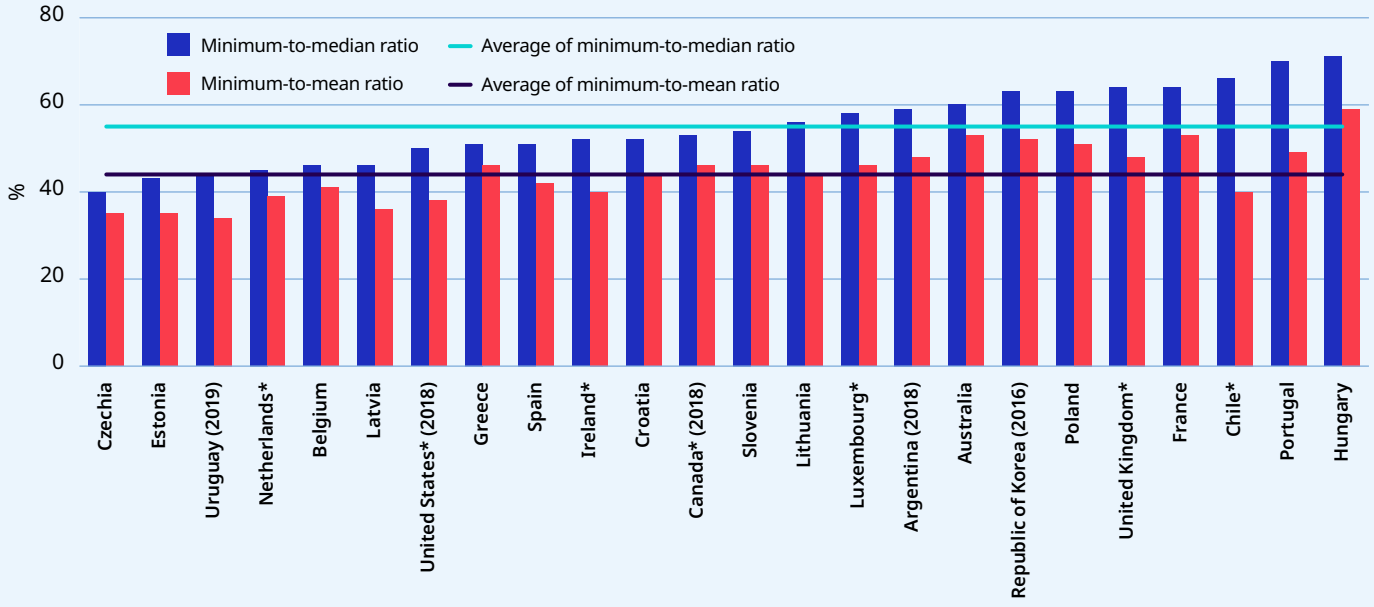
Figure 9.8 Minimum wage level relative to median and mean wage, selected developing and emerging economies (percentage)



Note: Years are given in parentheses. Countries marked with an asterisk (*) are those with multiple minimum wage rates, for which minimum-to-median and minimum-to-mean ratios have been calculated using a weighted average of the minimum-to-median and minimum-to-mean ratios of these multiple rates. For more details, see Appendices II and V.

Source: ILO estimates based on microdata.

Figure 9.9 Minimum wage level relative to median and mean wage, selected developed countries, 2017 (percentage)



Note: Data refer to the year 2017 unless another date is given in parentheses. Countries marked with an asterisk (*) are those with multiple minimum wage rates, for which minimum-to-median and minimum-to-mean ratios have been calculated using a weighted average of the minimum-to-median and minimum-to-mean ratios of these multiple rates. For more details, see Appendices II and V.

Source: ILO estimates based on microdata.

While there is no single ideal benchmark value for the ratio of minimum to median or mean wages, these ratios can nevertheless be indicative of minimum wage levels that are either too low to substantially reduce inequality or too high to be widely enforceable. National minimum wages set at less than half the median wage will leave many workers with relatively low pay, while rates close to or in excess of the median wage are likely to be impossible to comply with for many enterprises (by definition, when the median wage is below the minimum wage, more than half of all workers are paid less than the minimum). At what relative level the minimum wage should be set, however, remains a matter of national circumstances and preferences.

It is widely considered that workers in high-income countries who are paid less than 60 per cent or two thirds of the median wage can be classified as "low-paid";[11] however, this threshold may not be very relevant in emerging economies. In the latter, where median wages are lower and there is often a higher degree of wage inequality than in high-income countries, the wage distribution is often characterized by a compressed distribution up to the median and a very long upper tail, with top earners earning much more than the median. This means that the wage of a median earner is often very low in emerging economies, and in such circumstances a minimum wage set at 60 per cent of the median may well be too low to allow a decent living. This explains, at least in part, why some emerging economies have higher minimum-to-median wage ratios than most developed economies.

[11] See, for example, the OECD definition of low pay in OECD (2020c); and also Ioakimoglou and Soumeli (2002).

iStock.com/patpitchaya

9.3 The frequency of adjustment

Sufficiently frequent adjustment is crucial to maintain minimum wages at an adequate level, and a very low level often reflects failure to adjust rates regularly over time. Indeed, the Minimum Wage Fixing Convention, 1970 (No. 131), stipulates that, to maintain their relevance, minimum wages should be "adjusted from time to time" (Article 4). Failure to do so may lead to an erosion of the purchasing power of workers who earn the minimum wage when prices of goods and services are rising, or to more wage inequality when the general level of wages is increasing more rapidly than the minimum wage. Therefore, the accompanying Minimum Wage Fixing Recommendation, 1970 (No. 135), expands on Convention No. 131 by stating that "[m]inimum wage rates should be adjusted from time to time to take account of changes in the cost of living and other economic conditions" (Paragraph 11). In principle, this revision can take place "either at regular intervals or whenever such a review is considered appropriate in the light of variations in a cost-of-living index" (Paragraph 12). Regular adjustments also prevent sudden and large jumps in minimum wage rates, which can make it challenging for enterprises to absorb the cost increases.

The analysis carried out for this report indicates that 85 countries, together representing around 54 per cent of countries with statutory minimum wages, adjusted their minimum wages at least every two years on average during the period 2010–19 (figure 9.10). Around half of these adjusted their minimum wage rates at least every year: this was, for example, the case in Australia, the Plurinational State of Bolivia, Brazil, China, Colombia, Costa Rica, France, Ghana, Japan, Malta, Mexico, the Netherlands, New Zealand, Poland, the Republic of Korea, Romania, Slovakia, Slovenia, Turkey, the United Kingdom, Uruguay and Viet Nam. Another large set of 49 countries adjusted their minimum wages every three to five years, including Algeria, Côte d'Ivoire, Cyprus, India, Nigeria and Sri Lanka. A further 20 countries adjusted their minimum wages less frequently, and there is evidence to suggest that a significant number of these have not adjusted their minimum wage at any point in the past ten years. This has been the case, for example, in Burundi, Rwanda and Uganda – the very same countries in which minimum wage rates are very low, as highlighted in the previous section. In the United States, while some states have adjusted their minimum wage more recently, the federal rate has not been adjusted since July 2009, leading to an erosion of its real value (see also figure 7.11 in Chapter 7).

> 54 per cent of countries with statutory minimum wages adjusted their minimum wages at least every two years during the period 2010–19.

Since 2010, countries with statutory minimum wages have adjusted their minimum wages, on average, every 3.1 years (figure 9.11). However, the frequency of adjustment varies across regions: on average, countries in Europe and Central Asia are adjusting their minimum wages every 1.9 years, while in Africa the average interval is 4.7 years and in Asia and the Pacific it is 2.7 years. In the Americas and in the Arab States, countries are adjusting their minimum wages on average every 2.9 years and every 3.6 years, respectively.

When countries are grouped by income level, it becomes apparent that, on average, high-income countries adjust their minimum wages more frequently than countries in lower income groups (figure 9.12). While minimum wages were adjusted, on average, every 2.0 years in high-income countries, the corresponding interval was 5.1 years in low-income countries. In upper-middle-income and lower-middle-income countries, meanwhile, adjustments were made, on average, every 2.5 and 3.7 years, respectively.

Figure 9.10 Map showing frequency of adjustment of the minimum wage, 2010–19

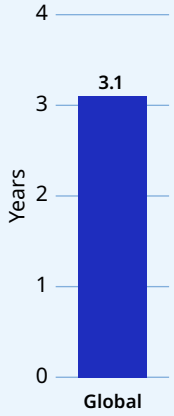
Note: This map shows adjustments of minimum wage rates at the most highly aggregated level possible, that is, at the national level or, where no national rate exists, using an average of regional adjustment frequencies. For countries that have adopted a minimum wage after 2010, the frequency of adjustment is calculated using the years between the implementation and 2019.

Source: ILO minimum wage database.

Figure 9.11 Average frequency of adjustment of the minimum wage, global and by region, 2010–19 (years)

Note: For countries that have adopted a minimum wage after 2010, the frequency of adjustment is calculated using the years between the implementation and 2019.

Source: ILO minimum wage database.



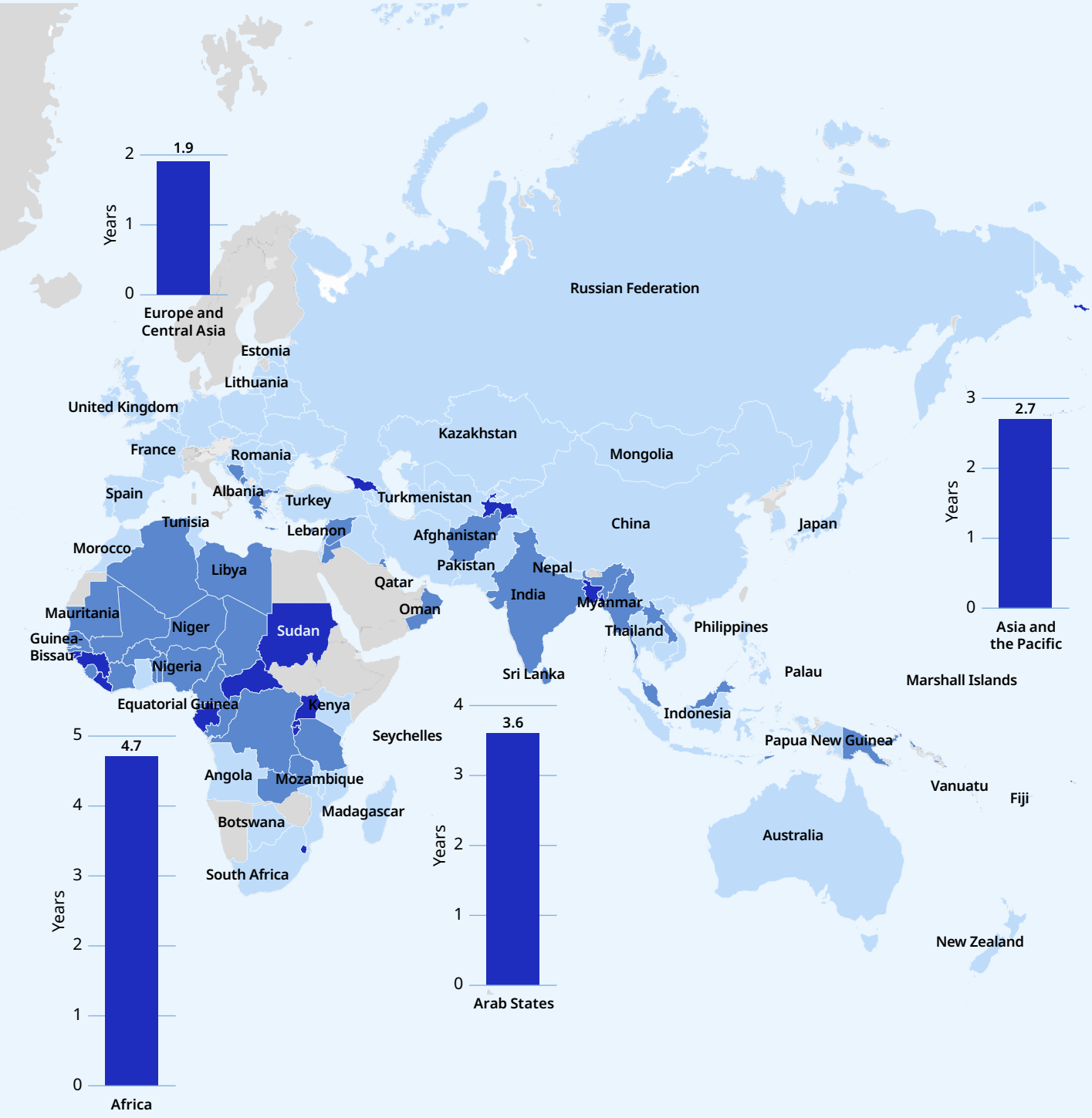
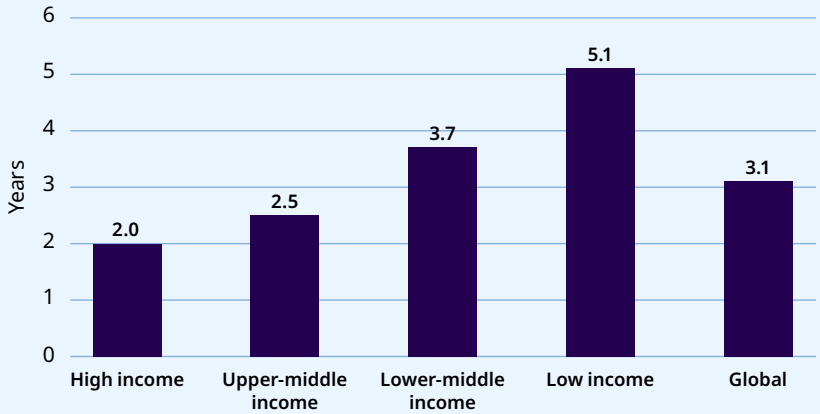


Figure 9.12 Average frequency of adjustment of the minimum wage, global and by country income group, 2010–19 (years)



Note: For countries that have adopted a minimum wage after 2010, the frequency of adjustment is calculated using the years between the implementation and 2019.

Source: ILO minimum wage database.

9.4 How have minimum wages evolved over time?

Although in some countries the lack of adjustment has resulted in stagnant nominal minimum wages, in a large majority of countries around the world minimum wages have increased in nominal terms over the past ten years. However, this does not necessarily mean that they increased in real terms, as they may have increased at a lower rate than inflation. Figure 9.13 illustrates the relative evolution of nominal and real minimum wages in selected countries across regions. (Similar estimates were provided for the countries covered in figures 7.11–7.17 in Chapter 7.) As may be seen, regular adjustments of minimum wages in Australia, Japan and Viet Nam resulted in steady increases in real minimum wages. In contrast, the lack or irregularity of adjustments in Burkina Faso, Georgia and Uganda, for example, has resulted in falling real minimum wages. In Tunisia and in Trinidad and Tobago more regular adjustments were undertaken, but they were not sufficient to compensate for increases in prices, resulting in a decline in real minimum wages. In Greece and, to a lesser extent, Spain, one may observe the effect of freezing or even reducing the minimum wage after the financial crisis of 2009. These examples highlight the importance of monitoring the level of the minimum wage over time.

At the global level, 114 out of the 153 countries for which data are available (approximately 75 per cent) have seen their minimum wages grow in real terms between 2010 and 2019. In 13 of these, including Bulgaria, Cambodia, Iraq, Lithuania, Nigeria and Sierra Leone, the real minimum wage has more than doubled over this period. Taking into account all countries, both those in which real minimum wages have increased and those in which real minimum wages have decreased, the global average annual growth of real minimum wages over the decade was 2.3 per cent. This overall figure masks significant regional differences: the annual growth of real minimum wages was, on average, 1.1 per cent in Africa, 1.8 per cent in the Americas, 2.5 per cent in Asia and the Pacific, 3.5 per cent in Europe and Central Asia, and 5.5 per cent in the Arab States (figure 9.14).

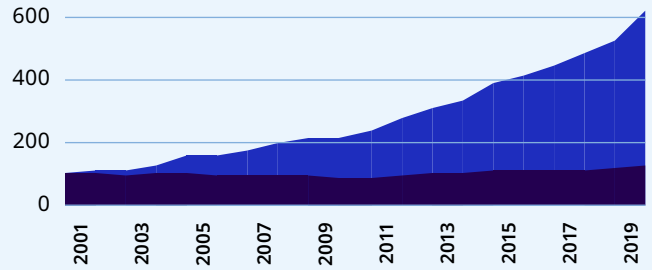
114 out of 153

At the global level, 114 countries out of the 153 for which data are available (approximately 75 per cent) have seen their minimum wages grow in real terms between 2010 and 2019.

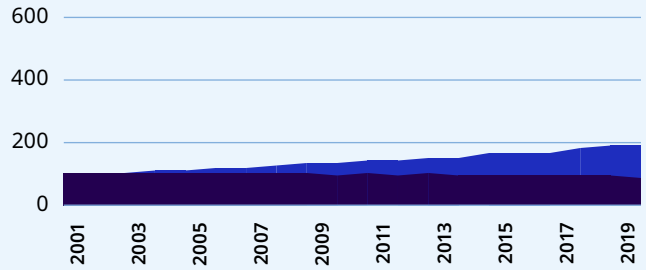
Figure 9.13 Evolution of nominal and real minimum wages, selected countries, by region, 2001–19 (index, year 2001=100)

Africa

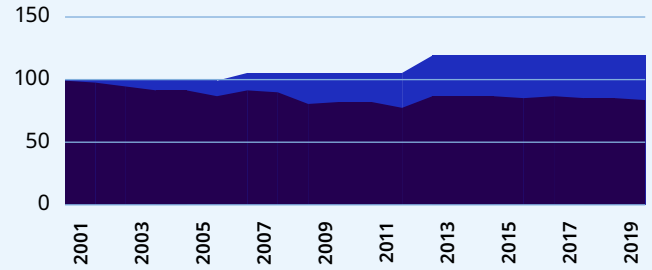
Madagascar ▲ 30.5%



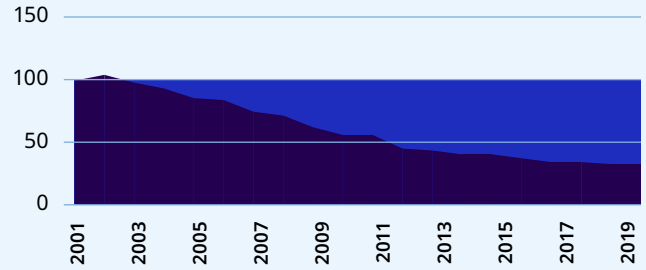
Tunisia ▼ 12.3%



Burkina Faso ▼ 16.2%

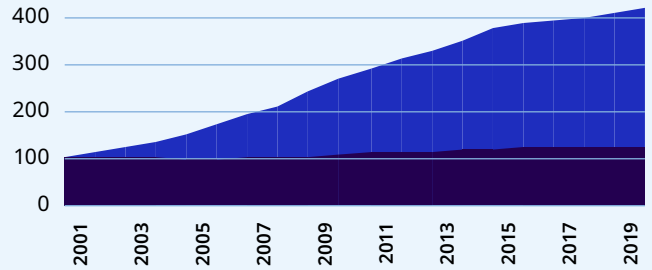


Uganda ▼ 68.0%

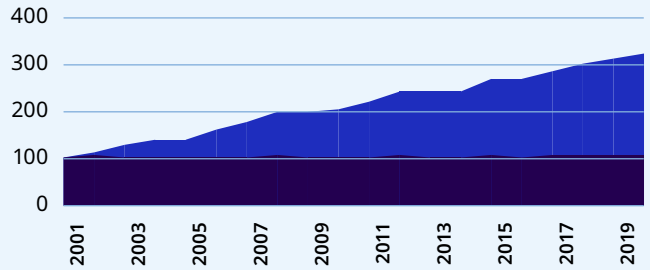


Americas

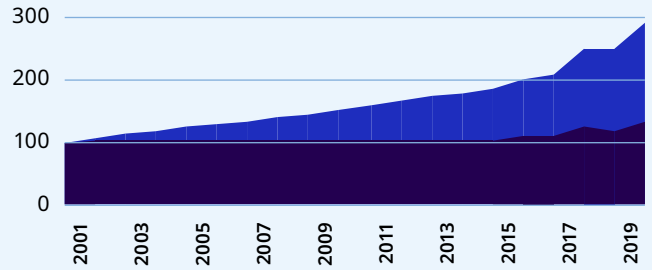
Costa Rica ▲ 24.7%



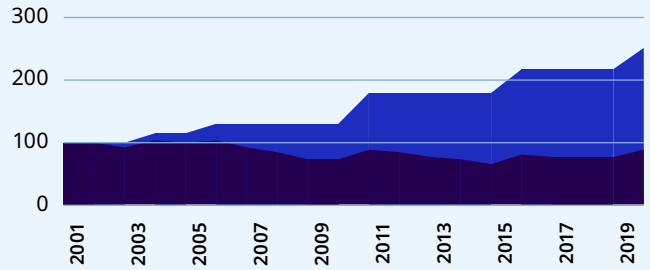
Paraguay ▲ 6.2%



Mexico ▲ 32.8%

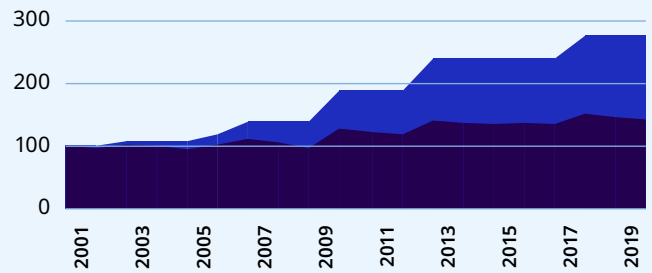


Trinidad and Tobago ▼ 14.3%

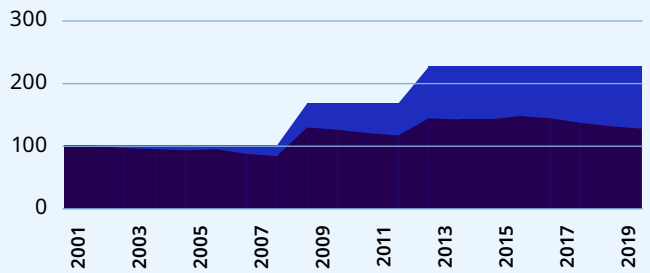


Arab States

Jordan ▲ 42.4%

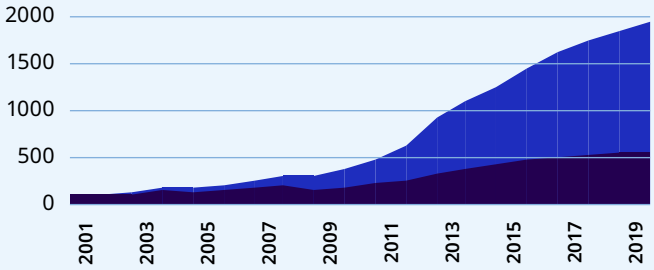


Lebanon ▲ 26.5%

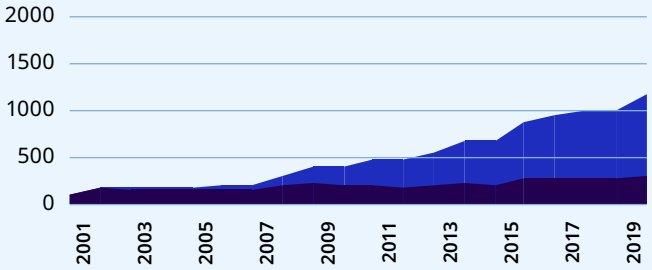


Asia and the Pacific

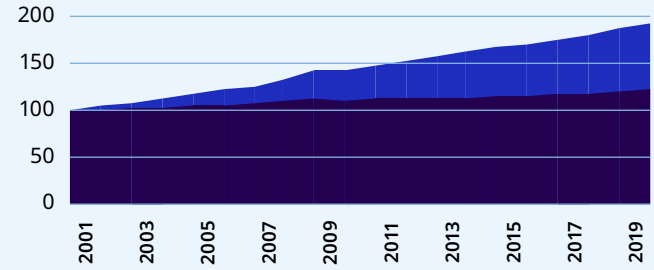
Viet Nam ▲ 453.6%



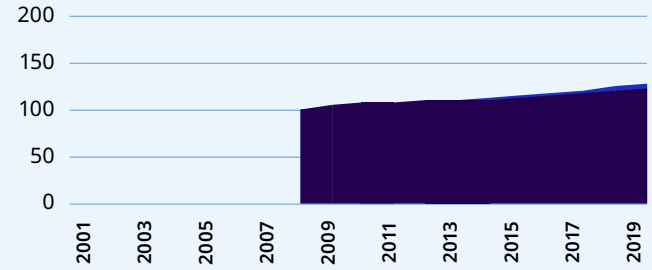
Pakistan ▲ 185.2%



Australia ▲ 21.1%

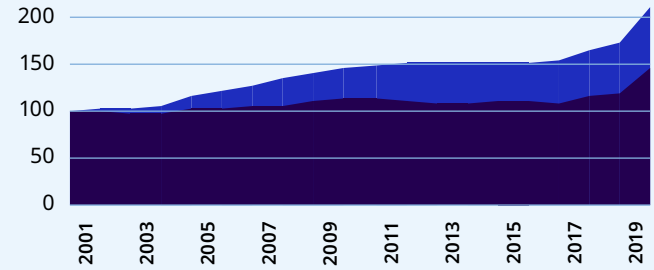


Japan ▲ 22.5%

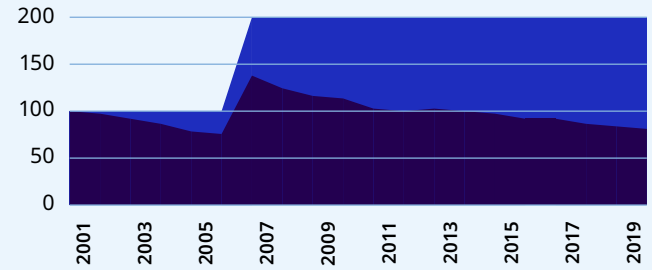


Europe and Central Asia

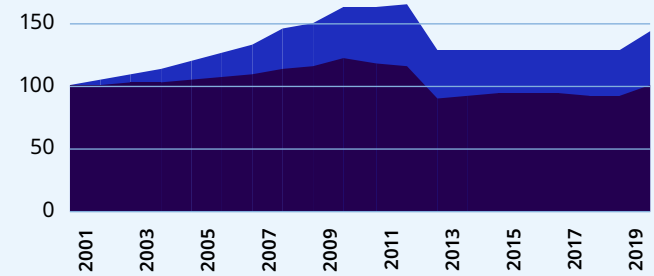
Spain ▲ 46.4%



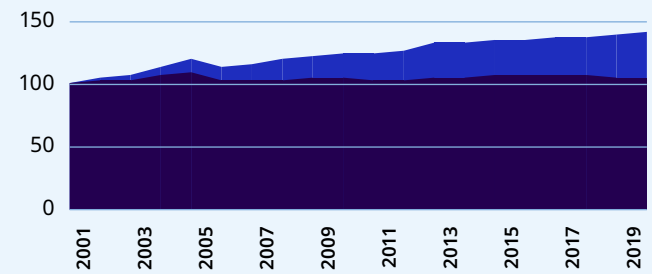
Georgia ▼ 19.7%



Greece ▲ 0.7%



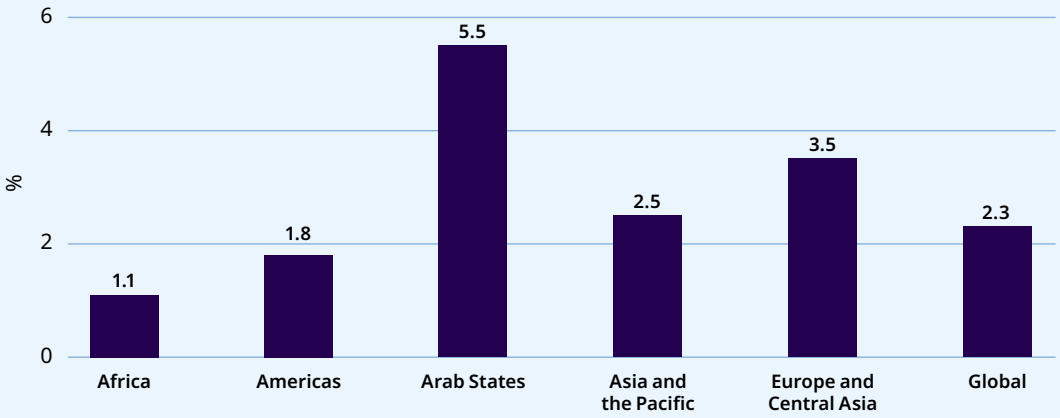
France ▲ 5.2%



Note: Blue = nominal; dark blue = real. For Japan, data refer to the weighted national averages calculated by the national statistical office. The triangle and its associated percentage, refers to the overall growth of the real minimum wage between 2001 and 2019.

Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

Figure 9.14 Average annual growth of real minimum wages, global and by region, 2010–19 (percentage)



Note: For countries that have adopted a minimum wage after 2010, the annual growth of real minimum wage is calculated using the years between the implementation and 2019.

Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

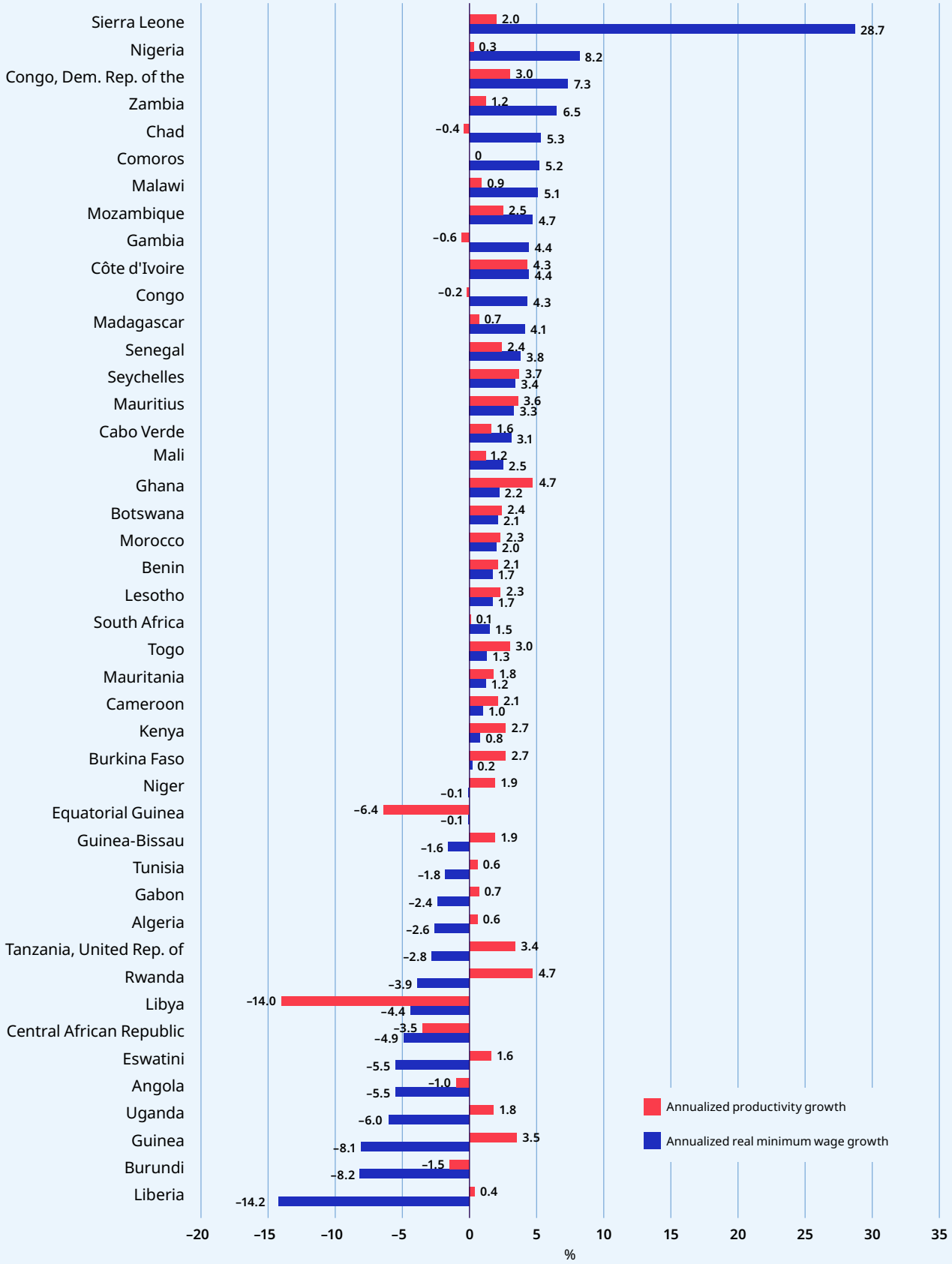
Figures 9.15–9.19 below present estimates of average annual growth of real minimum wages between 2010 and 2019 for countries grouped by region, and compare these with estimates of annual average growth in labour productivity.

In Africa, between 2010 and 2019, real minimum wages increased in 28 countries and decreased in 16 countries (figure 9.15). Among the countries that have experienced an increase in real minimum wages, the highest growth was observed in Sierra Leone, Nigeria and the Democratic Republic of the Congo, with average annual increases of, respectively, 28.7 per cent, 8.2 per cent and 7.3 per cent. The sharpest declines in real minimum wages were observed in Liberia and Burundi, with average annual decreases of, respectively, 14.2 per cent and 8.2 per cent. Considering minimum wages in relation to labour productivity, one may see that in 14 countries growth in real minimum wages and labour productivity growth are similar.[12] In 13 other countries, minimum wage growth exceeds labour productivity growth.[13] However, 17 countries failed to increase their minimum wages in line with productivity growth.

[12] For the purposes of this section, growth of real minimum wages and labour productivity growth are considered to be similar if the difference does not exceed 1.5 percentage points.

[13] This total includes countries where real minimum wages have decreased less than labour productivity.

Figure 9.15 Average annual growth of real minimum wages and labour productivity in Africa, 2010–19 (percentage)

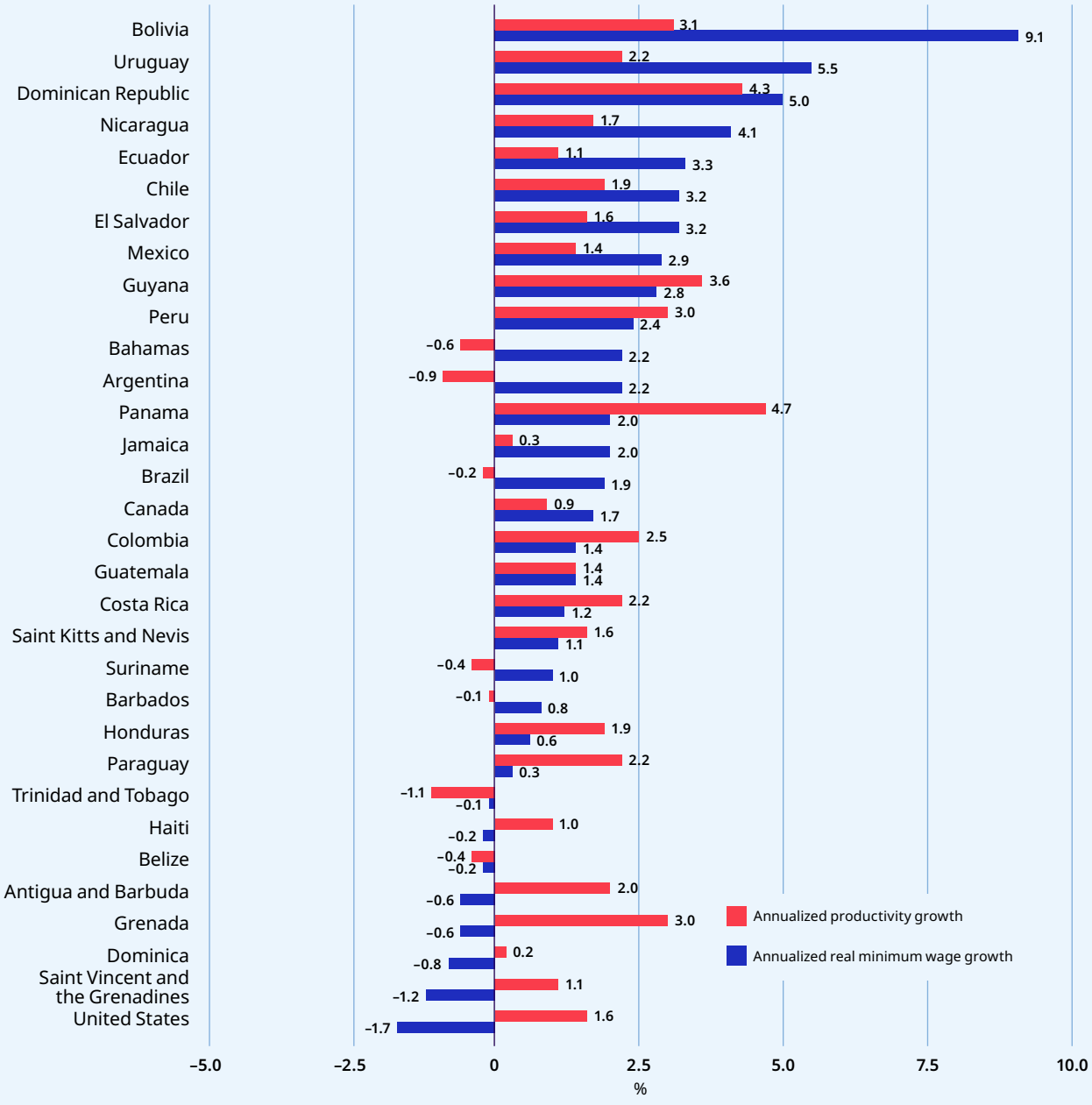


Note: For countries that have adopted a minimum wage after 2010, the annual growth rates are calculated using the years between the implementation and 2019.

Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

In the Americas, between 2010 and 2019, real minimum wages increased in 24 countries and decreased in 8 countries (figure 9.16). Average annual increases in this region range from 0.3 per cent in Paraguay to 9.1 per cent in the Plurinational State of Bolivia. For countries where the real minimum wage has fallen, the average annual decreases range from 0.1 per cent in Trinidad and Tobago to 1.7 per cent in the United States. In this region, 16 countries have experienced similar levels of minimum wage and labour productivity growth and 10 countries higher minimum wage growth than labour productivity growth, while in 6 countries minimum wages failed to keep pace with labour productivity.

Figure 9.16 Average annual growth of real minimum wages and labour productivity in the Americas, 2010–19 (percentage)

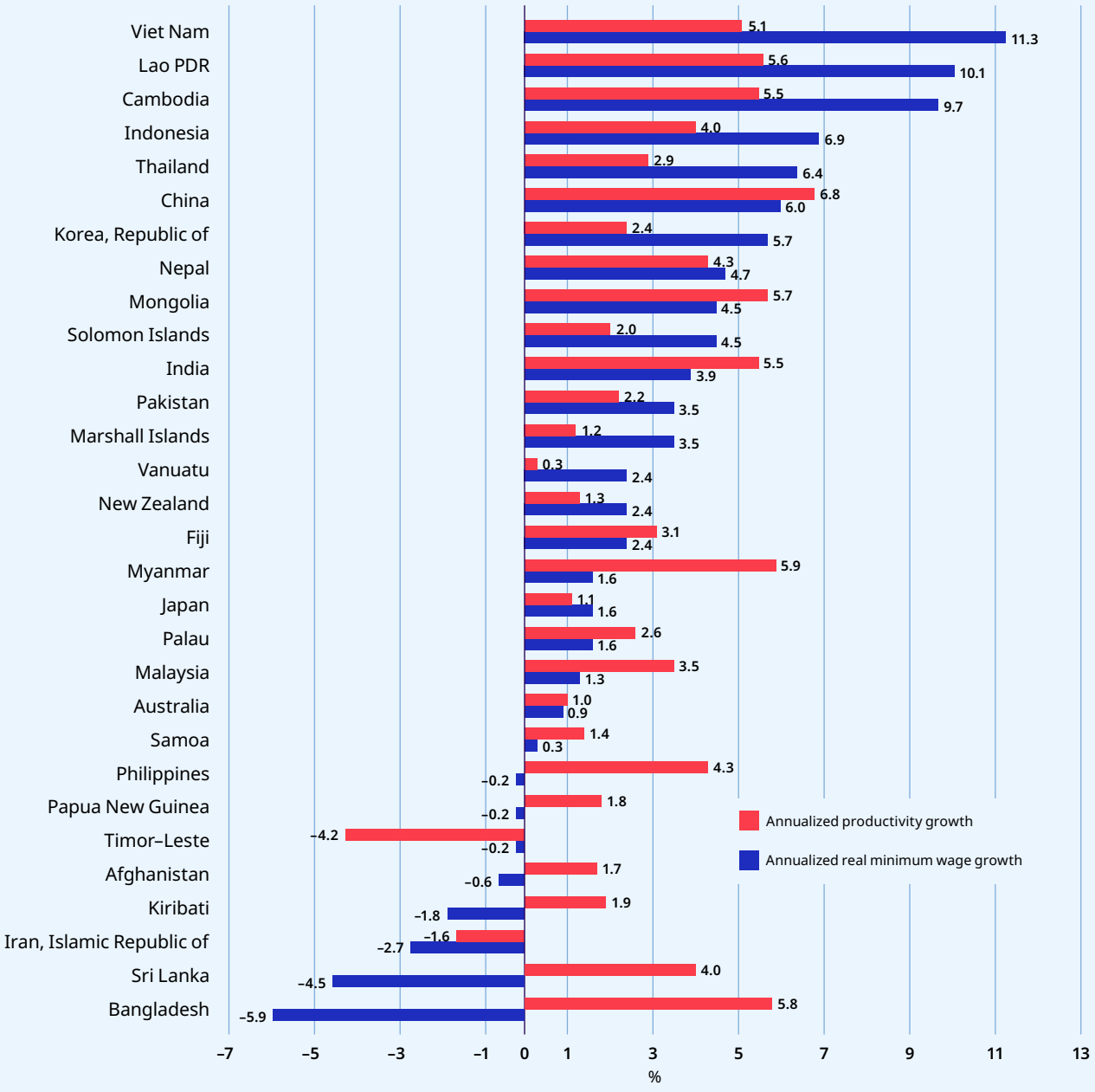


Note: For countries that have adopted a minimum wage after 2010, the annual growth rates are calculated using the years between the implementation and 2019.

Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

In Asia and the Pacific, between 2010 and 2019, real minimum wages increased in 22 countries and decreased in 8 countries (figure 9.17). Among the countries that have experienced an increase in real minimum wages, the highest average annual increases were observed in Viet Nam (11.3 per cent), the Lao People's Democratic Republic (10.1 per cent) and Cambodia (9.7 per cent). The largest decreases in real minimum wages were observed in Bangladesh and Sri Lanka. In 20 countries in the region the growth of real minimum wages kept pace with or exceeded labour productivity growth, whereas in 10 countries the growth of real minimum wages was lower than labour productivity growth.

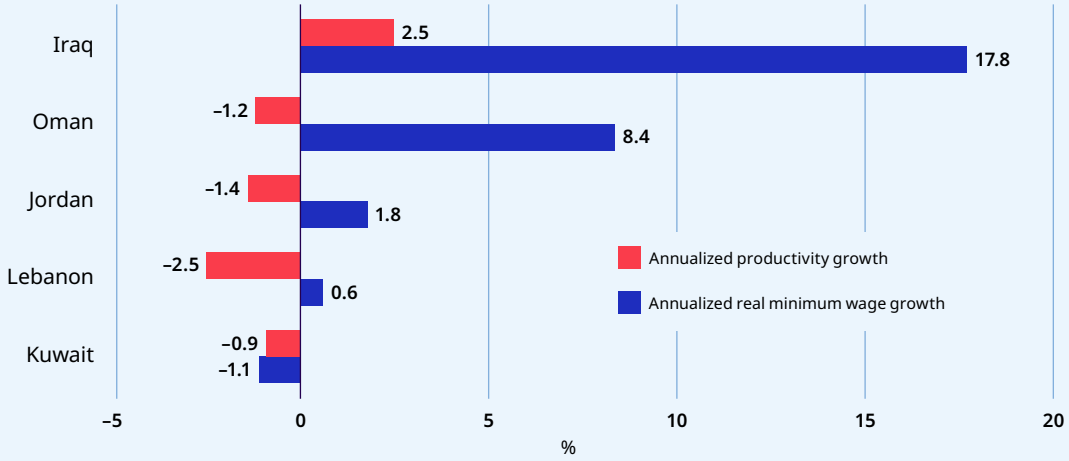
Figure 9.17 Average annual growth of real minimum wages and labour productivity in Asia and the Pacific, 2010–19 (percentage)



Note: For countries that have adopted a minimum wage after 2010, the annual growth of real minimum wage is calculated using the years between the implementation and 2019. For Japan, data refer to the weighted national averages calculated by the national statistical office.

Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

Figure 9.18 Average annual growth of real minimum wages and labour productivity in the Arab States, 2010–19 (percentage)



Note: For countries that have adopted a minimum wage after 2010, the annual growth rates are calculated using the years between the implementation and 2019.

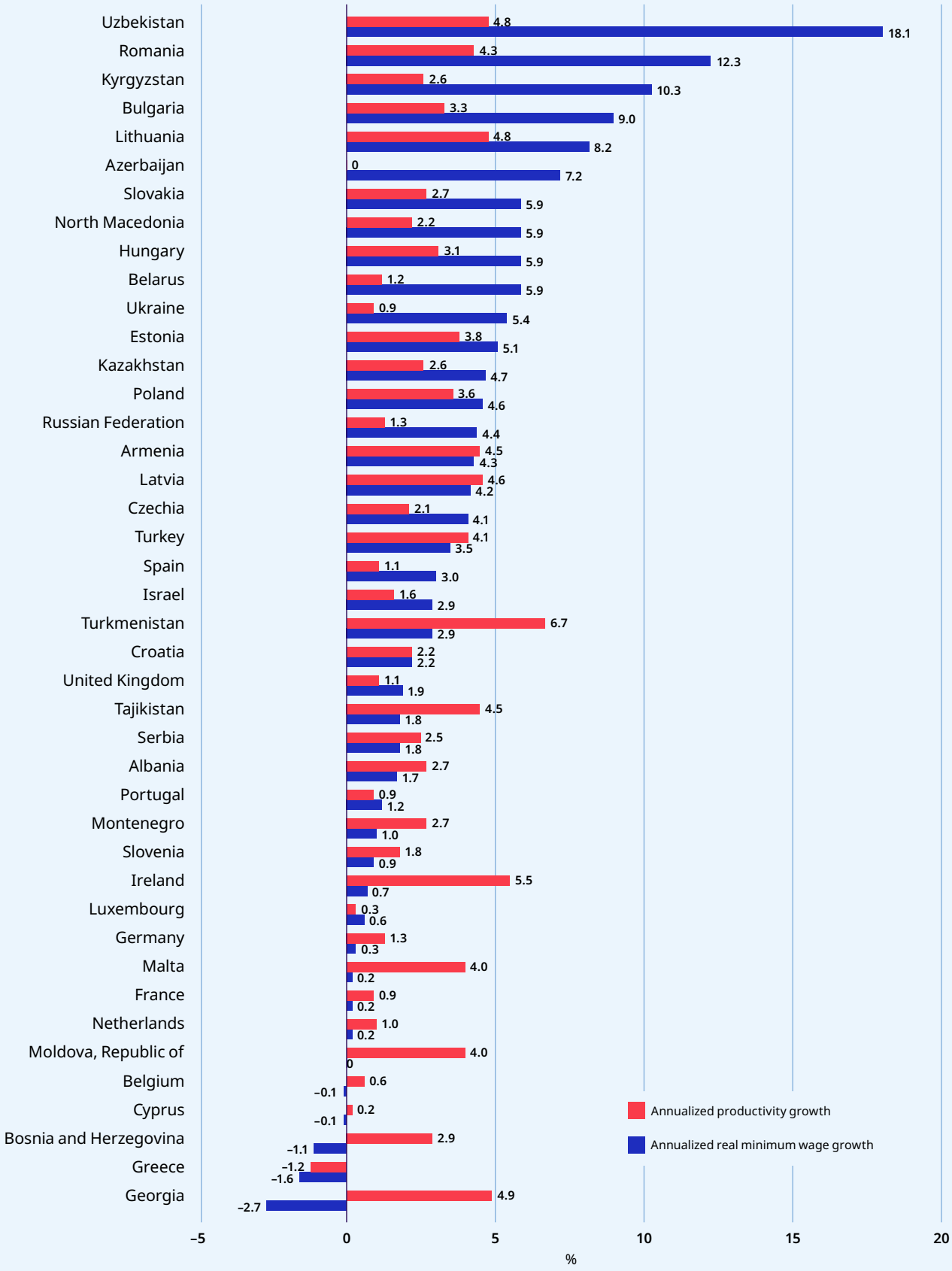
Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

In the Arab States, between 2010 and 2019, real minimum wages increased in all countries that have a statutory minimum wage except Kuwait (figure 9.18). In Kuwait, the real minimum wage declined by an annual average of 1.1 per cent. In the other countries of the region, annual average increases ranged from 0.6 per cent in Lebanon to 17.8 per cent in Iraq. In all countries of the region except Kuwait, the growth of real minimum wages exceeded labour productivity growth over this period.

In Europe and Central Asia, between 2010 and 2019, real minimum wages increased in 36 countries and decreased in 6 countries (figure 9.19). This means that 86 per cent of countries in the region experienced an increase in real minimum wage: the highest share of any region. The annual average increases range from 0.2 per cent in the Netherlands to 18.1 per cent in Uzbekistan. On the other hand, there are some countries in which real minimum wages have declined: these decreases range from an annual average of 2.7 per cent in Georgia to 0.1 per cent in Belgium. In the Republic of Moldova, the real minimum wage decreased marginally. In almost half of the countries in this region, growth in real minimum wages and labour productivity growth are similar. Additionally, in 15 countries minimum wage growth exceeded labour productivity growth, and only 8 countries failed to increase minimum wages in line with labour productivity.

It is clear from figures 9.15–9.19 that, in many countries, increases in the real value of minimum wages are not very well aligned with growth in labour productivity. There may be good reasons for this misalignment. For example, if minimum wages were very low to start with, policymakers and the social partners may have decided to "correct" this situation by raising the rate above and beyond the increase in productivity. Conversely, some countries may have decided to "correct" a high minimum wage downwards by moderating increases in the rate despite rising labour productivity. In principle, however, it is desirable to set minimum wages at an adequate level, and then adjust the rates roughly in line with increases in the cost of living and in labour productivity growth.

Figure 9.19 Average annual growth of real minimum wages and labour productivity in Europe and Central Asia, 2010–19 (percentage)



Note: For countries that have adopted a minimum wage after 2010, the annual growth rates are calculated using the years between the implementation and 2019.

Source: ILO minimum wage database for the minimum wage level and International Monetary Fund's World Economic Outlook database (Oct. 2020) for inflation (end of period consumer prices).

10 The beneficiaries of minimum wages

10.1 Do minimum wage earners live in poor families?

The characteristics of those who receive the minimum wage constitute one of the three key factors on which the potential of minimum wage systems for reducing inequality depends. As noted in section 7.4, one of the primary conditions that must be fulfilled if the minimum wage is to help to reduce inequality and poverty has to do with where those earning the minimum wage or below are situated in the income distribution. Wages and household income are two separate but related concepts. While wages refer to gross remuneration in cash and in kind paid to employees, household income is measured at the household level, and includes all income received by the household or by its individual members. Wages are a key source of household income, but they are not the only one – sometimes they are not even the main source. In addition, because income is measured at the household level, ranking households from richest to poorest (in terms of household income) requires not only information on total household income, but also information on the size of the household. For example, an annual household income of US$6,500 is not the same for a single-person household as it is for a household with two adults and three children (ILO 2014b, 77). Therefore, sub-minimum and minimum wage earners can be located in poor or rich families, depending on the amount of income coming from other sources and/or from the other family members and also on the size of the family. It is clear that if minimum wage earners are located in relatively well-off households in the upper tail of the income distribution, any attempt at increasing either compliance with, or the level of, the minimum wage would fail to reduce inequality or poverty. However, evidence suggests that this is not the case to any appreciable extent.

The evidence suggests that the majority of those paid at or below the minimum wage are located in the lower tail of the income distribution (figure 10.1). In Europe, on average, 69 per cent of all sub-minimum and minimum wage earners are located in the lower half of the income distribution. In Asia, results based on the four countries for which data are available suggest that the corresponding share is similar, at around 70 per cent; and in Latin America, based on the average of the six countries studied, the figure is 66 per cent. In Africa, sub-minimum and minimum wage earners appear to be more evenly distributed across the income distribution, only 52 per cent of them being located in the lower half of the income distribution.

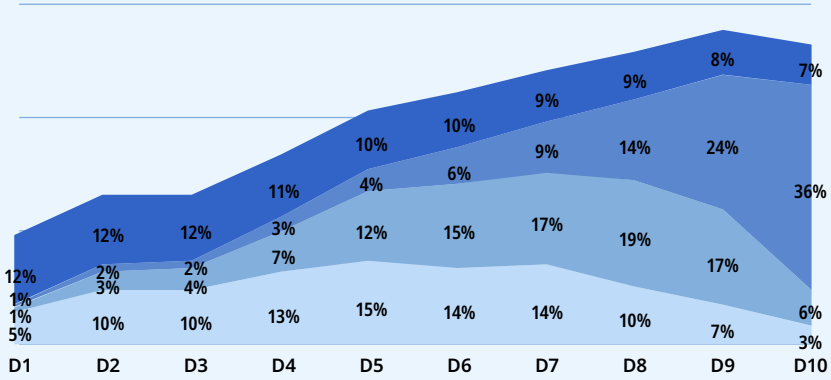
The majority

of those paid at or below the minimum wage are located in the lower tail of the income distribution.

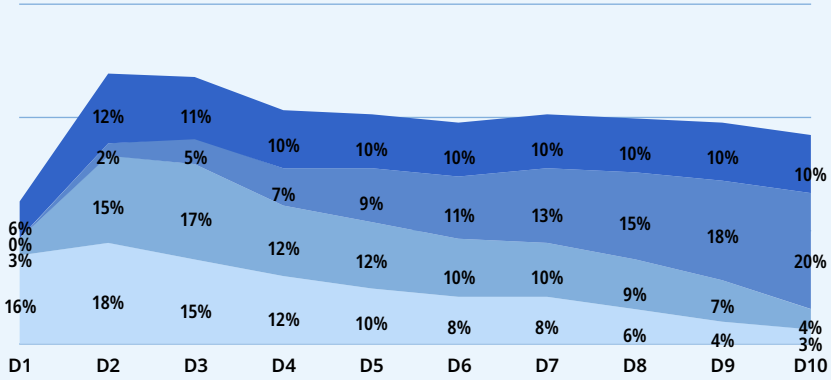
How do those earning at or below the minimum wage who are located in the poorest households differ from the minority of those earning low wages but living in better-off families? Figure 10.2 shows that in Europe, sub-minimum and minimum wage earners located in the top income deciles are more likely to be young and slightly more likely to be women, and that their incomes do not seem to contribute significantly to the total labour income of their households. In contrast, sub-minimum and minimum wage earners located in the poorest households are more likely to be older and living as single parents with dependent children, and to account for a significant share of the total labour income in their households. Figures 10.3–10.5 provide similar analyses based on the available data for, respectively, Latin America, Asia and Africa. Figure 10.3 shows that the findings for Latin America are similar to those for Europe. Among those Asian and African countries for which data are available, the results, presented in figures 10.4 and 10.5 respectively, are more heterogeneous.

Figure 10.1 Distribution of wage earners across income deciles, by region (percentage)

Africa



Asia



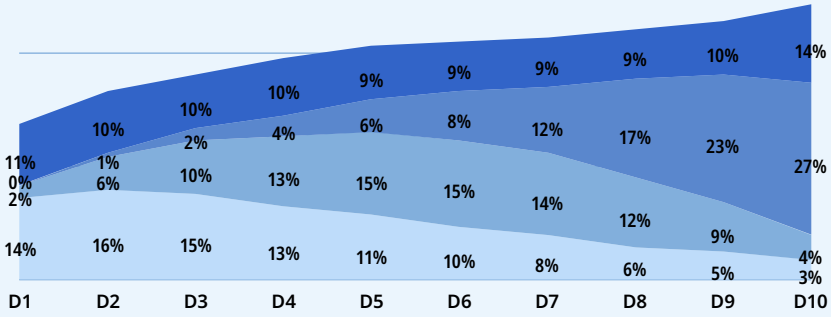
Own-account workers and other types of workers, except wage employees

Workers paid above twice minimum wage

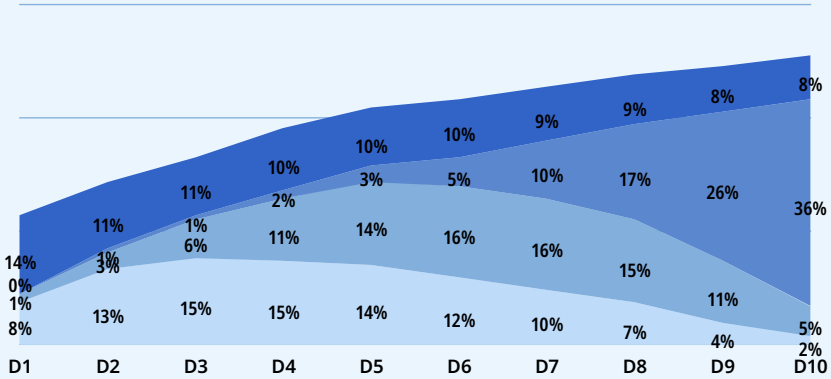
Workers paid 1.05 to 2 times minimum wage

Workers paid at or below minimum wage

Europe



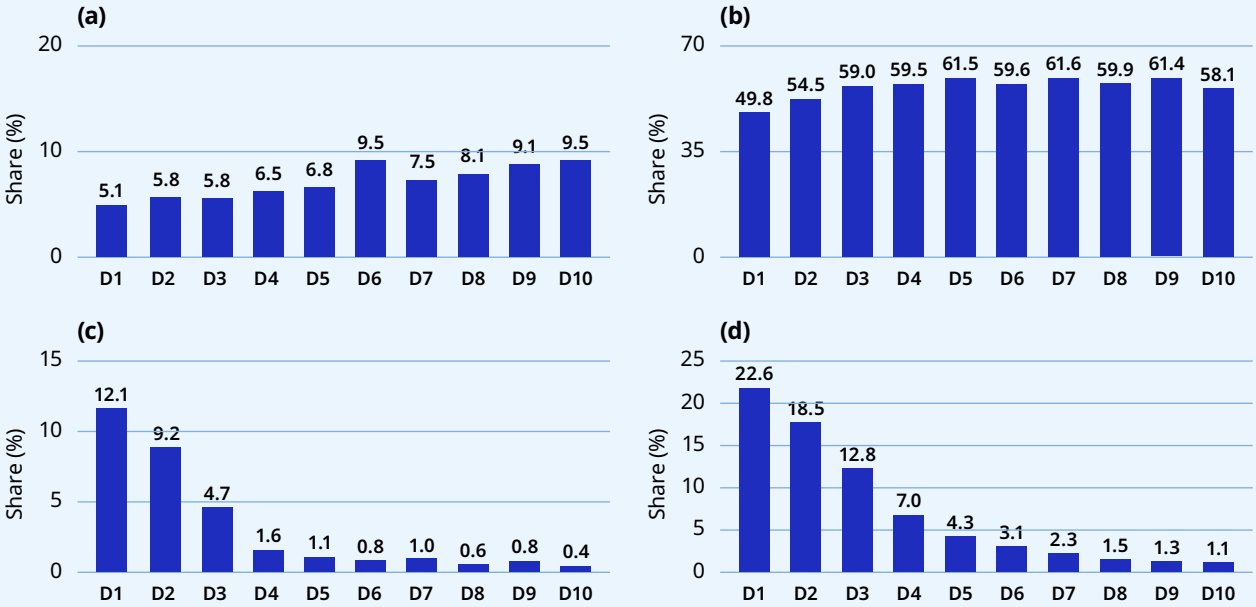
Latin America



Note: For Africa, estimates are based on five countries: Cameroon, Côte d'Ivoire, Malawi, Niger, United Republic of Tanzania. For Asia, estimates are based on four countries: Cambodia, Mongolia, Myanmar, Viet Nam. For Europe, estimates are based on the 27 countries for which data are available in the EU-SILC database. For Latin America, estimates are based on six countries: Plurinational State of Bolivia, Chile, Ecuador, Guatemala, Guyana, Uruguay. All regional estimates are weighted averages. Note that the sum of the percentages within each category of workers adds up to 100 per cent. For more information, see Appendix V.

Source: ILO estimates.

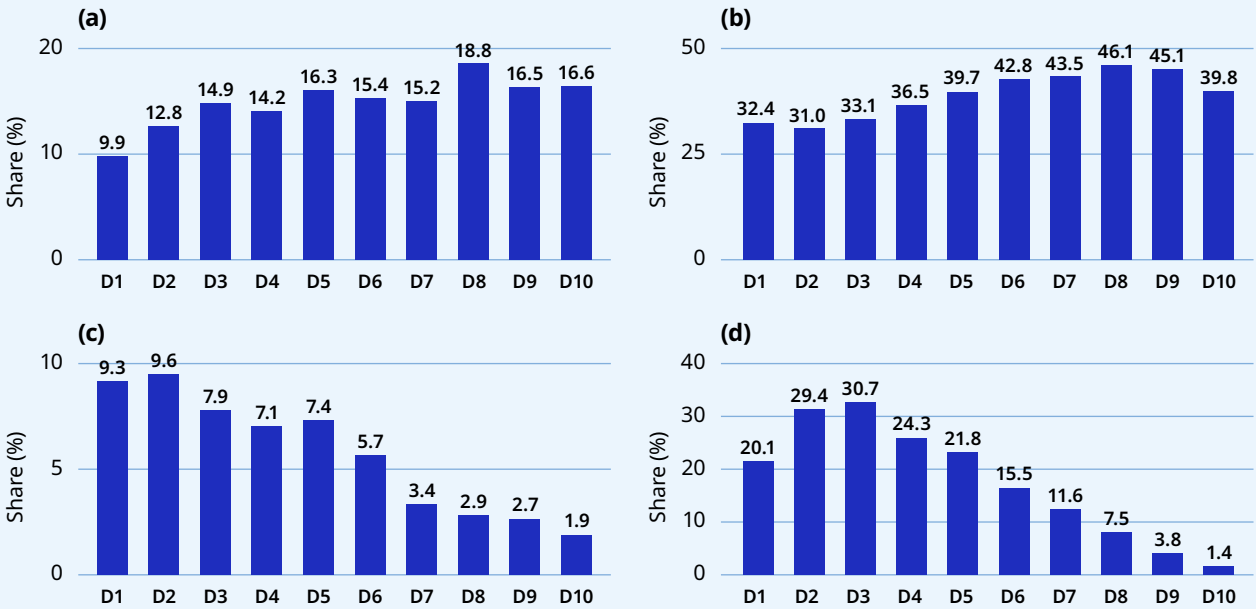
Figure 10.2 Characteristics of minimum and sub-minimum wage earners by income decile, Europe (weighted averages) (percentage)



Note: (a) Share of workers aged 16–20 among all wage earners paid at or below the minimum wage, by income decile. (b) Share of women among all wage earners paid at or below the minimum wage, by income decile. (c) Share of single-parent workers with dependent children paid at or below the minimum wage, by income decile. (d) Share of household labour income generated by wage earners paid at or below the minimum wage, by income decile. The estimates are based on data from 27 countries available in the EU-SILC database. For more information, see Appendix V.

Source: ILO estimates.

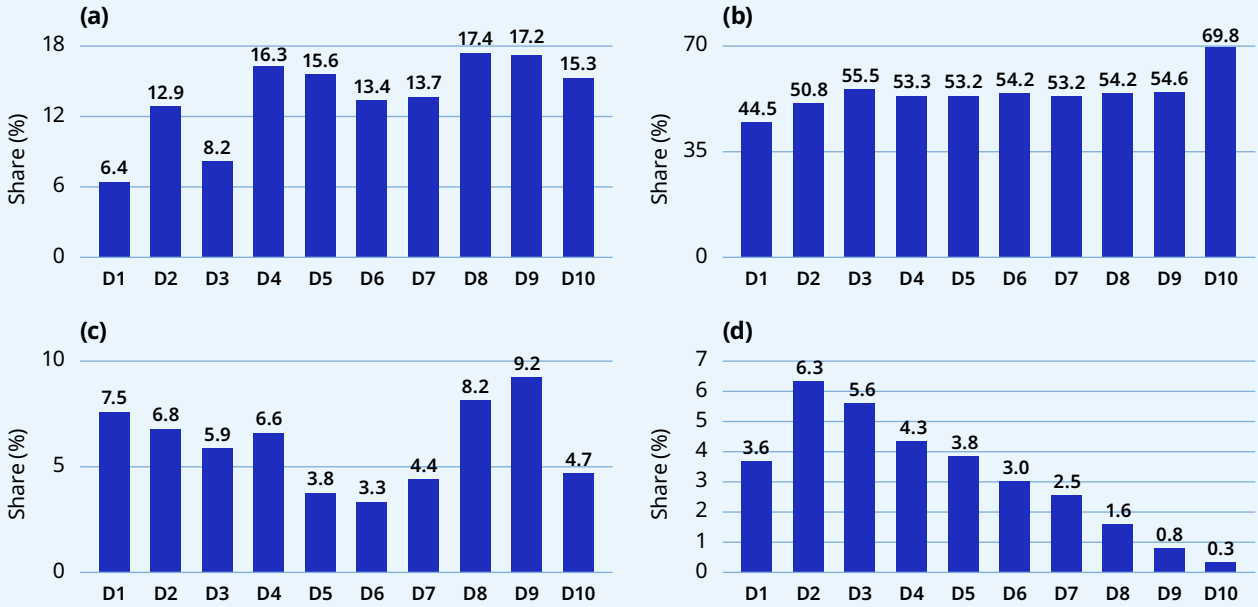
Figure 10.3 Characteristics of minimum and sub-minimum wage earners by income decile, Latin America (weighted averages) (percentage)



Note: (a) Share of workers aged 16–20 among all wage earners paid at or below the minimum wage, by income decile. (b) Share of women among all wage earners paid at or below the minimum wage, by income decile. (c) Share of single-parent workers with dependent children paid at or below the minimum wage, by income decile. (d) Share of household labour income generated by wage earners paid at or below the minimum wage, by income decile. The estimates are based on data from six countries: Plurinational State of Bolivia, Chile, Ecuador, Guatemala, Guyana, Uruguay. For more information, see Appendix V.

Source: ILO estimates.

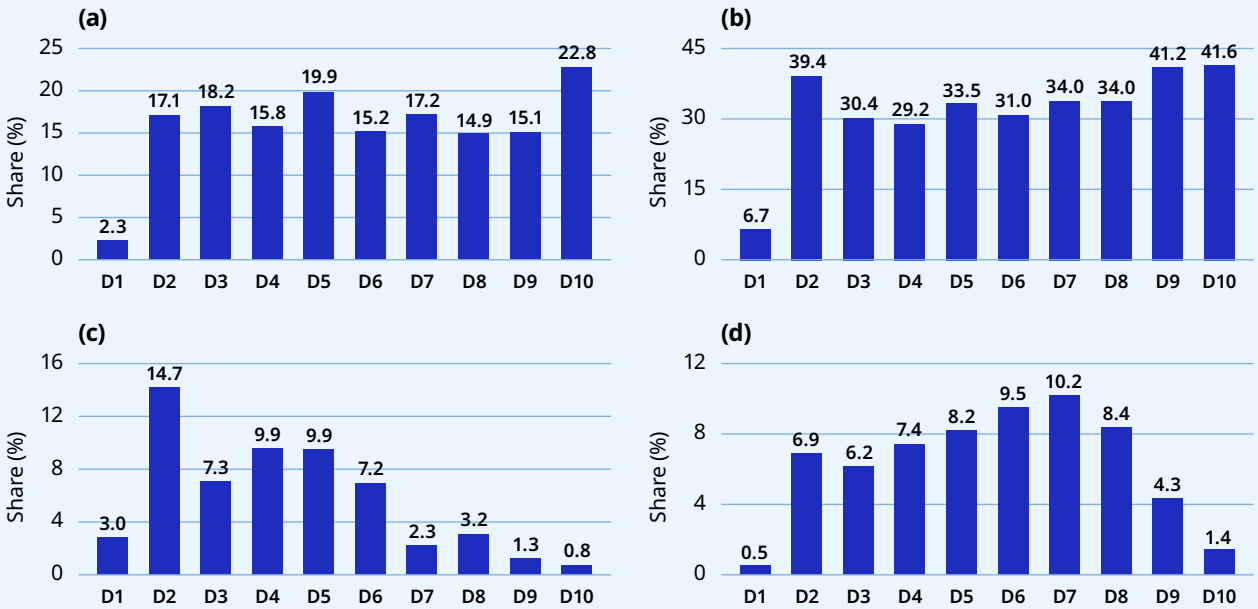
Figure 10.4 Characteristics of minimum and sub-minimum wage earners by income decile, Asia (weighted averages) (percentage)



Note: (a) Share of workers aged 16–20 among all wage earners paid at or below the minimum wage, by income decile. (b) Share of women among all wage earners paid at or below the minimum wage, by income decile. (c) Share of single-parent workers with dependent children paid at or below the minimum wage, by income decile. (d) Share of household labour income generated by wage earners paid at or below the minimum wage, by income decile. The estimates are based on data from four countries: Cambodia, Mongolia, Myanmar, Viet Nam. For more information, see Appendix V.

Source: ILO estimates.

Figure 10.5 Characteristics of minimum and sub-minimum wage earners by income decile, Africa (weighted averages) (percentage)



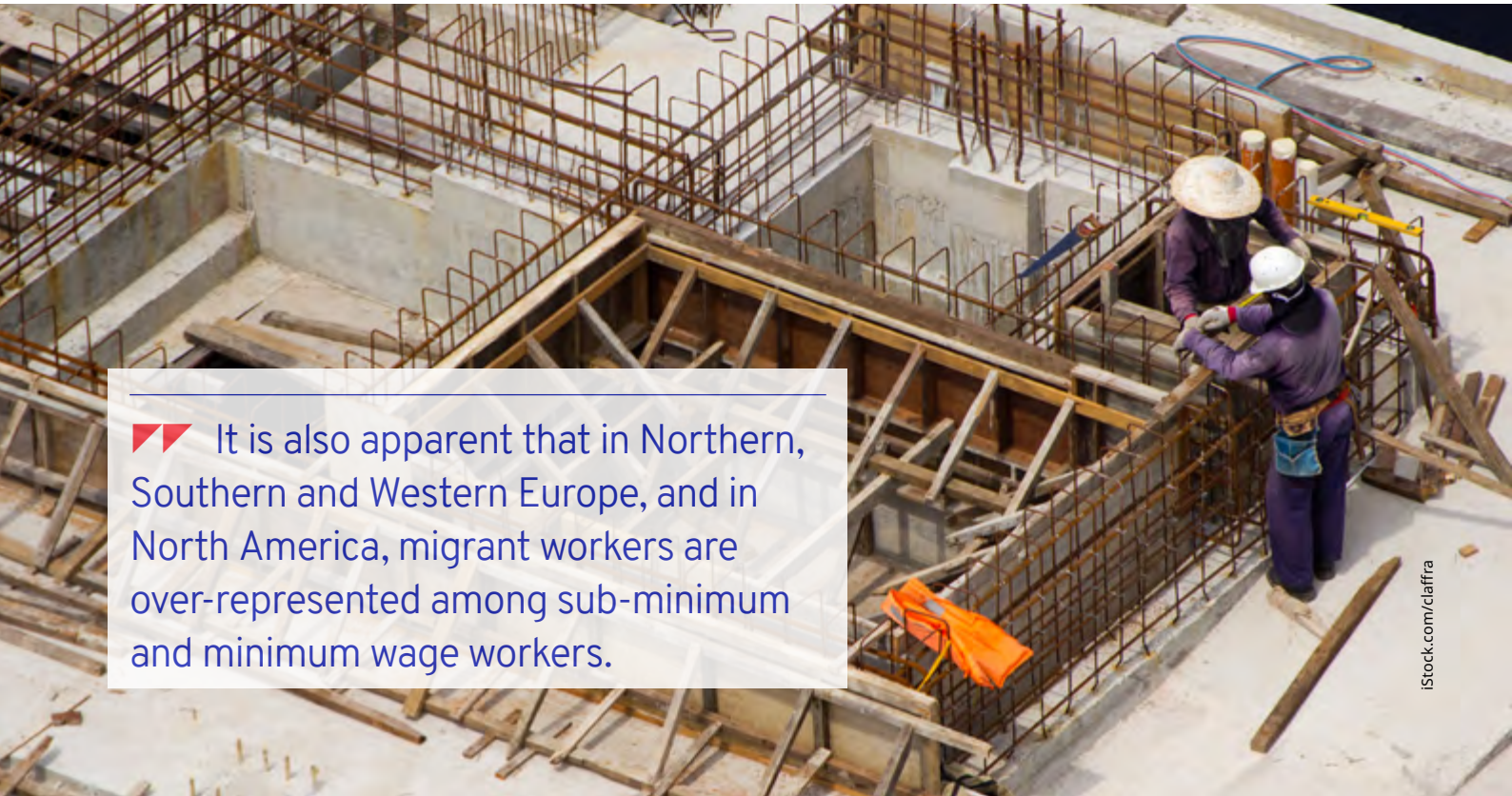
Note: (a) Share of workers aged 16–20 among all wage earners paid at or below the minimum wage, by income decile. (b) Share of women among all wage earners paid at or below the minimum wage, by income decile. (c) Share of single-parent workers with dependent children paid at or below the minimum wage, by income decile. (d) Share of household labour income generated by wage earners paid at or below the minimum wage, by income decile. Estimates are based on five countries: Cameroon, Côte d'Ivoire, Malawi, Niger, United Republic of Tanzania. For more information, see Appendix V.

Source: ILO estimates.

10.2 The demographic characteristics of minimum wage earners

The literature shows that as well as reducing income inequality across households, minimum wages can also reduce pay gaps between men and women (section 7.2), and between different groups in society. The extent to which they are able to do this depends, among others, on which group benefits the most from a minimum wage policy. While gender gaps represent one of today's greatest sources of inequality (Atkinson and Bourguignon 2015), in many countries differences between other groups, for example between migrants and nationals, also contribute to growing inequality, with migrants making up a relatively large proportion of low-income households. In addition, spatial inequalities, particularly between rural and urban areas, may also contribute to a growing sense of fracture in many societies. Most studies on income inequality focus on the inequality between all households in a country (known as "vertical inequality"). However, policies that seek to reduce inequality may fail unless they recognize that inequality also exists between population groups (known as "horizontal inequality": see Stewart 2005). Particular dynamics of inequality appear where people belong to multiple disadvantaged groups. The notion of "intersectionality" captures the complex way in which inequalities based on different personal characteristics overlap and accumulate. Examining the demographic characteristics of people paid at or below the minimum wage can, therefore, shed light on the potential of minimum wage policy to narrow existing gaps between groups and thus contribute to a reduction of horizontal inequalities.

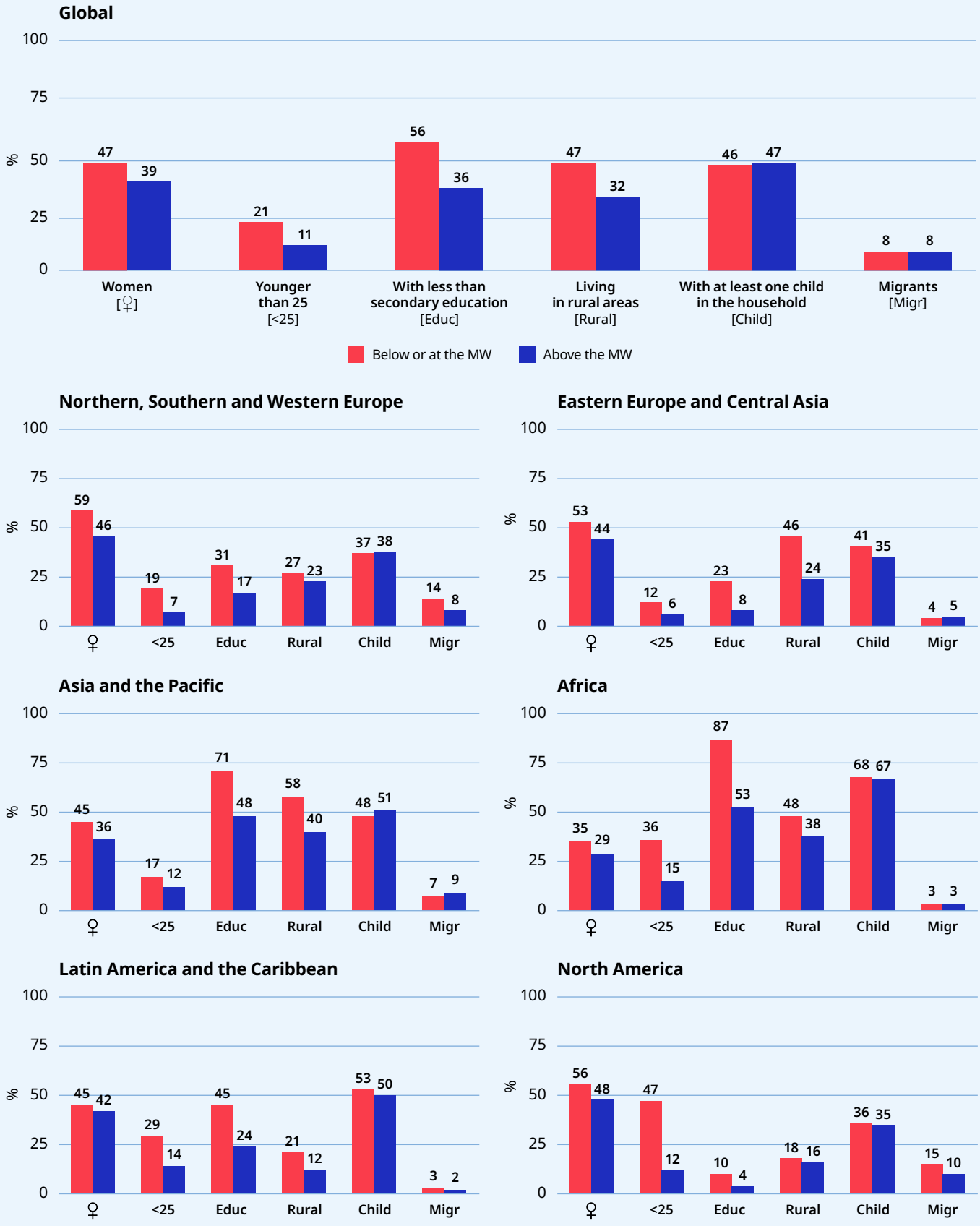
When the characteristics of sub-minimum and minimum wage earners are compared with those of employees paid above the minimum wage, it can be seen that women, young workers (aged under 25), workers with lower education and rural workers are all over-represented (figure 10.6). Young workers, for example, make up only 11 per cent of those paid above the minimum wage and 21 per cent of those paid at or below the minimum wage. However, this also implies that almost 80 per cent of sub-minimum and minimum wage earners are aged over 25, and almost half of them have children. These results suggest that, contrary to certain assumptions, sub-minimum and minimum wage earners are not mostly young individuals living with their parents; on the contrary, many of them have families of their own to support. It is also apparent that in Northern, Southern and Western Europe, and in North America, migrant workers are over-represented among sub-minimum and minimum wage workers.



It is also apparent that in Northern, Southern and Western Europe, and in North America, migrant workers are over-represented among sub-minimum and minimum wage workers.

iStock.com/claffra

Figure 10.6 Demographic characteristics of sub-minimum and minimum wage earners compared with those paid above the minimum wage, global and regional estimates (percentage)



Note: Estimates are based on 71 countries: 13 from Latin America and the Caribbean, 2 from North America, 11 from Africa, 14 from Asia and the Pacific, 22 from Northern, Southern and Western Europe, and 9 from Eastern Europe and Central Asia. For more information, see Appendix V.

Source: ILO estimates.

10.3 The labour market characteristics of minimum wage earners

At the global level, sub-minimum and minimum wage earners are more likely to have temporary contracts than those paid at higher levels; on average, they also work more hours (figure 10.7). An estimated 46 per cent of those paid at or below the minimum wage worldwide are employed on temporary contracts; 14 per cent of them work part-time. Sub-minimum and minimum wage earners work on average 47 hours per week. In comparison, among employees earning more than the minimum wage, 28 per cent are on temporary contracts, 9 per cent are on part-time contracts, and they work on average 44 hours per week. Similar trends can be observed in all regions, with just two exceptions: in Northern, Southern and Western Europe regarding working hours, and in Africa with respect to the shares on part-time contracts. Indeed, in Northern, Southern and Western Europe, sub-minimum and minimum wage earners work on average approximately 33 hours per week, while those earning more than the minimum wage work on average 39 hours per week. In Africa, the proportion of workers on part-time contracts is approximately twice as high among those earning above the minimum wage.

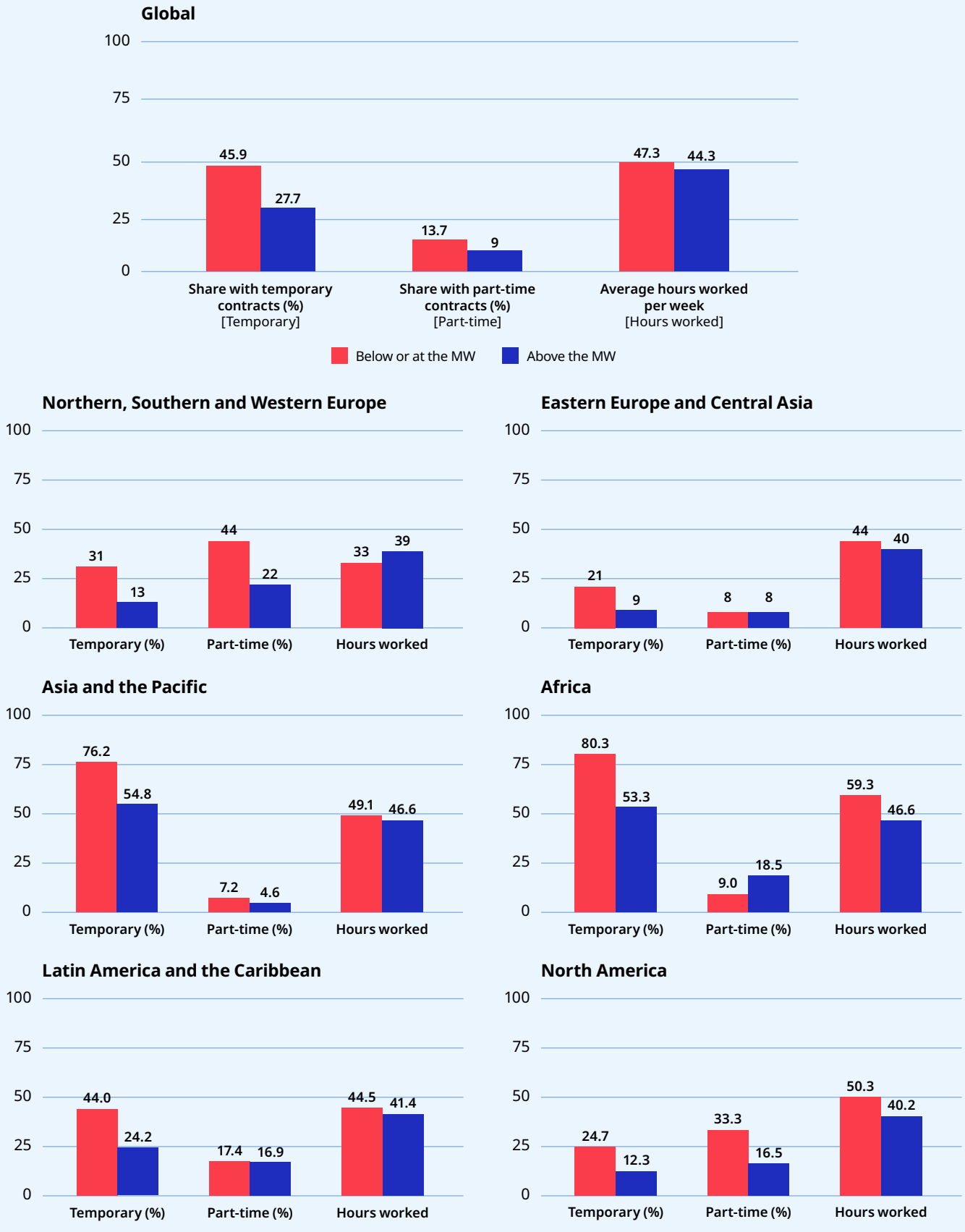
With respect to the occupational distribution, a large majority of sub-minimum and minimum wage earners work in lower- and middle-skilled occupations (figure 10.8). In particular, compared with employees paid above the minimum wage, minimum and sub-minimum wage earners are over-represented among craft workers and machine operators, as they are also among clerical, sales and skilled agricultural workers, elementary occupations and domestic workers. At the global level, the aforementioned occupations account for an estimated 89 per cent of all minimum and sub-minimum wage earners, whereas only 65 per cent of employees paid above the minimum wage work in these occupations.

As for the sectoral distribution, globally, around 52 per cent of minimum and sub-minimum wage earners are employed in agriculture, mining, manufacturing, construction and trade (figure 10.9). Estimates also suggest that, almost everywhere across the regions, those paid at or below the minimum wage are more likely than employees earning more than the minimum wage to work in agriculture, trade, food and accommodation, and other private services.

iStock.com/Servet TURAN

> Sub-minimum and minimum wage earners are more likely to have temporary contracts than those paid at higher levels; they also, on average, work more hours.

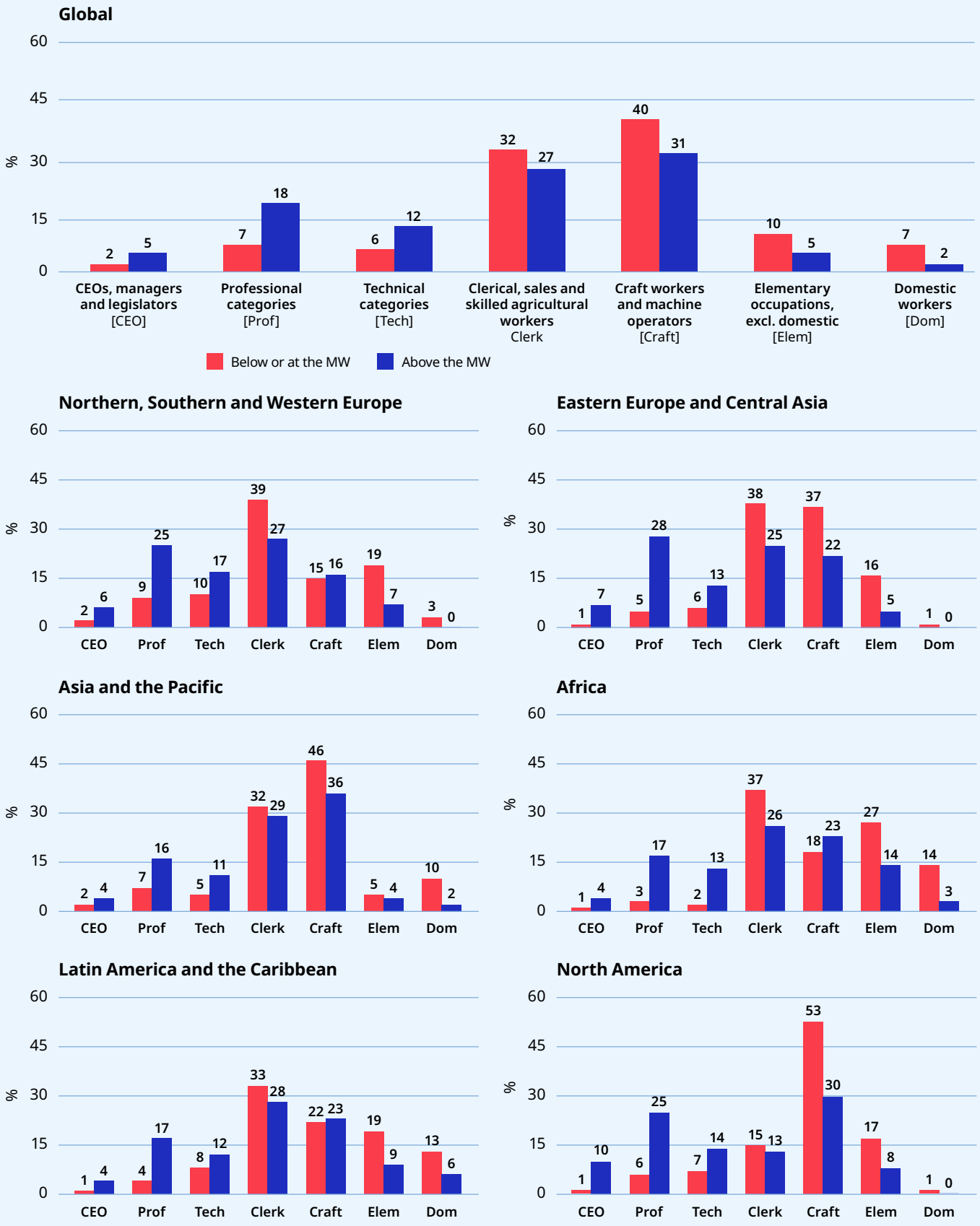
Figure 10.7 Labour market characteristics of sub-minimum and minimum wage earners compared with those paid above the minimum wage, global and regional estimates



Note: Estimates are based on 71 countries: 13 from Latin America and the Caribbean, 2 from North America, 11 from Africa, 14 from Asia and the Pacific, 22 from Northern, Southern and Western Europe, and 9 from Eastern Europe and Central Asia. For more information, see Appendix V.

Source: ILO estimates.

Figure 10.8 Occupational classification (ISCO-08) of sub-minimum and minimum wage earners compared with those paid above the minimum wage, global and regional estimates (percentage)

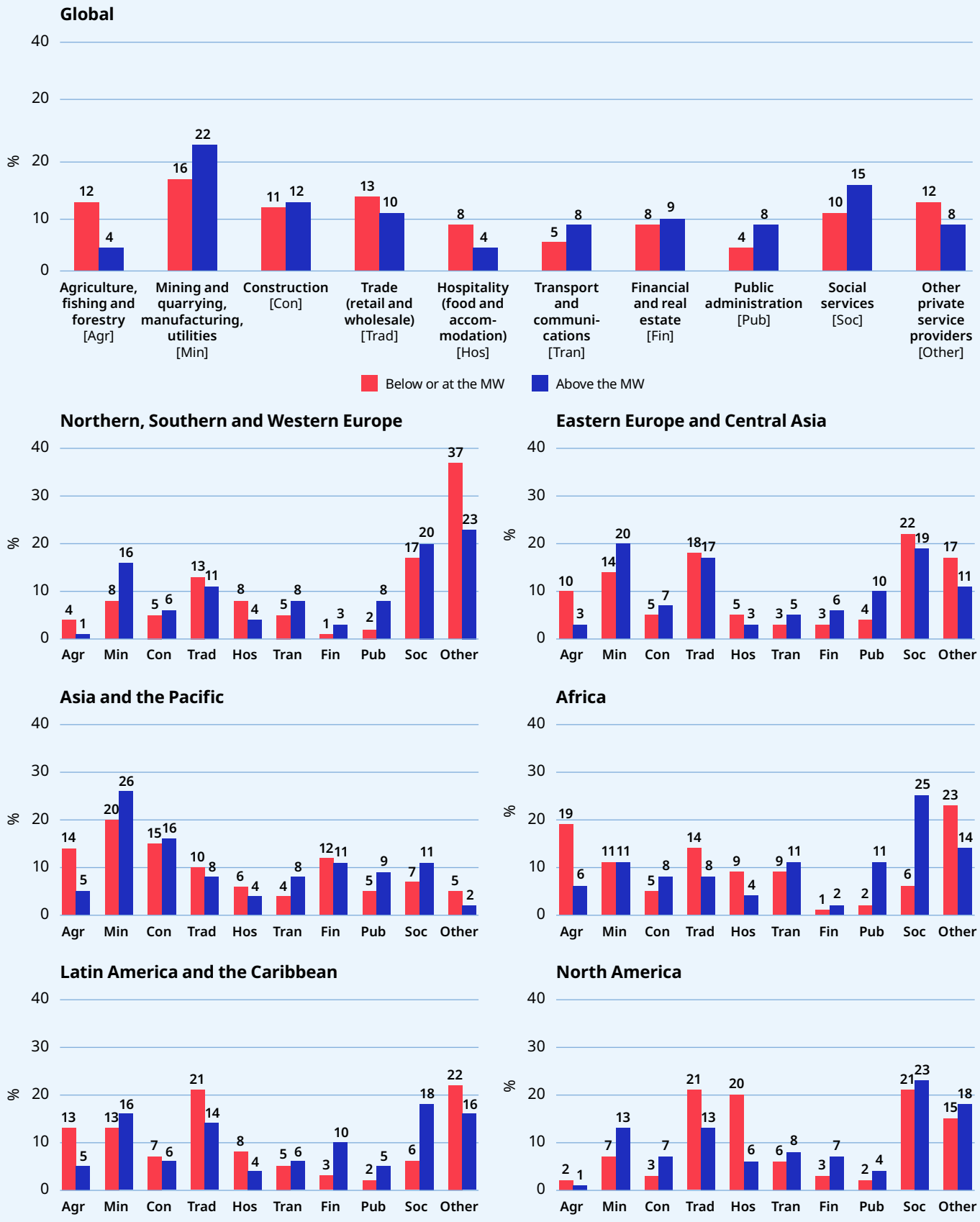


CEO = chief executive officer. ISCO-08 = International Standard Classification of Occupations 2008.

Note: Estimates are based on 71 countries: 13 from Latin America and the Caribbean, 2 from North America, 11 from Africa, 14 from Asia and the Pacific, 22 from Northern, Southern and Western Europe, and 9 from Eastern Europe and Central Asia. For more information, see Appendix V.

Source: ILO estimates.

Figure 10.9 Sectoral distribution of sub-minimum and minimum wage earners compared with those paid above the minimum wage, global and regional estimates (percentage)



Note: The classification of sectors is taken from the Statistical Classification of Economic Activities in the European Community (NACE), Rev. 4. Estimates are based on 71 countries: 13 from Latin America and the Caribbean, 2 from North America, 11 from Africa, 14 from Asia and the Pacific, 22 from Northern, Southern and Western Europe, and 9 from Eastern Europe and Central Asia. For more information, see Appendix V.

Source: ILO estimates.

> Regardless of the measure of inequality used, in practically all the countries studied, reaching a situation of full coverage and compliance, together with an adequate level of minimum wage, does have the potential to reduce income inequality.

iStock.com/ AsianDream

11 Results from a simulation exercise

11.1 Data and methodology

Using micro data for a set of 41 countries in Africa, Asia and the Pacific, Europe and Latin America and the Caribbean for which wage and income information was available, this chapter explores the redistributive potential of the minimum wage by presenting the results of a simulation exercise on the impact of two different minimum wage scenarios on indicators of income inequality and poverty. The two scenarios simulate, respectively: (1) an *increase in the number of workers receiving the minimum wage*, which is assumed to be achieved through full compliance and full coverage among wage employees (although full compliance may never be a completely realistic scenario, the simulation provides evidence on the maximum extent to which inequality and poverty might potentially be reduced through better coverage and compliance); and (2) *an increase in both the coverage (to reach full compliance among wage employees) and the level of the minimum wage*, with the latter increasing to a certain proportion of the national median wage. More specifically, the two scenarios are based on the following underlying hypotheses (for more details, see Appendix IV):

- **The first scenario assumes full compliance with, and full coverage of, the existing hourly minimum wage, meaning that all wage employees observed in the data who are paid below the minimum wage are assigned the minimum wage with respect to the number of hours they work.** Using the hourly minimum wage rate allows the inclusion of all workers irrespective of whether they are full-time or part-time workers. However, in countries where the minimum wage is excessively high relative to the median wage, assuming full compliance does not seem realistic. Therefore, in countries where the minimum wage exceeds 67 per cent of the median wage, the decision was taken to simulate a situation of full compliance by increasing the wage of employees earning less than 67 per cent of the median up to the exact value of 67 per cent of the median wage (which in these cases is lower than the existing minimum wage). In addition, and in order to account for the possibility of an adverse employment effect, the scenario assumes an "employment penalty" of 1 per cent for each increase of 10 per cent in the total wage bill as a result of full compliance with, and full coverage of, the minimum wage.[14] This assumption is justified by the fact that most empirical studies that have found an effect on employment arising from an increase in the minimum wage assess that effect as ranging from 1 to 2 per cent for each increase of 10 per cent in the minimum wage (see, for example, Neumark and Wascher 2008). In the rest of the report, this first scenario is referred to as the "full compliance scenario", even though in certain cases it may also assume an increase in the legal coverage.

[14] The term "total wage bill among wage employees" provides an approximation of the total labour costs (in terms of wages) incurred by the employers of wage workers.

- **The second scenario combines the assumption of full compliance and full coverage with an assumption that the level of the minimum wage increases in some countries.** This scenario assesses the impact of an increase in the minimum wage up to 67 per cent (two thirds) of the median wage in countries in which it is lower. The selection of this level is based on the fact that low-wage jobs are usually defined as those that pay less than two thirds of the national median wage. Two steps were taken to operationalize these assumptions. First, in countries where the existing minimum wage is below 67 per cent of the median, the hourly wage was increased to 67 per cent of the median for all wage workers whose earnings currently fall below that benchmark, automatically leading to a situation of full compliance with the minimum wage. Second, in countries where the existing minimum wage is already set above 67 per cent of the median wage, the minimum wage was not increased and full compliance was assumed up to the level of 67 per cent of the median wage. For these countries, the first and second scenarios are, therefore, identical, implying that there is no space for an increase in the level of the minimum wage when it is already set above 67 per cent of the median. This scenario also assumes that there is an employment penalty of 1 per cent for each increase of 10 per cent in the total wage bill.

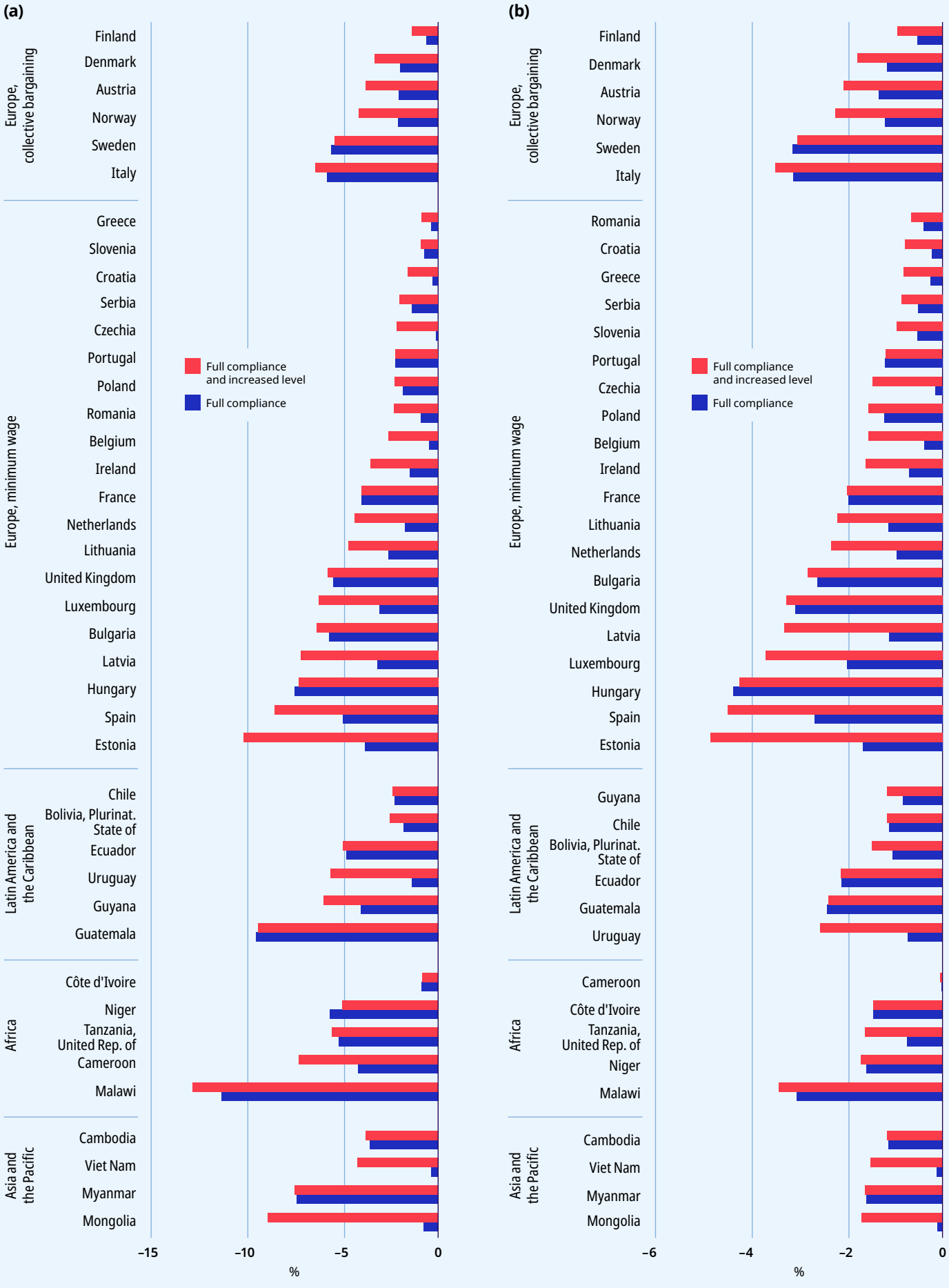
The results of this simulation exercise enable a better understanding of the conditions under which minimum wages can reduce income inequality. It should be emphasized that the selection of 67 per cent of the median as a benchmark is not meant to indicate an optimal minimum wage level, but simply to facilitate analysis of the potential effect of a change in minimum wage levels while assuming levels that are credible and realistic with respect to the shape of the wage distribution (that is, in relation to the median wage). The estimates were used to create a typology of countries according to the potential of their minimum wage systems to reduce income inequality. An in-depth analysis of the characteristics of selected countries is carried out to shed further light on the conditions under which minimum wages could fully realize their redistributive potential.

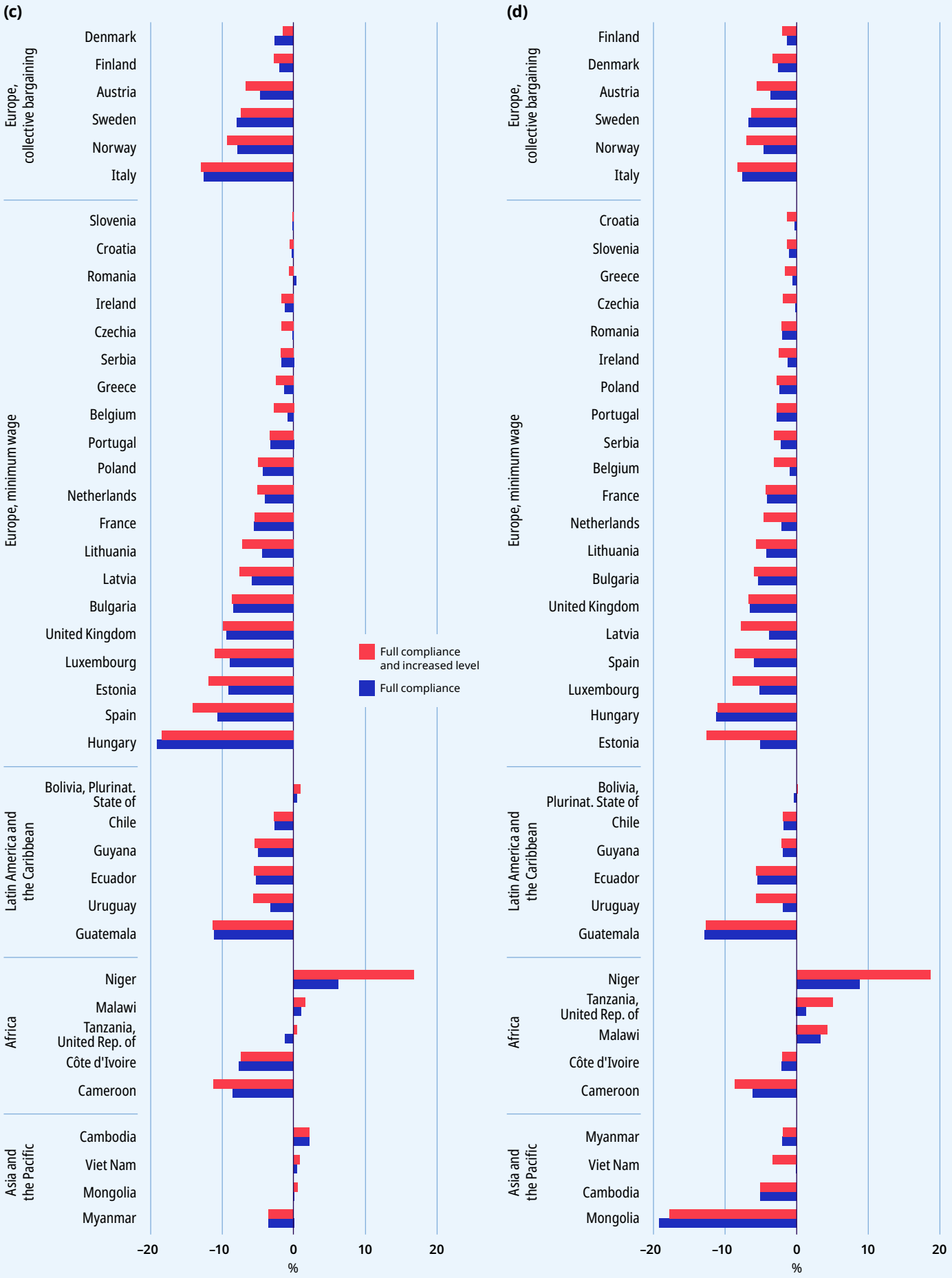
11.2 Results on income inequality and relative poverty

Results from the simulations suggest that, regardless of the measure of inequality used, in practically all the countries studied, reaching a situation of full coverage and compliance, and increasing the level of the minimum wage to 67 per cent of the median, does have the potential to reduce income inequality. Figure 11.1 shows the impact of the two simulations on four different measures of income inequality. When analysing income inequality, the first question that arises has to do with how such inequality is to be measured. Various measures of inequality exist, and each of them is likely to be affected differently by a change in compliance with, or in the level of, the minimum wage. For the purposes of this report it has been decided to present the percentage changes in the Palma ratio, the Gini coefficient,[15] the D9/D1 ratio and the D8/D2 ratio, all of which are measured using the ranking of households in terms of their household income per capita. The Palma ratio refers to the income share of the top 10 per cent of the distribution divided by the income share of the bottom 40 per cent. The D9/D1 ratio refers to the income share of the top 10 per cent divided by the income share of the bottom 10 per cent. Similarly, the D8/D2 ratio refers to the income share of the top 20 per cent divided by the

[15] The Gini coefficient measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. A Gini coefficient of 0 represents perfect equality; one of 100, perfect inequality. See the definition of the Gini index in the OECD's online Glossary of Statistical Terms.

Figure 11.1 Potential impact of two simulated minimum wage scenarios on income inequality, selected countries: (a) % change in Palma ratio; (b) % change in Gini coefficient; (c) % change in D9/D1 ratio; (d) % change in D8/D2 ratio





Source: ILO estimates.

Figure 11.2 Potential impact of two simulated minimum wage scenarios on poverty, selected countries: (a) % change in relative poverty among households; (b) % of people living in households with increased income

Note: (a) Change in the share of households below half the median household income per capita. (b) Change in the share of individuals living in households that experience an increase in total household income.

Source: ILO estimates.

income share of the bottom 20 per cent.[16] It is clear from figure 11.1, when looking at the effect on the Palma ratio and the Gini coefficient, that increases in compliance with, coverage of, and level of, the minimum wage have the potential to reduce income inequality in almost all of the countries studied. When considering the effect of both minimum wage scenarios on the D9/D1 and D8/D2 ratios, the same conclusion can be drawn for all countries except Niger, Malawi and, to some extent, the United Republic of Tanzania. For example, in the case of Niger, both the D9/D1 and D8/D2 ratios suggest that full compliance and coverage increase inequality among households. The fact is that in Niger, as in many other sub-Saharan countries, wage employees are usually located in the higher deciles of the household income distribution, while workers in the lower deciles are more likely to be own-account workers or contributing family workers. Thus, a scenario based on full compliance with, and coverage of (or a higher level of), the minimum wage results in an increase in earnings at higher deciles, including D9 and D8, while leaving the bottom two deciles of the household income distribution almost unchanged.

However, the redistributive potential of the minimum wage varies greatly across countries and between the two minimum wage scenarios. Looking at the Palma ratio and assuming a scenario of full compliance, the results range from a decline of almost 0 per cent in Czechia to 11 per cent in Malawi. In contrast, when both full compliance and an increased level are assumed, the results range from a decline of 0.8 per cent in Côte d'Ivoire to one of around 13 per cent in Malawi. For instance, full compliance with the hourly minimum wage in Spain would reduce the Palma ratio by 5 per cent and the Gini coefficient by almost 3 per cent, while in Croatia the same scenario would reduce both the Palma ratio and the Gini coefficient by a mere 0.2 per cent or so (figure 11.1). The differences between the two scenarios highlight the varying redistributive potential of increasing the level of the minimum wage. In Estonia, for example, full compliance would reduce the Palma ratio by 3.8 per cent (and the Gini coefficient by 1.7 per cent), while full compliance with an increased minimum wage level set at 67 per cent of the median wage would reduce the Palma ratio by 10 per cent and the Gini coefficient by 4.8 per cent. On the other hand, in some countries, such as Hungary, Guatemala, France or Portugal, full compliance would reduce income inequality – the Palma ratio declining in these countries by between 2 and 7 per cent – but the relatively high level of the minimum wage relative to the median wage suggests that there is little scope for reducing inequalities by applying the second scenario, that is, by raising the minimum wage level so that it reaches 67 per cent of the median.

The simulation exercise also suggests that, in the overwhelming majority of countries studied, minimum wages have the potential to reduce relative poverty. Using the proportion of households living on less than half the median income as an indicator of relative poverty, the simulation provides estimates of the potential impact of minimum wages on relative poverty. Figure 11.2 shows the percentage change in relative poverty along with the share of the population living in households that experience an increase in their total income as a result of the simulated changes on the minimum wage. In Estonia, for instance, an increase of the minimum wage level to 67 per cent of the median wage, combined with full compliance, would increase the income of more than 35 per cent of the population and result in a reduction of 17 per cent in the share of households living in relative poverty. In Hungary, full compliance with the existing minimum wage would increase the income of around 24 per cent of the population and lead to a reduction of 24 per cent in the share of households living on less than half of the median income. In Guatemala, an increase in compliance with a minimum wage level equal to 67 per cent of the median would reduce the household poverty rate by 8 per cent. While these are significant reductions in poverty levels, in other countries the estimated impact is much smaller. For instance, in Croatia, Czechia and Slovenia the same scenario would lead to higher income for approximately 22–23 per cent of the population but result in only modest changes in relative poverty. In most of the African countries analysed, the scenario would in fact result in an increase of relative poverty. This may be explained by the fact that in these countries members of the poorest households are not paid wages but derive their income from own-account and contributing family work.

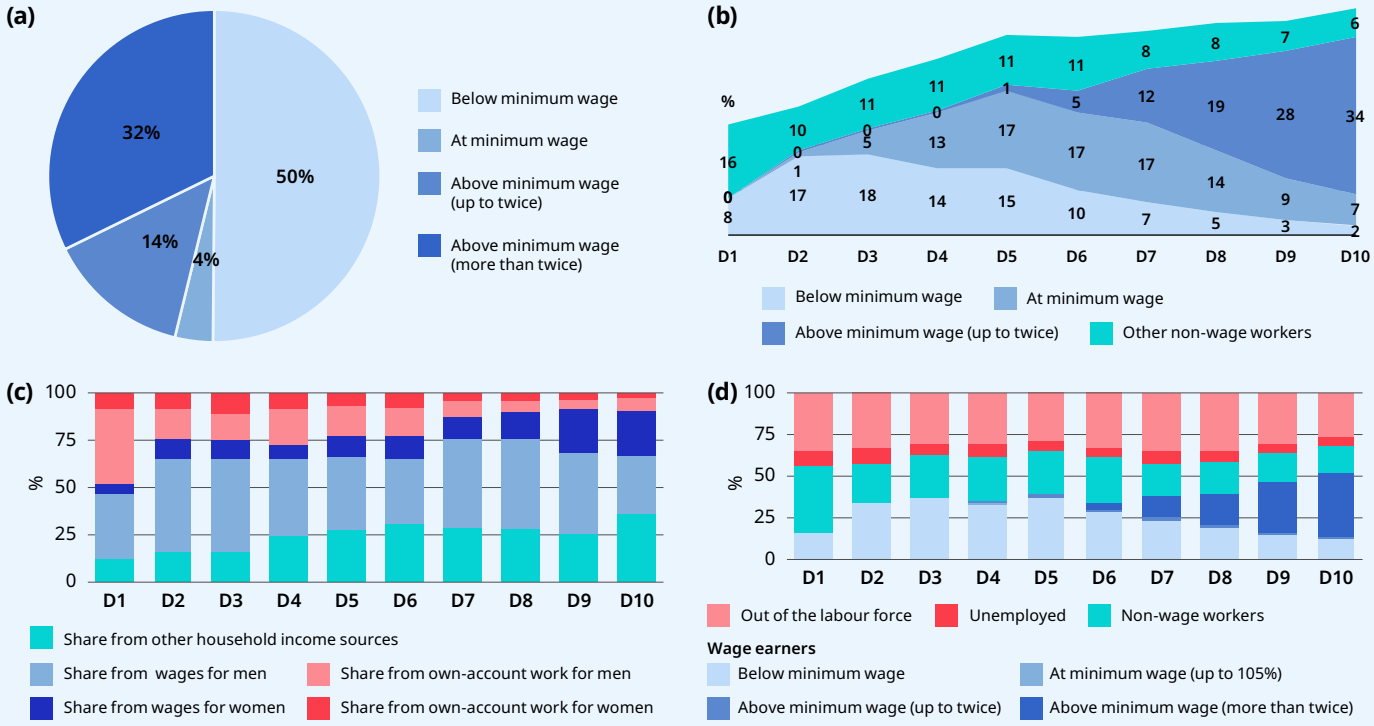
[16] The D9/D1 and D8/D2 ratios are classic measures of income inequality which can be calculated using either the threshold values that separate the deciles or the share of income within the deciles. We estimated both alternatives and observed just small differences between them. It was decided to report the ratios between income shares to enable a more consistent comparison with the Palma ratio.

11.3 Country examples

In some countries, such as Guatemala, Ecuador and Hungary, the potential for reducing income inequalities through an increase in compliance is relatively high. Indeed, looking at the changes in the Palma ratio, the reduction in income inequality would exceed 4.5 per cent in all three aforementioned countries, even reaching 9.5 per cent in the case of Guatemala. In general, these three countries have a relatively high level of minimum wages and relatively high shares of wage earners paid below the minimum wage. In addition, a majority of these sub-minimum wage earners are located in the lower tail of the income distribution (see figures 11.3–11.5). For example, in Guatemala, where the minimum wage exceeds the median wage, the minimum-to-median ratio being 105 per cent, more than half (54 per cent) of wage earners are paid at or below the minimum wage (figure 11.3(a)). Of those workers, 59 per cent are located in the bottom 40 per cent of the income distribution (figure 11.3(b)). Ecuador exhibits similar characteristics, with a minimum-to-median wage ratio of 88 per cent and a share of minimum and sub-minimum wage earners of 38 per cent (figure 11.4(a)). However, in Ecuador, sub-minimum wage earners are more evenly distributed across deciles than in Guatemala (46 per cent of them being located in the bottom 40 per cent of the distribution). This may explain why the potential impact of increased compliance on the Palma ratio is twice as large in Guatemala as in Ecuador. Another interesting example, this time from Europe, is Hungary (figure 11.5). In this country, the minimum wage is set at 71 per cent of the median wage, a relatively high level in relation to the national wage structure. The share of sub-minimum and minimum wage earners is also relatively high, standing at 26 per cent of all employees, of which 6 per cent are paid approximately the minimum wage and 20 per cent are paid less than the minimum wage. In addition, a large majority of these workers – 63 per cent – are located in the lower tail of the income distribution and they account for 31 per cent of the actively employed population in the first decile (figure 11.5(d)). Looking at the income generated at the household level in Hungary, wages account for 28 per cent of the total income of households located in the first decile, with 15 per cent coming from men's wages and 13 per cent from women's wages (figure 11.5(c)).

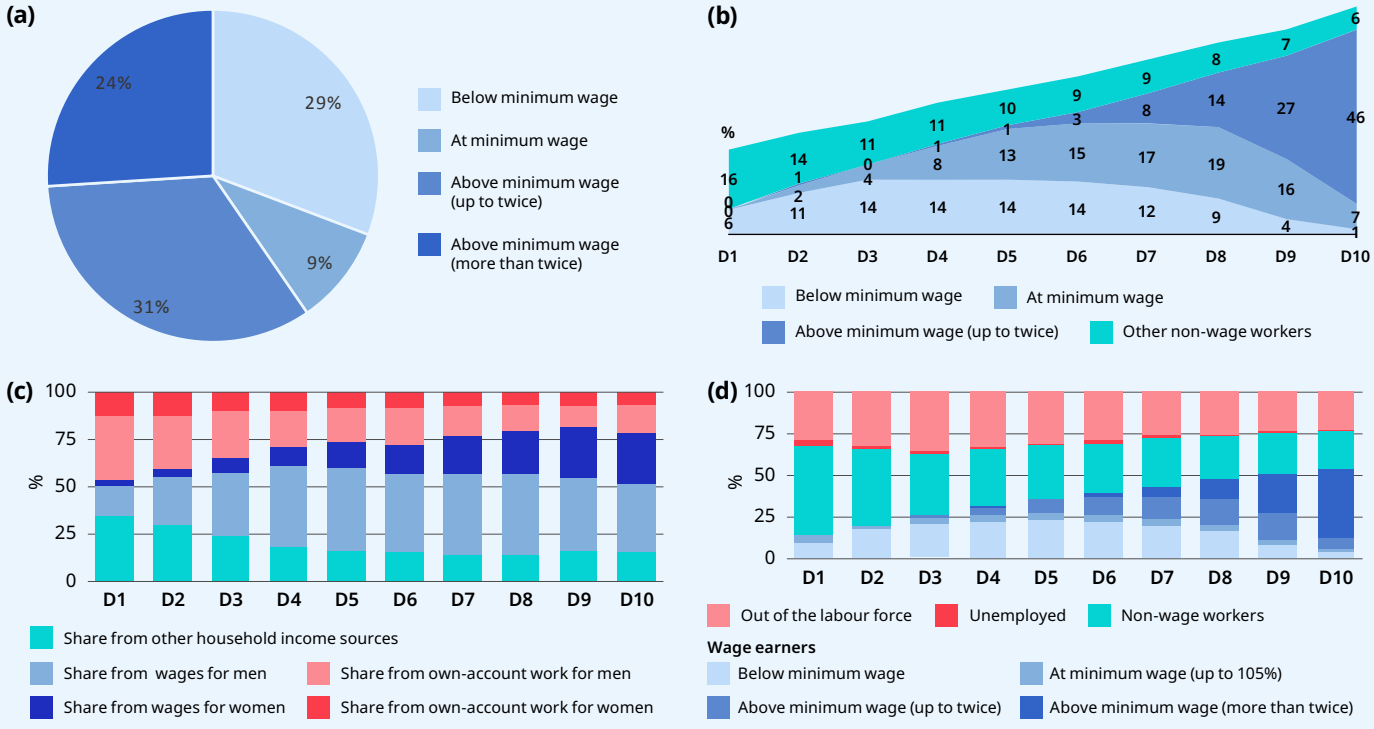
In another set of countries including, among others, Estonia, Viet Nam and Uruguay, the potential for reducing income inequalities through a combination of full compliance and an increase in the minimum wage level is relatively high. In fact, in these countries the redistributive potential of an increase in level combined with full compliance is more than twice as large as the potential of the "full compliance only" scenario (figure 11.2). These countries are often characterized by relatively low levels of minimum wages and a significant share of sub-minimum wage earners located in the lower part of the income distribution (figures 11.6–11.8). For example, in Estonia the minimum wage is set at 43 per cent of the median wage, and 11 per cent of wage earners are paid the minimum or below. Furthermore, 63 per cent of minimum and sub-minimum wage earners are located in the four lower deciles of the distribution (figure 11.6). Similarly, in Viet Nam, where the minimum wage is set at around 28 per cent of the median, 72 per cent of minimum and sub-minimum wage earners are located in the four lowest deciles (figure 11.7). Similar characteristics are observed in Uruguay (figure 11.8).

Figure 11.3 Guatemala (Kaitz index = 105%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



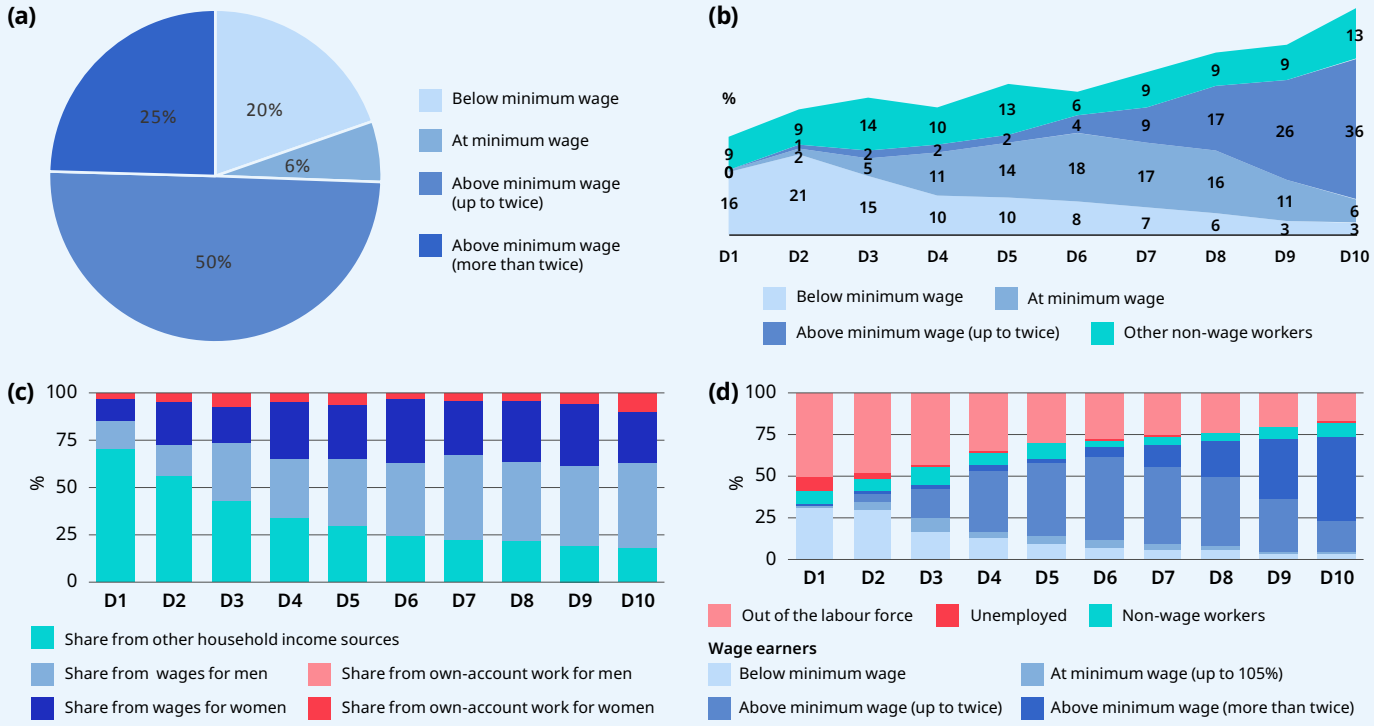
Source: ILO estimates.

Figure 11.4 Ecuador (Kaitz index = 88%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



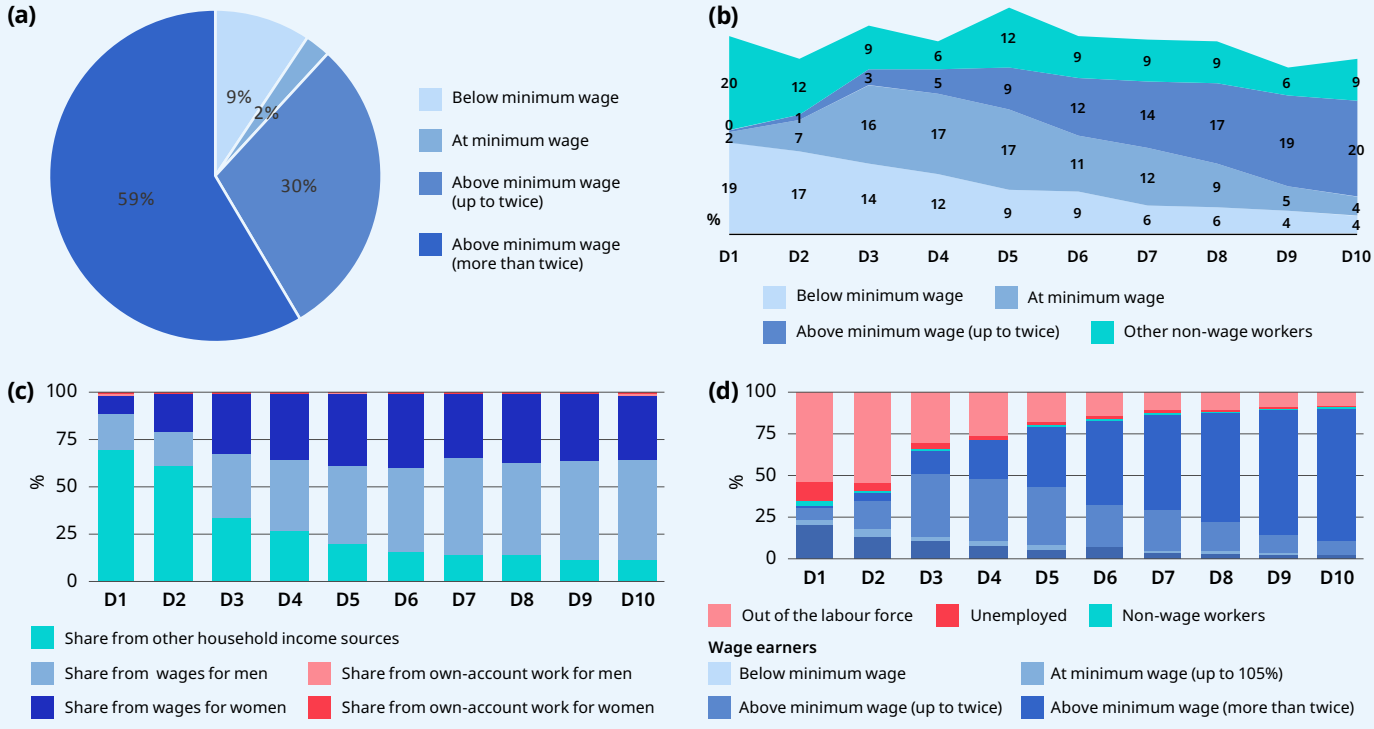
Source: ILO estimates.

Figure 11.5 Hungary (Kaitz index = 71%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



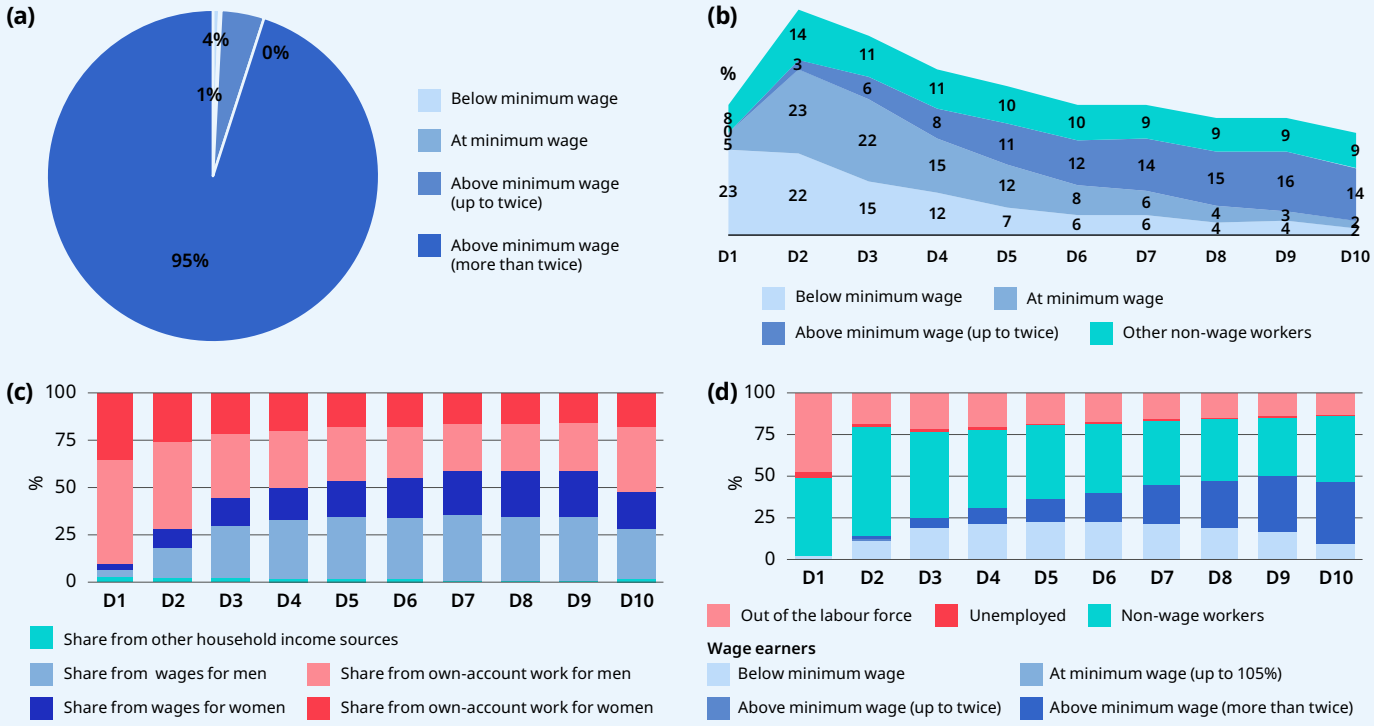
Source: ILO estimates.

Figure 11.6 Estonia (Kaitz index = 43%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



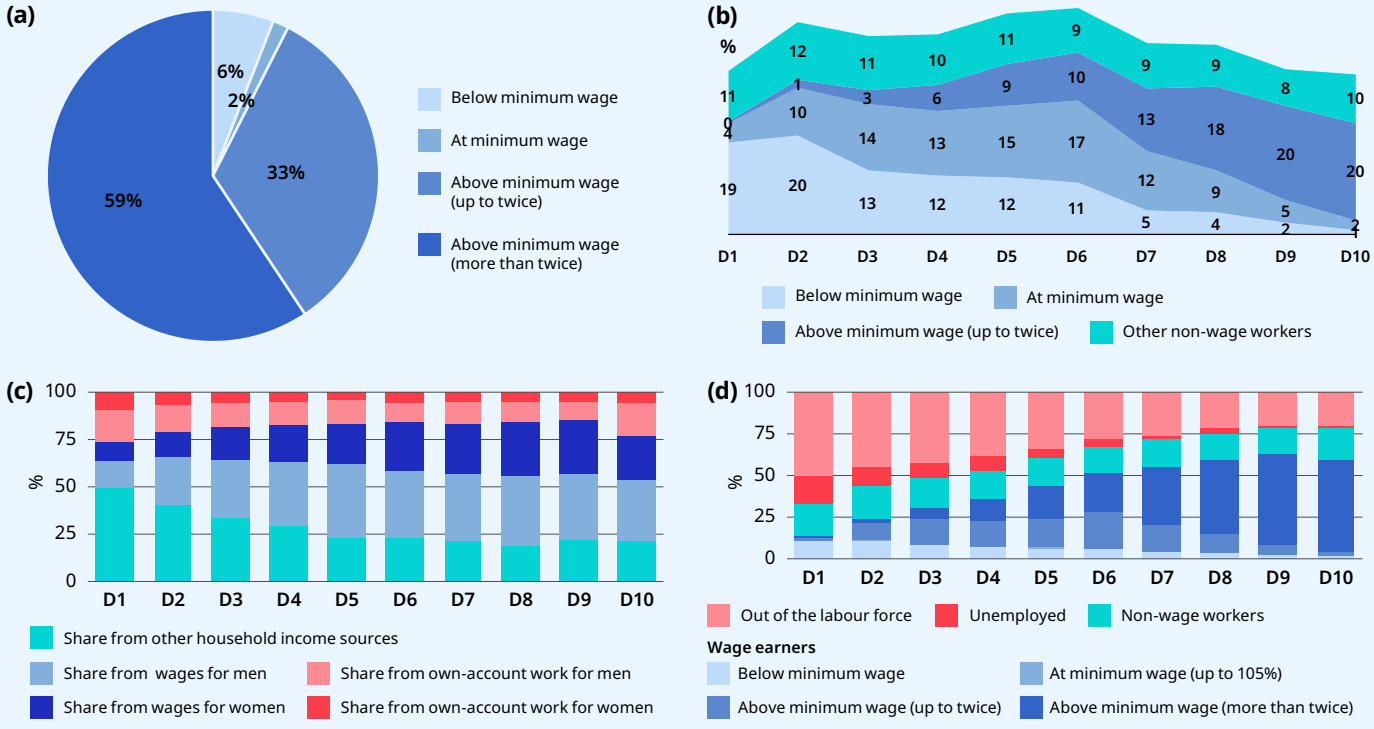
Source: ILO estimates.

Figure 11.7 Viet Nam (Kaitz index = 28%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



Source: ILO estimates.

Figure 11.8 Uruguay (Kaitz index = 44%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



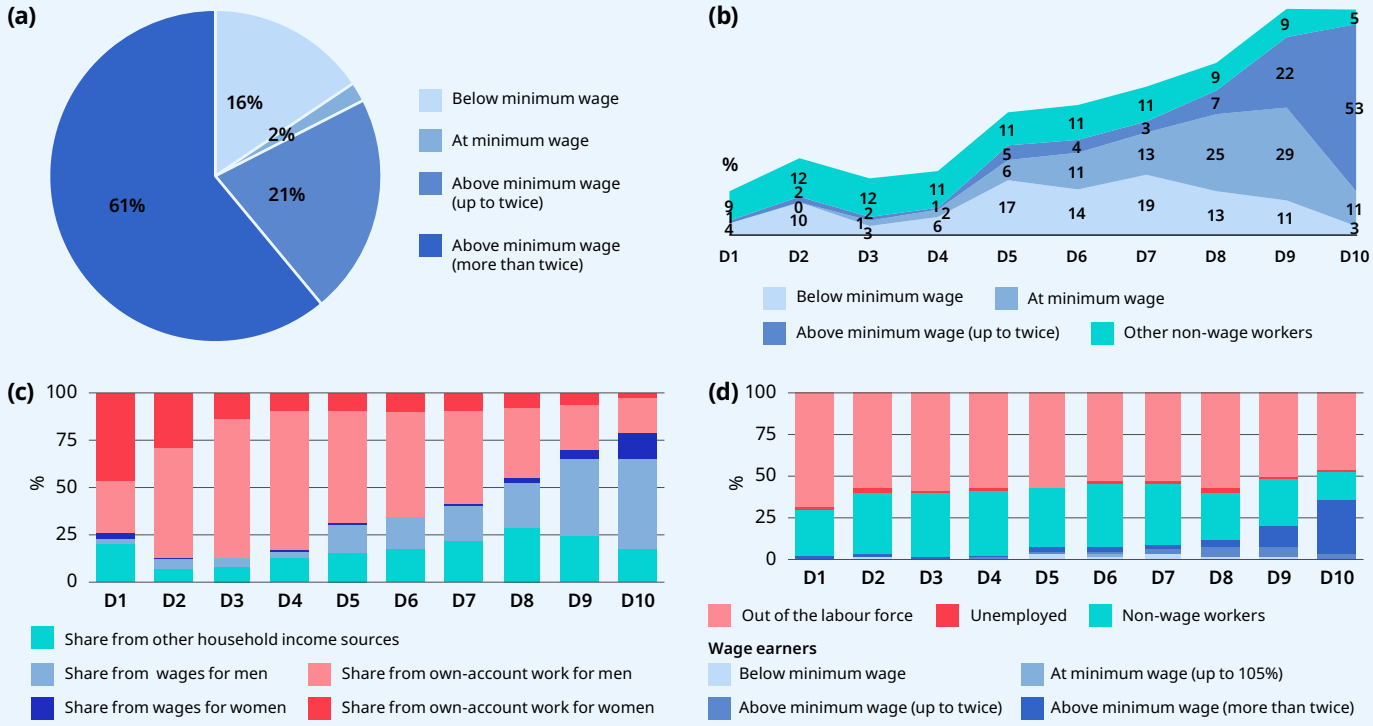
Source: ILO estimates.

Significantly, for certain other countries, one obtains contrasting results depending on which measure of income inequality is considered. Although in all countries increases in compliance with, and levels of, minimum wages have the potential to reduce the Palma ratio and the Gini coefficient, in some cases these policy measures would lead to very modest falls, or even to increases, in the D9/D1 and D8/D2 ratios. This is particularly the case in low-income countries such as Niger, the United Republic of Tanzania and Malawi, which are characterized by high levels of self-employed working in the informal economy. In Niger, for example, the share of wage employees is very low across the whole income distribution but especially in the lowest deciles (figure 11.9). In addition, sub-minimum and minimum wage earners are not concentrated in the lower tail of the income distribution. Therefore, changes in minimum wage levels or compliance would not have much effect on the income of the households in the lowest deciles. Figure 11.10 shows broadly similar findings for the United Republic of Tanzania. In the Plurinational State of Bolivia, the D9/D1 and D8/D2 ratios fall only very slightly in both scenarios (figure 11.11) – again, because minimum and sub-minimum wage earners do not live in the poorest households: as it can be observed only a small share of them are located in the first decile (figure 11.11(d)).

Finally, in countries where minimum wages are already at levels close to the simulation exercise's benchmark and compliance is already relatively high, the two minimum wage scenarios would have a smaller effect in terms of reducing inequality. For example, in Poland, Chile and Portugal, where minimum wages are set at, respectively, 63 per cent, 66 per cent and 70 per cent of the median wage, and the share of wage earners paid below the minimum wage is relatively small, the scope for further increases in the redistributive effects of the minimum wage is expected to be limited (figures 11.12–11.14).

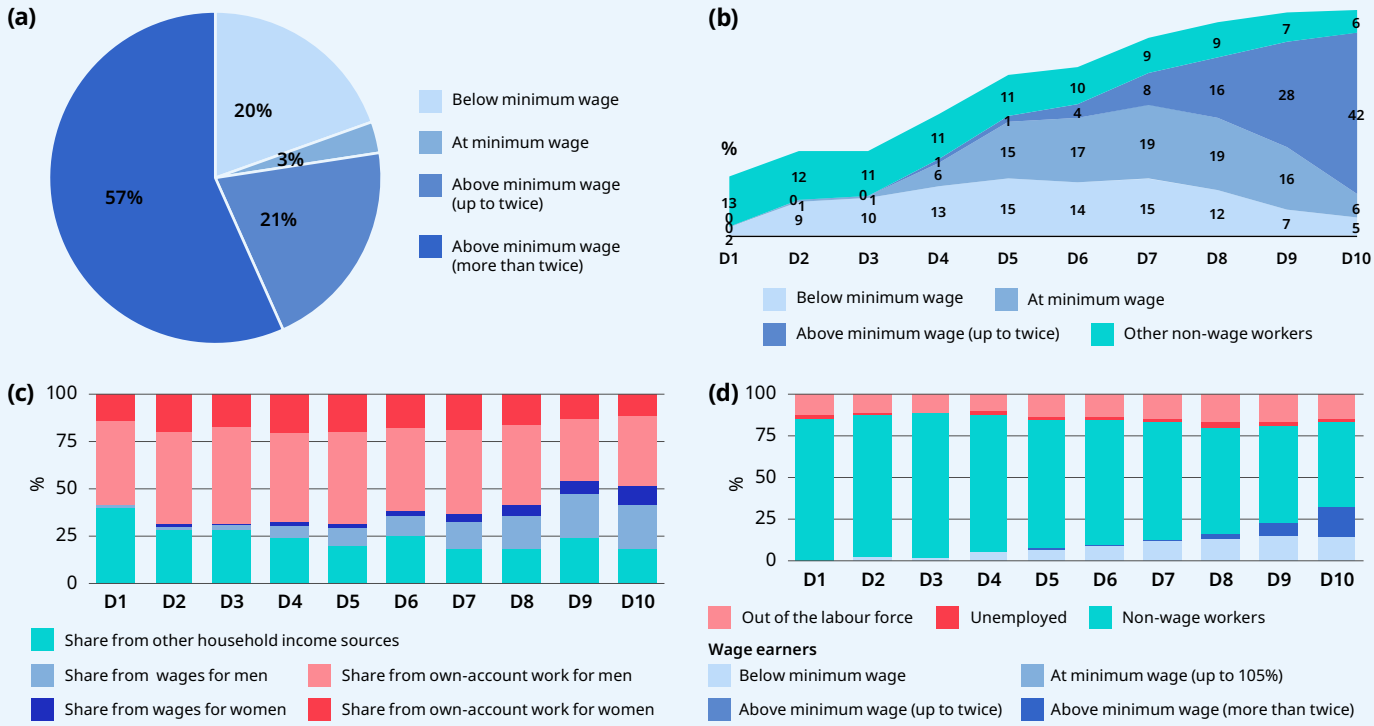
iStock.com/fivepointsix

Figure 11.9 Niger (Kaitz index = 37%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



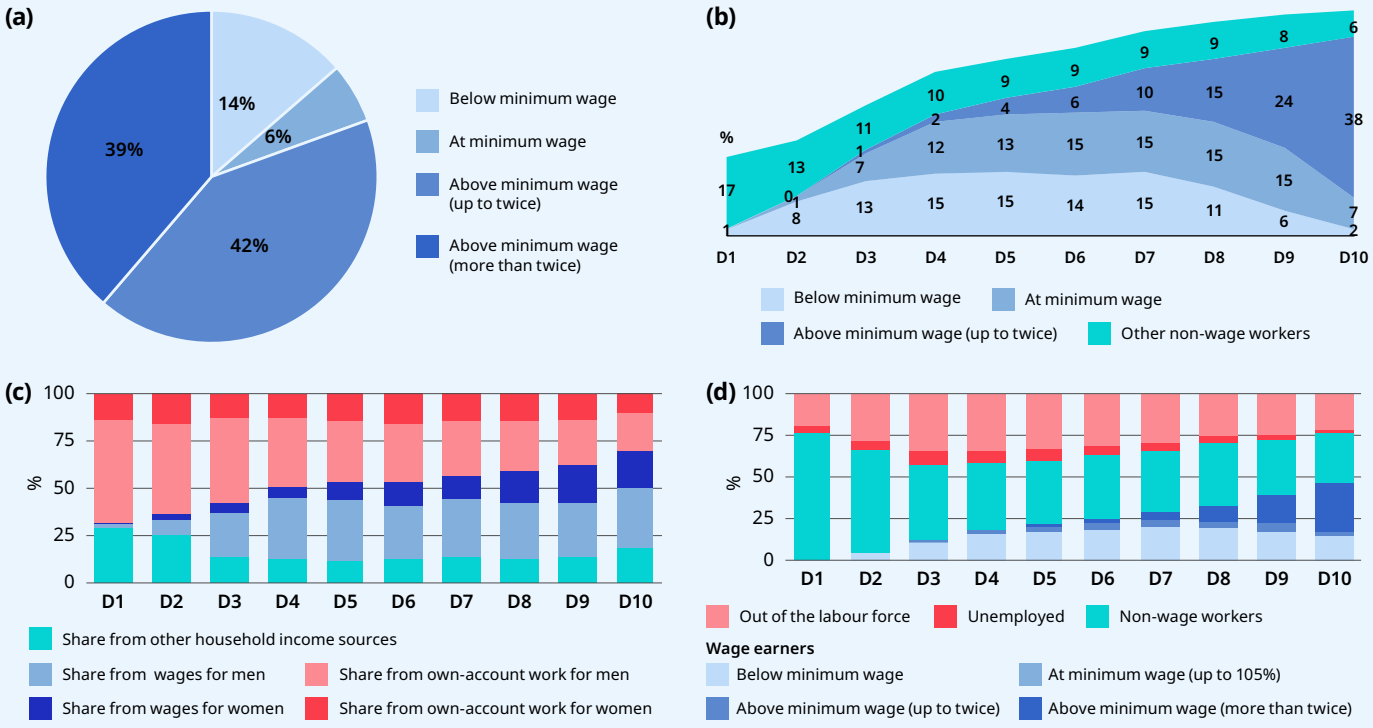
Source: ILO estimates.

Figure 11.10 United Republic of Tanzania (Kaitz index = 47%): (a) distribution of wage earners by group; (b) distribution of workers across deciles of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



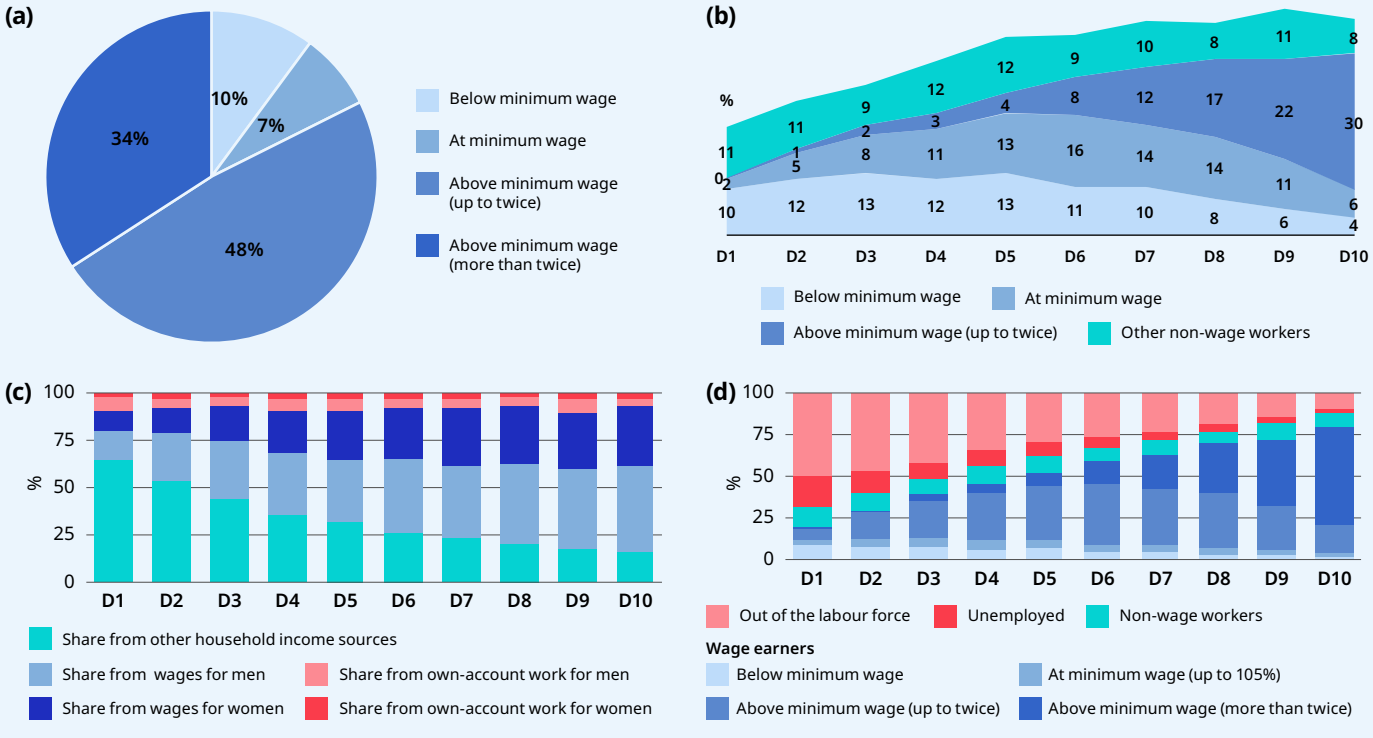
Source: ILO estimates.

Figure 11.11 Plurinational State of Bolivia (Kaitz index = 66%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



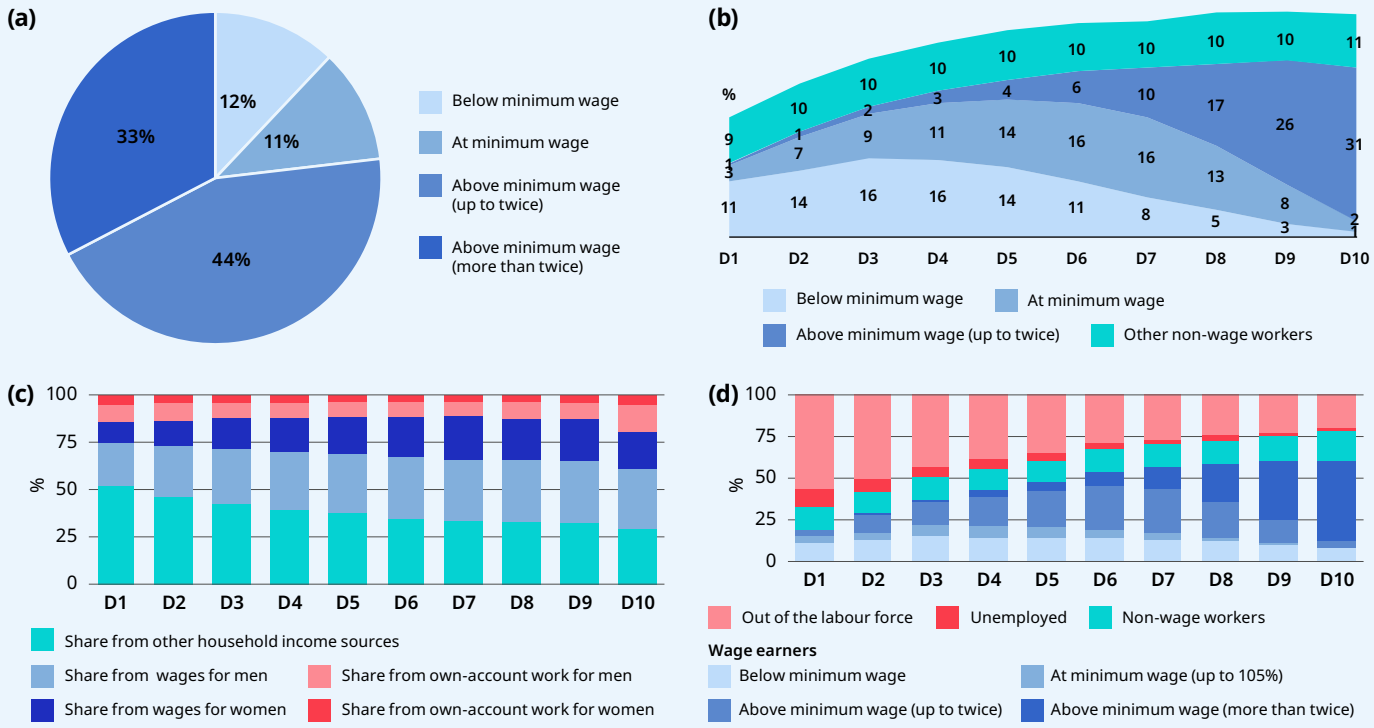
Source: ILO estimates.

Figure 11.12 Poland (Kaitz index = 63%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



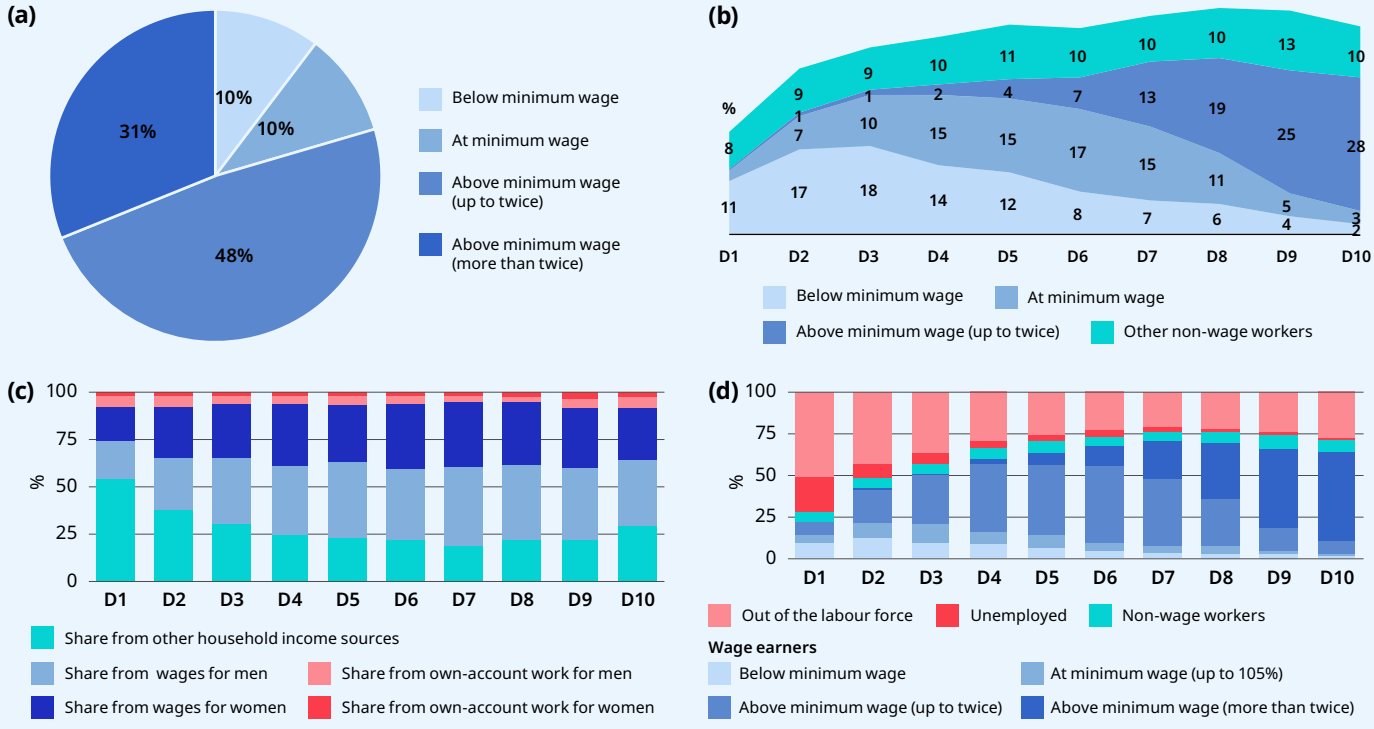
Source: ILO estimates.

Figure 11.13 Chile (Kaitz index = 66%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



Source: ILO estimates.

Figure 11.14 Portugal (Kaitz index = 70%): (a) distribution of wage earners by group; (b) distribution of workers across decile of household income; (c) income sources by decile; (d) labour market status by decile (percentage)



Source: ILO estimates.

11.4 The importance of formalizing the informal economy

The simulations presented so far do not distinguish between formal and informal employment, yet almost 40 per cent of wage employees across the world hold jobs classified as informal employment. Accordingly, this section distinguishes between formal and informal employment in a selection of countries in order to highlight the importance of achieving full compliance with minimum wage policies among all wage employees, including those in informal employment, in pursuit of reducing working poverty and household inequality.[17] Compared to workers in formal employment, workers who hold informal jobs are more likely to suffer from non-compliance with respect to a minimum wage and, at the same time, less likely to be adequately protected. This final subsection estimates the possible impact of the minimum wage on inequality in conditions of full compliance – or full compliance at a higher level – for both formal and informal employees.

The starting point is to determine where formal and informal wage employees are situated across the household income distribution in each region. Figure 11.15 shows that for all three regions considered – Latin America and the Caribbean, Asia and the Pacific, and Africa – informal employment accounts for a significant proportion of all employed workers. Latin America and the Caribbean has a lower share of informal employment than Asia and the Pacific or Africa. In all three regions, informal employment decreases significantly with increasing affluence of households, while the proportion of formal employment increases. It can also be seen that a large proportion of wage employees who earn at or below the minimum wage hold informal jobs, and many of them live in low-income households.

In the lowest decile of the income distribution in Latin America and the Caribbean, 23.8 per cent of all workers are wage employees; of these, 62.3 per cent are in informal employment and earn at or below the minimum wage. In subsequent deciles – the second, the median and the ninth deciles, to give just a few examples – the proportions of wage employees in informal employment at or below the minimum wage are, respectively, 61, 34.1 and 6.4 per cent. Non-wage informal employment accounts for 40.3 per cent of all employment in the region.

As for Asia and the Pacific, almost all wage employees in the first decile are in informal work and receive earnings at or below the minimum wage; however, in this bottom decile, non-wage informal employment predominates, with wage employment accounting for only 8.5 per cent of all workers. The proportion of wage employees increases as one moves up the income distribution, and despite the fact that a substantial number of these continue to be wage employees in informal employment, the great majority receive earnings above the minimum wage. Thus, among economies in Asia and the Pacific for which data are available, 60.7 per cent of all wage employees are informal workers; of these, 16.5 per cent earn at or below the minimum wage.

With regard to Africa, figure 11.15(a) shows that non-wage informal employment is the dominant category across all income deciles. Only a small fraction of workers are classified as wage employees in formal employment (13.5 per cent of all workers), and most of them are located in the top deciles of the household income distribution. In this region, where 65.4 per cent of wage employees are in informal employment, 38.5 per cent of these earn at or below the minimum wage, while non-wage employment (formal and informal) accounts for 79.4 per cent of all employment in African countries for which data are available.

[17] The Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204), defines the informal economy as "all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements".

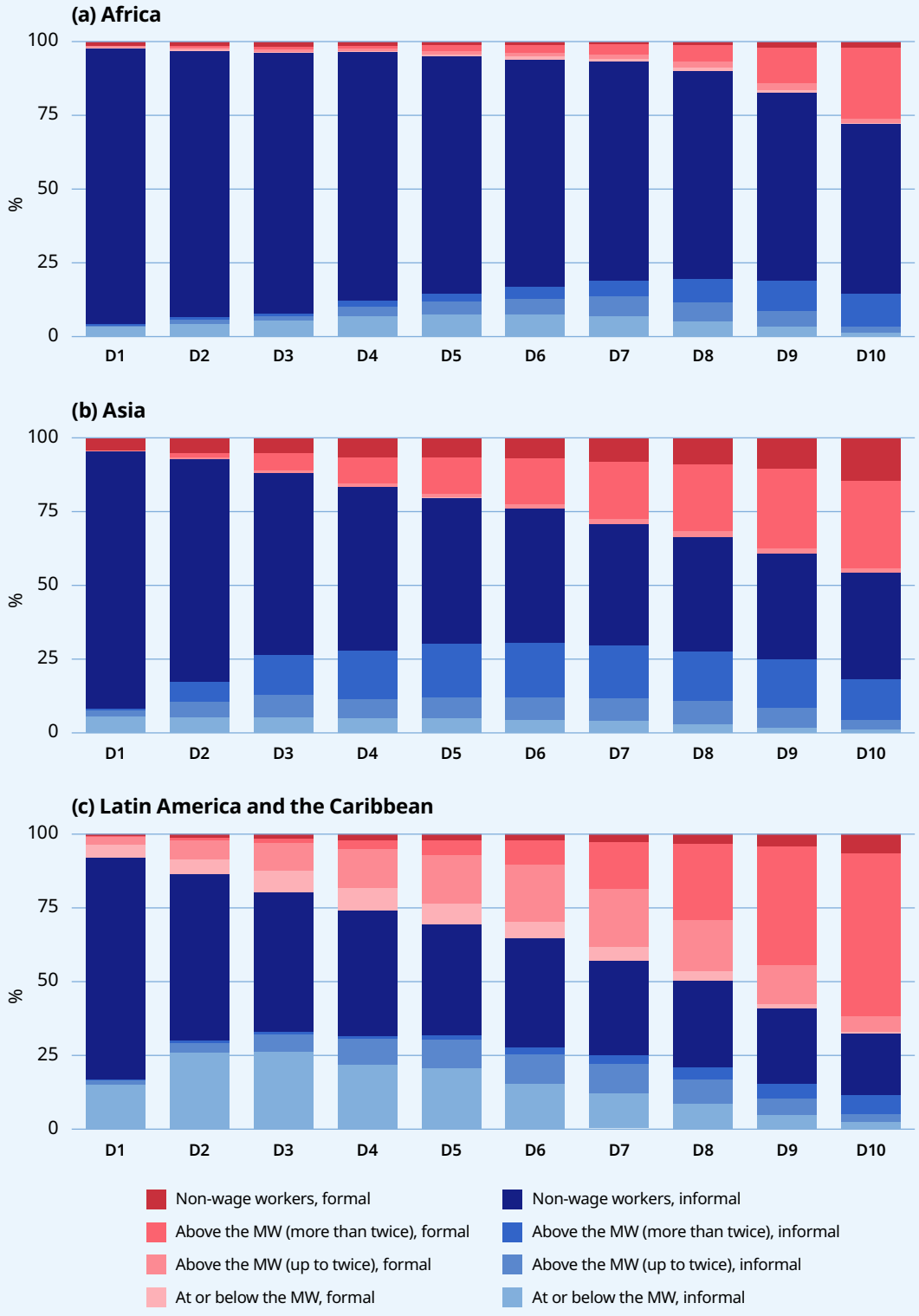
> Informal work is prominent in many regions of the world and is significantly coincident with non-compliance with the minimum wage.

Figure 11.15 indicates that informal work is prominent in many regions of the world and that it is significantly coincident with non-compliance with the minimum wage. This does not mean, though, that a minimum wage policy has no effect on the earnings of employees in informal jobs. In fact, it has been established empirically that in labour markets with significant levels of informality, the determination of wages of workers in informal employment takes account of the level of the minimum wage – a phenomenon known as the "lighthouse effect" (see box 11.1). However, figure 11.15 also shows that employees with informal jobs are more likely to be at the low end of the wage distribution, pursuing their livelihoods in poverty and under irregular conditions. As has been established by the Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204),[18] securing (at least) a minimum wage for informal wage employees through the transition to the formal economy would contribute to the improvement of their working and living conditions. In this sense, full compliance with the minimum wage across informal wage employment should be considered as part of a strategy that addresses informality by facilitating transition to formality.

Furthermore, as illustrated in figures 11.16–11.19, the achievement of full compliance with the minimum wage across all wage employees can also have a considerable impact on the reduction of inequality and poverty at the country level. Each of these four figures shows the results of the simulations carried out as described in section 11.3, comparing the scenarios of full compliance (and full compliance together with an increased minimum wage level) as applied (a) to all wage employees and (b) only to wage employees in formal jobs. Evidently, the expected gains in reduced inequality and household poverty become much smaller if full compliance with the minimum wage does not extend to wage employees in informal jobs. In all three regions, when the simulations are calibrated to apply full compliance with the minimum wage only to formal wage employees, the benefits of such a scenario in terms of reducing inequality and household poverty at the country level clearly diminish. For example, in Malawi the Gini coefficient declines by three points when full compliance applies to all wage employees – whether formal or informal. However, given that informal employment in Malawi accounts for 93 per cent of total employment, when full compliance with the minimum wage is applied only to those holding formal jobs, the Gini coefficient declines by a mere 0.5 points. This final exercise shows the importance of extending formal working arrangements to those with informal employment, not only to improve their working conditions but also to reduce inequality and relative poverty.

[18] The Recommendation was adopted in June 2015, at the 104th Session of the International Labour Conference. Paragraph 18 states: "Through the transition to the formal economy, Members should progressively extend, in law and practice, to all workers in the informal economy, social security, maternity protection, decent working conditions and a minimum wage that takes into account the needs of workers and considers relevant factors, including but not limited to the cost of living and the general level of wages in their country."

Figure 11.15 Distribution of workers (by employment status and formal/informal employment) within deciles of the household income distribution, by region (percentage)



MW = minimum wage.

Note: For Africa, estimates are based on five countries: Cameroon, Côte d'Ivoire, Malawi, Niger, United Republic of Tanzania. For Asia, estimates are based on four countries: Cambodia, Mongolia, Myanmar, Viet Nam. For Latin America, estimates are based on six countries: Plurinational State of Bolivia, Chile, Ecuador, Guatemala, Guyana, Uruguay. All regional estimates are weighted averages. For more information, see Appendix V. The status of informal employment reflects the recommendations established in the 17th International Conference of Labour Statisticians (ILO 2003). The figures show individuals ranked according to their corresponding per capita household income as described in Appendix IV. For each decile, the distribution of all workers (wage employees and non-wage employees) within that decile is shown. Non-wage employees include employers, own-account workers and contributing family workers.

Source: ILO estimates.

▶ Box 11.1 The "lighthouse effect" of minimum wages among workers in informal employment

A large body of empirical evidence indicates that, contrary to the predictions of economic theory, wages in the informal economy increase following an upward adjustment of the minimum wage in a country. Relevant studies include (among many others): Boeri, Garibaldi and Ribeiro (2010) for Brazil; Maloney and Mendez (2004) for Colombia; Arias and Khamis (2008) for Argentina; and Canelas (2014) for Ecuador. This phenomenon is known as the "lighthouse effect",[a] and although there are several explanations for its mechanism, all refer to the fact that a minimum wage serves as a reference price in the bargaining process of all workers in the economy, including those in the informal economy.[b] Consequently, when minimum wages increase and the increase is moderate, the evidence shows that average wages among wage workers in informal employment also increase, on average. Several explanations have been put forward in an effort to understand the mechanism behind the lighthouse effect. For example, if a country routinely employs the minimum wage as an index to set all sorts of prices – inside and outside the labour market – one would expect wage bargaining in the informal economy also to take the minimum wage as a reference point. However, even if this were so, the mechanism would require firms that employ workers in the informal economy to have monopsony power and to acknowledge that fair remuneration is relevant in the production process (Souza and Baltar 1980). One possible explanation for the lighthouse effect suggests that the "sorting of skills" between the formal and the informal economy is an important determinant for increasing wages among wage workers in informal employment when the minimum wage is increased: that is, the increase attracts some workers working in the informal economy into formal employment, thus reducing the supply of labour in the informal economy. This movement implies an increase of wages in the informal economy that attracts workers with relatively higher skills – compared to the skill mix in this part of the economy before the increase – which further increases average labour productivity. Boeri, Garibaldi and Ribeiro (2010) used panel data from Brazil to analyse the effects of the increase in the minimum wage by 43 per cent that occurred in Brazil in 1995. Their findings indicate that the subsequent spillover effects of the minimum wage on the sorting of workers between formal and informal employment increased labour productivity in the informal economy, while the sorting itself was estimated to have accounted for at least two thirds of the increase in the average wage of wage workers in informal employment.

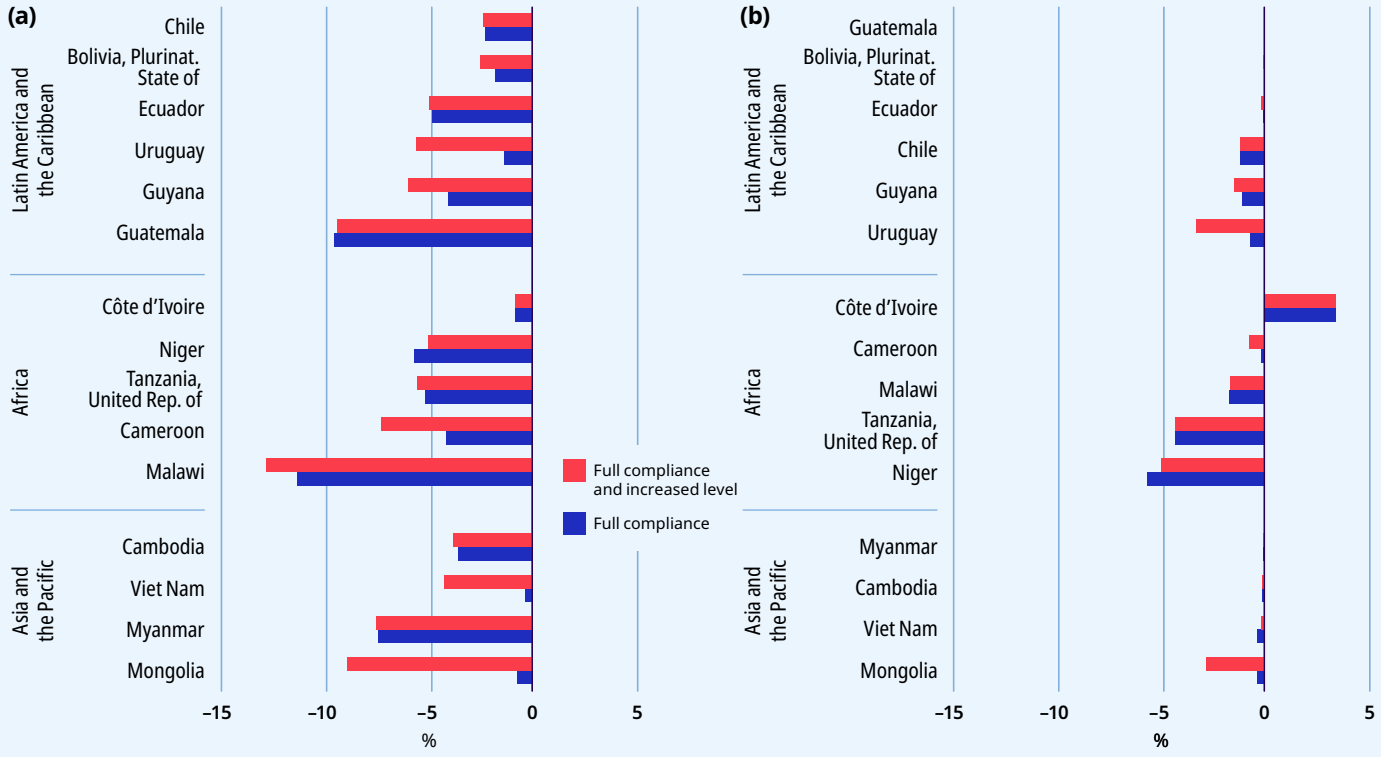
It should be noted that most studies on the lighthouse effect have been conducted in the context of Latin America, where informality accounts for about 50 per cent of the working population, of whom at least half are wage employees.[c] There are a few studies on the lighthouse effect outside Latin America, including Rama (2001) for Indonesia; Fang and Lin (2015) for China; and Dinkelman and Ranchhod (2012) for South Africa.

[a] First described by Souza and Baltar (1980) as the *efeito farol* (lighthouse effect) in the Brazilian economy.

[b] As noted by De Soto (2002), informal workers are also organized and they are involved in certain bargaining processes as part of wage determination in some areas of the informal economy.

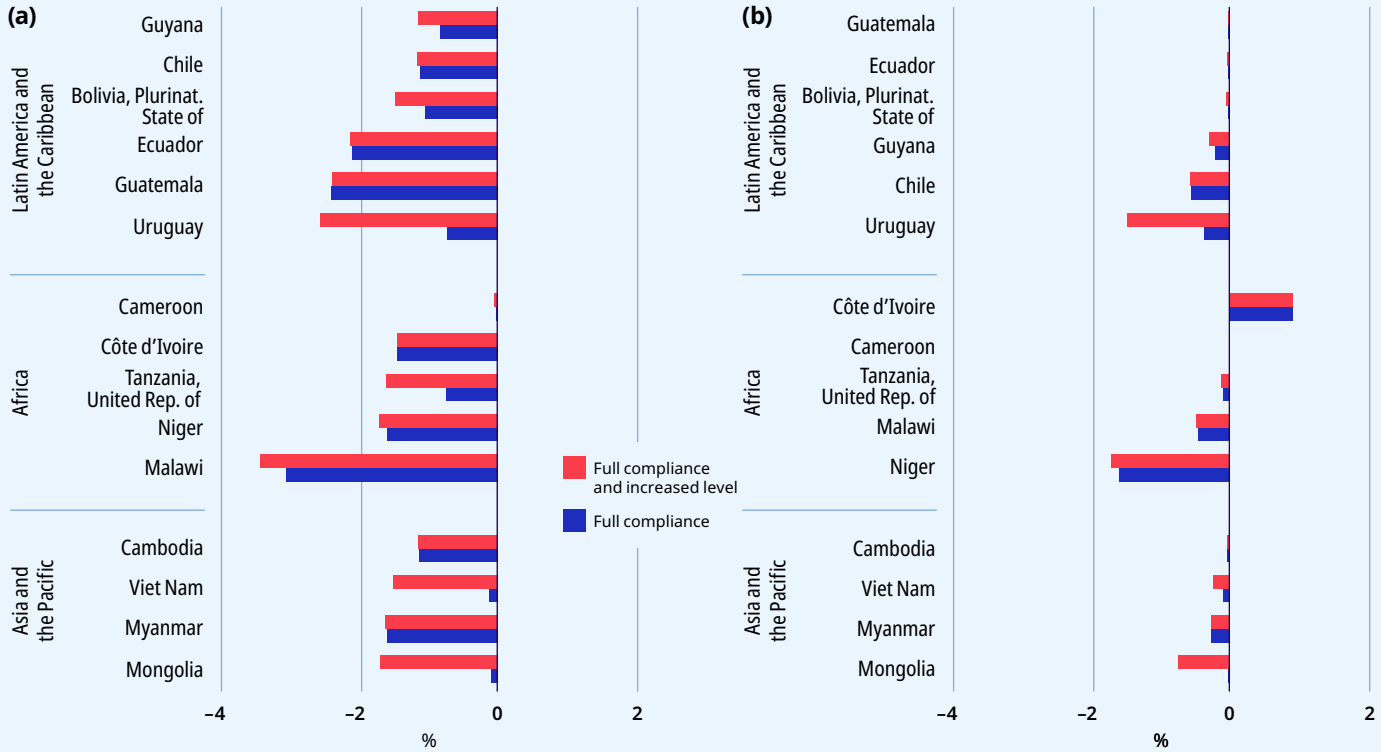
[c] There are two reasons why most studies on the lighthouse effect are conducted using data from Latin America. The first is the existence of appropriate data sets that help to identify the effect empirically. The second, and more important, is that in emerging middle-income countries such as those in Latin America the proportion of wage employees among informal workers is high (about 50 per cent), and therefore wage policies directed at wage employees have a direct bearing on the wage structure of the informal economy. For example, in the Plurinational State of Bolivia, Brazil, Costa Rica and Honduras, the informal economy accounts for 54 per cent, 31 per cent, 27 per cent and 65 per cent of employment, respectively. Within these four countries' informal workforce, 14 per cent, 28 per cent, 14 per cent and 64 per cent, respectively, are wage employees in informal enterprises or in private households. These examples illustrate how in Latin America informal wage employment is a significant element of the labour market, and the existence of relevant data has enabled a substantial amount of research to be carried out on the lighthouse effect. In other economies with significant levels of informality (low-income countries in particular), wage employment is marginal and informal wage employees make up an almost negligible fraction of the informal economy (see ILO 2014c, for a definition of the different profiles of the informal economy; and ILO 2018a, for the most recent statistical compendium on informality around the world).

Figure 11.16 Comparison of potential impact of two minimum wage policy scenarios in terms of % change in Palma ratio when (a) all wage employees are affected by the policy; (b) only wage employees in formal employment are affected (percentage)



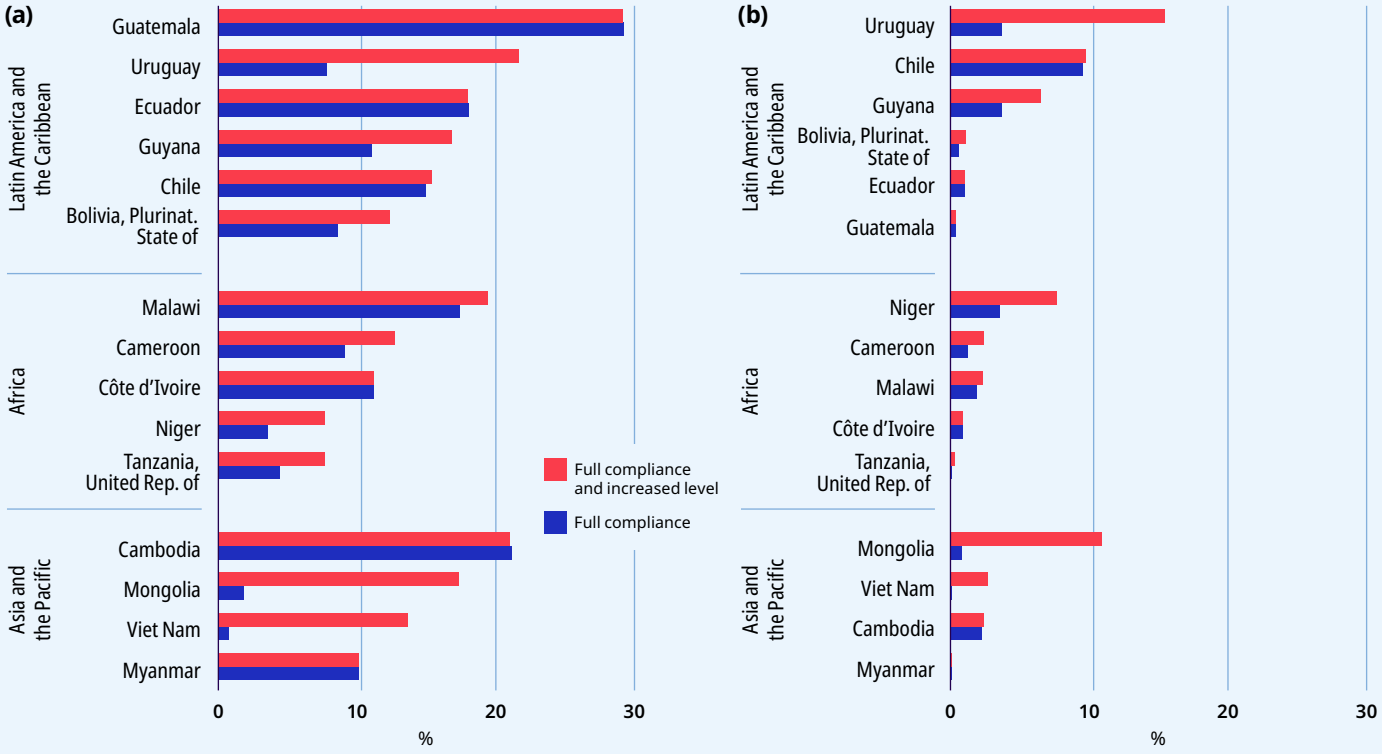
Source: ILO estimates; see the source note to figure 11.15.

Figure 11.17 Comparison of potential impact of two minimum wage policy scenarios in terms of % change in Gini coefficient when (a) all wage employees are affected by the policy; (b) only wage employees in formal employment are affected (percentage)



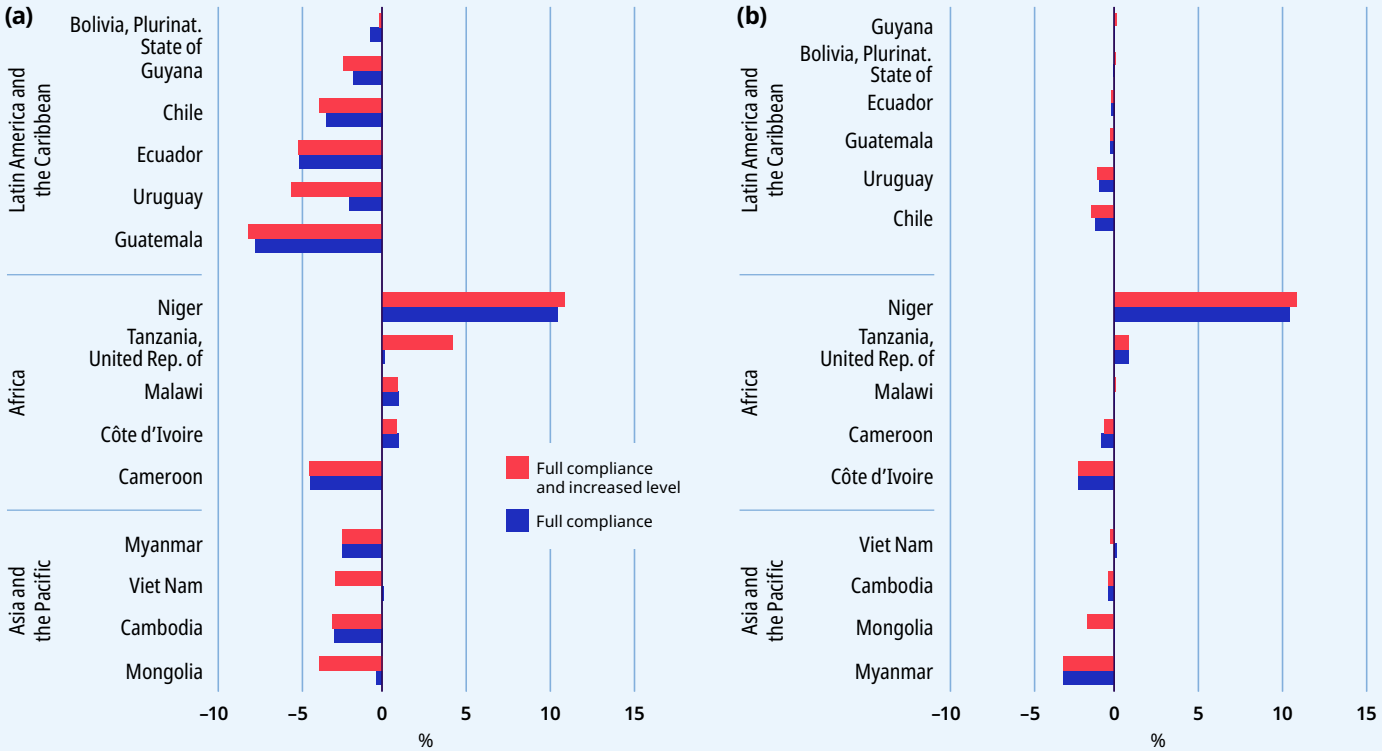
Source: ILO estimates; see the source note to figure 11.15.

Figure 11.18 Comparison of potential impact of two minimum wage policy scenarios in terms of proportion of people living in households with increased income when (a) all wage employees are affected by the policy; (b) only wage employees in formal employment are affected (percentage)



Source: ILO estimates; see the source note to figure 11.15.

Figure 11.19 Comparison of potential impact of two minimum wage policy scenarios in terms of % change in relative poverty among households when (a) all wage employees are affected by the policy; (b) only wage employees in formal employment are affected (percentage)



Source: ILO estimates; see the source note to figure 11.15.

11.5 Conclusions from the simulation exercise

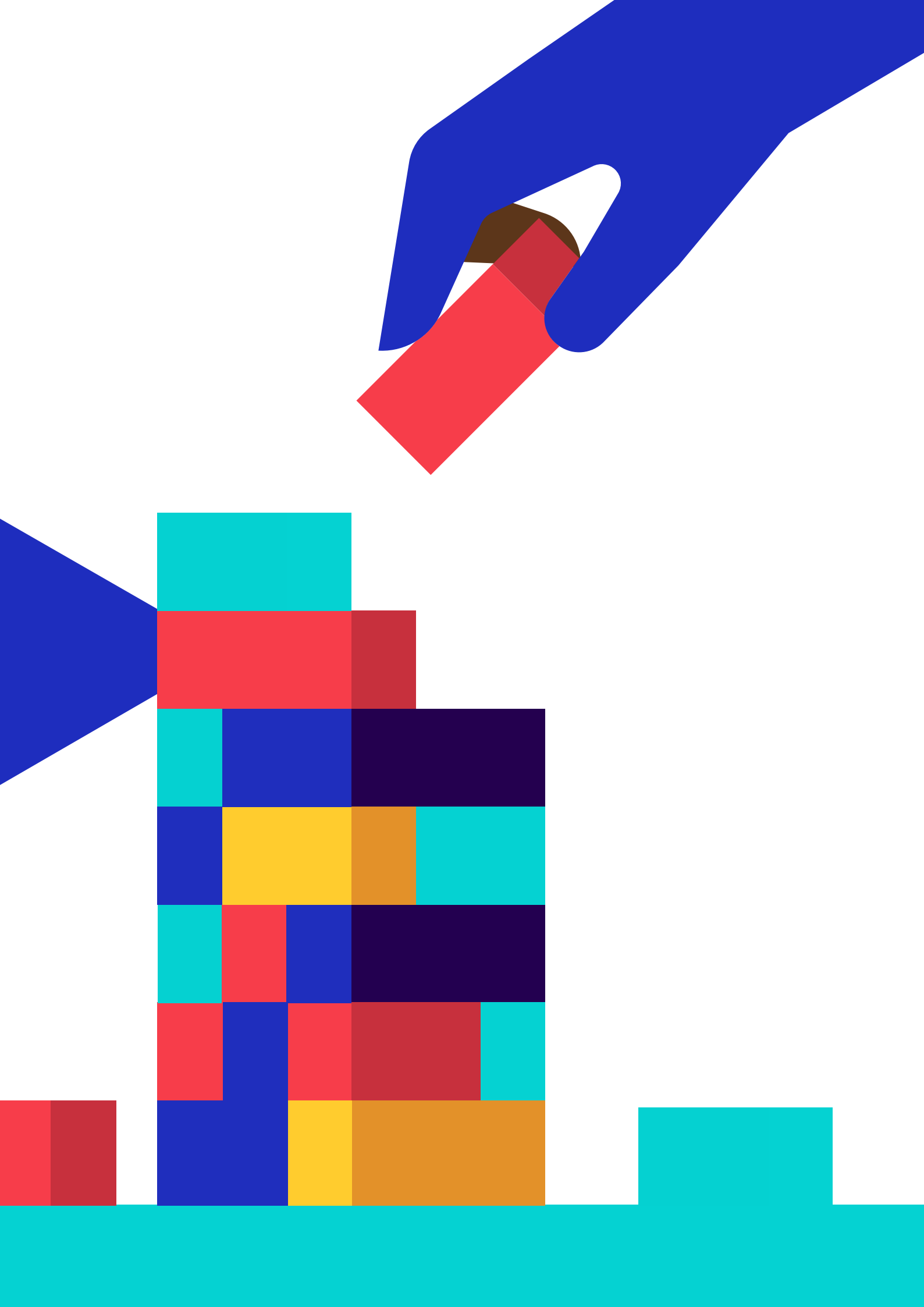
The simulation exercise conducted for this report shows that, in addition to their primary objective of protecting workers against unduly low pay, minimum wages have, in many cases, the potential to reduce inequality and poverty. However, if this potential is to be fully realized, minimum wages must be set and administered adequately. While in some countries minimum wage systems may already be achieving most of their redistributive potential, in others there is room for improvement. Whether by increasing the effectiveness of minimum wages through measures aimed at strengthening enforcement and compliance, formalizing jobs, broadening legal coverage or setting adequate levels by ensuring a balanced and evidence-based approach, policy measures can do much to ensure that minimum wage systems achieve their full potential.

Our evidence also shows that, in comparison with formal wage employees, workers in the informal economy are more likely to be located at the low end of the wage distribution, and their wages are less likely to reach the level of an existing prevailing minimum wage. Thus, securing (at least) a minimum wage for informal wage employees through transition to formality can help to improve their working and living conditions, and should therefore be considered as part of a strategy to facilitate transition to the formal economy along the lines of Recommendation No. 204.

iStock.com/Nattakorn Maneerat

Part III

Wage policies for a human-centred recovery



12

COVID-19 and the need for adequate short-term wage policies

As highlighted in Part I of this report, the COVID-19 pandemic has not only had major health consequences: it is also seriously threatening the existence of countless numbers of businesses along with the livelihoods of workers, increasing vulnerabilities, imperilling recent socio-economic progress in many areas, and very probably exacerbating inequalities. As the global economy collapses in 2020, the impacts on both businesses and workers are immense. Businesses have been suffering from precipitous falls in their revenues, leading to deteriorating productivity and many bankruptcies. With unprecedented increases in unemployment and reductions in working time, workers' jobs and earnings are experiencing impacts more serious and more rapid than at any previous time. The pandemic has contributed to the first increase in poverty recorded since 1998. Many of those who have been able to keep their jobs have seen their pay frozen or cut, even where temporary wage subsidy schemes have helped to replace some part of workers' wages. Although rising average wages have been observed in some countries because of a composition effect, recent studies and estimates by national statistical offices, along with much anecdotal evidence, have shown downward pressure on wages in the first half of 2020, a pressure which could be reinforced in the foreseeable future if adequate policies are not swiftly implemented.

Those at the lower end of the wage scale and the most vulnerable workers have been among the hardest hit, threatening to deepen inequalities. In the years before the crisis, income inequality in many countries had either been increasing or remained at very high levels, with adverse social and economic consequences. The COVID-19 crisis threatens to further increase these inequalities. Particularly hard-hit workers include those in informal employment, migrants, young people, domestic workers and workers with contracts that offer little protection. Women have also been disproportionately hit, a factor that threatens to widen existing labour market inequalities to their detriment. In adopting short-term responses to the crisis, particular attention should thus be devoted to the protection of those at the "wrong end" of the inequality spectrum.

In this context, it is essential that adequate and balanced wage policies are adopted and implemented, in the short term, through strong and inclusive social dialogue. In the coming months and years, adequately balanced wage adjustments, taking into account relevant social and economic factors, will be required to safeguard jobs while at the same time sustaining demand and avoiding deflationary situations. Wage cuts or reductions in working time may be necessary in some enterprises or sectors to avoid lay-offs and bankruptcies, particularly when temporary wage subsidies are phased out or eligibility criteria for accessing them made more restrictive. However, generalized reductions in wages or working time are likely to further increase the depth and duration of post-lockdown recessions by depressing aggregate demand. Social dialogue, including collective bargaining, that takes into account the particular circumstances of specific enterprises or sectors is best placed to strike the right balance in deciding on appropriate action.

During the COVID-19 crisis, adjustments to minimum wages should be carefully balanced and calibrated, through full participation of the social partners and evidence-based social dialogue. Criteria for adjusting minimum wages should take due account not only of the needs of workers and their families, but also of economic factors. Thus, while it may be essential to ensure that low-paid workers and their families are able to maintain their living standards by adjusting rates to compensate for price inflation, in the particular circumstances of some countries it may be difficult or risky to implement larger increases. This is particularly the case where minimum wages are already relatively high with respect to median wages, and where employment and labour productivity have been severely affected by the economic crisis triggered by the COVID-19 pandemic.

The current recession, the duration and extent of which are profoundly uncertain, is likely to impede labour productivity growth, which is an essential element – together with the fair share distribution of the fruits of progress to all – in delivering adequate wages. Where GDP per worker – a standard measure of average labour productivity (the average value of goods and services produced by an individual worker) – has been stronger, average wages also tend to be higher, as highlighted in Part I. Productivity growth – of which the primary component is labour productivity – has been widely recognized as being of crucial significance in lifting millions of people out of poverty through its contribution to sustaining strong economic growth, creating employment, improving earnings and facilitating the transition to the formal economy. However, while productivity growth across the world has been sluggish since the 2007–09 financial crisis, it is likely to be damaged even more by the COVID-19 pandemic and its unprecedented impacts. Building on lessons learned from past recessions, the World Bank advocates urgent policy actions to avoid further falls in labour productivity and the consequent additional damage to workers' employment and earnings prospects. Therefore, reinvigorating productivity has become a central and urgent priority, both for containing the impacts of the crisis and for the global development agenda (World Bank 2020d; Dieppe 2020).

> In the context of the COVID-19 crisis, it is essential that adequate and balanced wage policies are adopted and implemented, in the short term, through strong and inclusive social dialogue.

iStock.com/Vadim_Key

With growing underemployment of labour and high levels of unemployment, massive state intervention may be required to avoid a deflationary situation. It is important at this stage to emphasize that the evolution of wages in the next few months or even years will not depend exclusively – or even primarily – on wage policies. Indeed, in an environment of collapsing aggregate demand, enterprises are unlikely to be able to pay increasing wages and may have no other option than to cut wages or dismiss workers. The extent to which countries decide and/or are able to stimulate the economy through fiscal and monetary policy will thus play an essential role in sustaining wages and employment. Monetary policy, particularly in the form of quantitative easing, seems already to be playing a prominent role as a tool to reduce the cost of lending, and is expected to continue to do so in emerging and high-income countries until the end of 2020. Such decisions will have enormous consequences for workers' wages in the years ahead.

> With growing underemployment of labour and high levels of unemployment, massive state intervention may be required to avoid a deflationary situation.

The current crisis presents an opportunity to re-evaluate the adequacy of wages in some mostly female-dominated low-paid sectors, which have proved to be essential and of high social value during the crisis. In the light of the enormous pressure that the COVID-19 pandemic has placed on workers in public health services, and the disproportionate risks of contamination faced by workers in essential and front-line occupations, it may be time to improve the employment conditions of such workers – most of whom are women – which would also contribute to limiting the effects of the crisis on the gender pay gap, and could even reduce it. As noted in Part I of this report, the fact that the majority of workers in these sectors are women has exposed them excessively and unfairly to the health and economic consequences of the current crisis. Throughout the crisis, both during and after lockdowns, these workers have been on the front line, providing populations with healthcare and ensuring their continued access to food and basic goods, risking their lives and those of their families in the process.

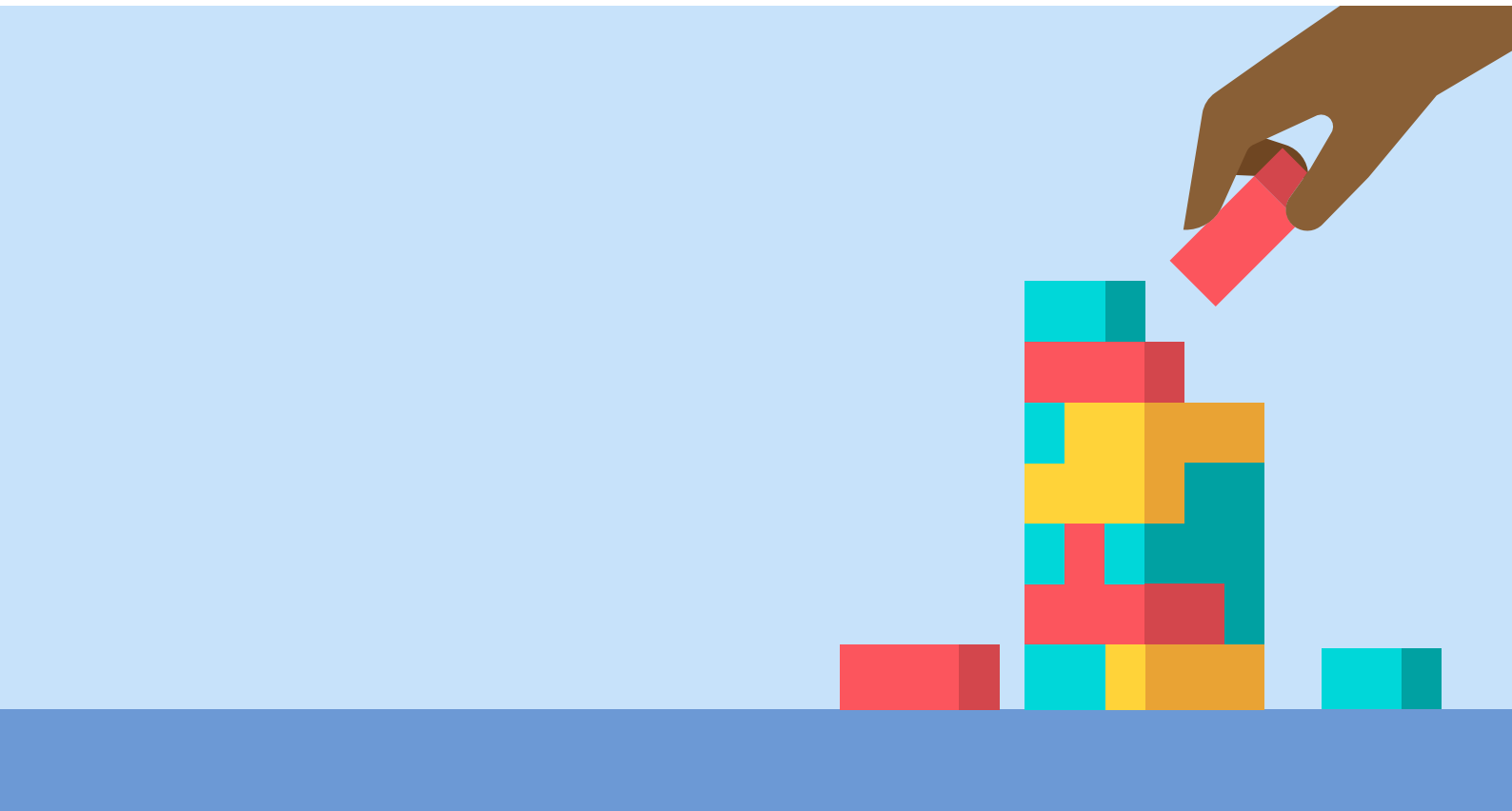
Wage subsidies, which have played a large role in mitigating the impact of the crisis by protecting workers' jobs and incomes, may need to be prolonged to support the recovery of the economy. As noted in Part I of this report, many countries have introduced wage subsidies, or extended and strengthened their coverage, with the aim of helping businesses to retain their workforces and workers to keep their jobs. Wage subsidies have not only supported the livelihoods of millions of workers by maintaining a large portion of their earnings, thereby also helping to protect aggregate demand and mitigate the recession; they have also enabled businesses to retain employees who already have the necessary skills for their jobs, thus sparing them the time, cost and effort involved in searching for and training new talent when the economy recovers. Wage subsidies have therefore been, in many countries, a worthwhile investment that is helping economies to recover better. However, for such a measure to be effective, the level of subsidized compensation must be adequate enough to meet the needs of workers and their families. In many countries, the level of wage subsidies has been determined using the prevailing minimum wage as a benchmark, thus reinforcing the need for adequate minimum wages.

> Wage subsidies, which have played a large role in mitigating the impact of the crisis by protecting workers' jobs and incomes, may need to be prolonged to support the recovery of the economy.

13

After the crisis: Adequate minimum wages, statutory or negotiated

In 2019, the ILO adopted the Centenary Declaration for the Future of Work, which calls for a human-centred approach to the future of work and, as part of this, for adequate wages for workers. It calls on the ILO to "carry forward into its second century with unrelenting vigour its constitutional mandate for social justice by further developing its human-centred approach to the future of work, which puts workers' rights and the needs, aspirations and rights of all people at the heart of economic, social and environmental policies", and identifies the private sector as "a principal source of economic growth and job creation". The Declaration notes that "persistent poverty, inequalities, and injustices ... in many parts of the world constitute a threat to those advances [in economic and social progress] and to securing shared prosperity and decent work for all". It also highlights the importance of "harnessing the fullest potential of technological progress and productivity growth, including through social dialogue, to achieve decent work and sustainable development, which ensure dignity, self-fulfilment and a just sharing of the benefits for all" (ILO 2019).



The ILO Centenary Declaration for the Future of Work emphasizes the importance of adequate minimum wages, statutory or negotiated. The Declaration calls for the institutions of work to be strengthened to ensure adequate protection of all workers, and reaffirms the continued relevance of the employment relationship, while recognizing the extent of informality and the need to achieve transition to formality. In this context, all workers should enjoy adequate protections, taking into account respect for their fundamental rights; maximum limits on working time; safety and health at work; and "an adequate minimum wage, statutory or negotiated". Wages are indeed a key dimension of the well-being of workers and their families, and adequate minimum wages are an essential requirement for a human-centred approach to the world of work.

In establishing adequate minimum wages, governments should make every effort to ensure the full consultation and, as far as possible, the direct participation, on an equal basis, of the social partners in the establishment and functioning of minimum wage systems. As emphasized in the ILO *Minimum Wage Policy Guide*, such consultations can be effective only when they are openly conducted and held before any decisions are taken by the public authorities (ILO 2016). This is because social dialogue recognizes a common interest in the well-being of businesses and workers and their families, despite the divergent views of the relevant actors on some occasions. For decision-makers, social dialogue is also an important opportunity for obtaining useful information and for involving the relevant social partners in an effective policy design. This improves ownership and buy-in from the social partners, which will permit more successful implementation. Social dialogue is also crucially important in minimizing misunderstandings and tensions, thereby contributing to the maintenance and strengthening of social and industrial peace. Furthermore, it is important to include independent experts and national statistical offices in the social dialogue process. As the various participants in social dialogue need to have advance access to relevant information in order to formulate their views, governments should devote sufficient resources to the collection of statistics on wages and other relevant data.

Seeking to support planning for a new and better "normal", this report has highlighted how adequate minimum wages can contribute to more social justice and less inequality. The empirical analyses presented in Part II have shown that minimum wages have the potential to reduce inequality. Achieving these effects, however, requires that minimum wages legally cover those employees who are most likely to be in low-paid jobs, including for example agricultural and domestic workers. It also requires that minimum wages be set at an adequate level relative to national circumstances, and that measures are taken to ensure compliance. The simulation exercise presented in Part II, Chapter 11, shows that the combination of extended legal coverage to workers on low pay and improved compliance, together with higher rates in countries where minimum wages are low, always contributes to reducing income inequality – even taking into account a moderate adverse employment effect. But the magnitude of the effects varies, depending in particular on the proportion of workers on the minimum wage who are located in the lower parts of the income distribution, and also on the share of minimum wage workers in the overall labour force. These factors in turn are closely linked to countries' level of development and the extent of informality in the labour market.

Seeking to support planning for a new and better "normal", this report has highlighted how adequate minimum wages can contribute to more social justice and less inequality.

To be truly effective, however, minimum wages must be accompanied by the creation of formal wage employment. This report has shown that where most low-income households rely on self-employment or wage employment in the informal economy, minimum wages will not be able to achieve their full potential. Indeed, the report has shown that non-compliance is linked to the much broader issue of informality. In recent years, several countries, especially in Latin America, have made significant progress in reducing informality among small enterprises and their workers through a multifaceted policy mix incorporating the provision of incentives and information, along with the facilitation of registration

and compliance (see, for example, Santiago et al. 2019). This trend has also made minimum wage policy much more relevant to reducing inequalities. The Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204), provides guidance to facilitate that transition.

> To be truly effective, minimum wages must be accompanied by the creation of formal wage employment.

The details of what constitutes an adequate minimum wage, including an adequate level, should be agreed at the national level through evidence-based social dialogue, in line with the Minimum Wage Fixing Convention (No. 131). Although a majority of ILO Member States set minimum wages only after consultation with employers' and workers' organizations, or with their full participation, in practice such consultations are not always effective. For many countries, improving these consultation mechanisms should be a priority in working towards adequate minimum wages. Furthermore, while this report has presented cross-country comparisons of the level of minimum wages in relation to median or mean wages, social dialogue around minimum wage rates should be based on solid, country-specific evidence about the needs of workers and their families, and on national economic factors. The needs of workers and their families can be evaluated by estimating the cost of living for families of different sizes, taking into account the costs of food, housing, education and health along with other important expenditures (see box 13.1). Relevant economic factors include the level and evolution of productivity and prices, and the capacity of sustainable enterprises to pay minimum wages while maintaining levels of employment.

▶ Box 13.1 Do minimum wages meet the needs of workers and their families?

Many workers around the world continue to suffer from very low wages. An ILO project funded by the Netherlands seeks to develop better indicators of the needs of workers and their families, reflecting national circumstances, and thereby to fill a knowledge gap and strengthen the capacity of governments, the social partners and enterprises to set wages that take into account both social and economic factors.[a] The project is being piloted in Costa Rica, Ethiopia, India, Indonesia and Viet Nam.

The methodology being tested estimates the cost of living on the basis of four categories of expenditure:

(1) The cost of food, calculated on the basis of a low-cost diet that is suitable for the target population in terms of composition and meets a standard of calorie intake as defined by the WHO and the Food and Agriculture Organization of the United Nations (FAO).

(2) The cost of housing, calculated on the basis of a basic dwelling of acceptable standard in the specific location. Following the United Nations Human Settlements Programme (UN-Habitat), this is calculated using national and international standards on characteristics of adequate housing, such as size, quality of materials and amenities.

(3) The cost of health and education. A basic level of education and health expenditure is calculated on a basis similar to that used by the World Bank in computing the non-food "basket" when constructing poverty lines. This element is estimated relatively by taking the average monthly expenditure on health and education of the population reference quintile that is closest to the calorie standard used for the cost of food in (1) above.

(4) The cost of other essentials. All other expenditure components (such as clothing and transport) are aggregated into one group; as for (3), this element is calculated relatively by taking the average monthly expenditure on other essentials of the population reference quintile that is closest to the calorie standard used in (1) above.

This methodology thus combines absolute measures for food and housing and relative measures for the cost of health, education and other essentials – a combination in line with the philosophy underlying the Minimum Wage Fixing Convention, 1970 (No. 131).

The methodology would provide a framework that is adaptable at the country level to reflect national circumstances and preferences, ensuring national ownership by governments and the social partners. A central element of minimum wage setting is social dialogue and consultation with the social partners. Indeed, the objective of the present methodology is to support governments and/or the social partners in their efforts to set adequate wages, taking into account both the needs of workers and their families and also economic factors.

[a] This technical cooperation project is entitled "Indicators and methodologies for setting adequate wages". For details, see https://www.ilo.org/global/topics/wages/projects/WCMS_742240/lang--en/index.htm.

Figure 13.1 Timeline of the ratification of the Minimum Wage Fixing Convention, 1970 (No. 131)

Year	
1970	Ecuador
1971	Japan, Libya, Spain
1972	Cuba, France, Syrian Arab Republic, Zambia
1973	Australia, Cameroon, Mexico, Netherlands
1974	Burkina Faso, Iraq, Nepal
1975	Romania, Sri Lanka
1976	Egypt, Nicaragua, Yemen
1977	Bolivia (Plurinational State of), Lebanon, Uruguay
1978	
1979	Costa Rica, Kenya
1980	Niger
1981	Eswatini
1982	
1983	Brazil, Guyana, Portugal, United Republic of Tanzania
1984 1985 1986 1987	
1988	Guatemala, Malta
1989 1990	
1991	North Macedonia
1992	Slovenia
1993	Azerbaijan, Bosnia and Herzegovina, Latvia
1994	Lithuania
1995	El Salvador
1996 1997 1998	
1999	Chile
2000	Republic of Moldova, Serbia
2001	Republic of Korea
2002	Antigua and Barbuda
2003	
2004	Albania
2005	Armenia
2006	Central African Republic, Montenegro, Ukraine
2007	Kyrgyzstan
2008 2009 2010 2011 2012	
2013	Morocco
2014 2015	
2016	Malaysia
2017	
2018	Bulgaria
Total	**54 ratifications**

Source: ILO.

54 out of 187

Among the 187 ILO Member States, just 54 countries have ratified the Convention since its adoption in 1970.

The evidence presented in this report reinforces the importance of implementing the principles of the Minimum Wage Fixing Convention, 1970 (No. 131). Key principles of the Convention include: (1) a broad scope of application, with exclusions kept to a minimum; (2) full consultation with – or direct participation of – the social partners, on a basis of equality, in the design and operation of minimum wages; (3) setting minimum wage levels that take into account both the needs of workers and their families and also economic factors; (4) adjusting the rates from time to time; and (5) appropriate measures to ensure the effective application of minimum wages. These principles and good practices are further developed in the ILO *Minimum Wage Policy Guide* (ILO 2016), and in the report of the Committee of Experts on the Application of Conventions and Recommendations (ILO 2020n).

Although many countries have ratified Convention No. 131 since its adoption, there remains scope for further ratifications. Among the 187 ILO Member States, just 54 countries have ratified the Convention since its adoption in 1970 (see figure 13.1). The first country to ratify it was Ecuador in 1970, followed by Japan, Libya and Spain in 1971. In recent years, Morocco, Malaysia and Bulgaria, respectively in 2013, 2016 and 2018, have joined the list of countries that have ratified the Convention.

14

A comprehensive set of measures to reduce inequality and cushion the impacts of the crisis

Although Part II of this report has highlighted the role of minimum wages in reducing inequality, meeting this objective requires more than just minimum wages; indeed, it calls for a comprehensive approach, including the use of collective bargaining, measures against discrimination and fiscal redistribution to ensure, in the words of the Declaration of Philadelphia, "a just share of the fruits of progress to all" (ILO 1944). In recent years, research has shown that inequality tends to be less pronounced in countries where a large number of workers are covered by collective agreements. Recent evidence on OECD countries shows that there is greater wage inequality where there is low collective bargaining coverage or when collective bargaining takes place predominantly at the enterprise level, and lower wage inequality when workers are covered by sectoral agreements (OECD 2019a). In some countries, extension provisions are used, subject in principle to certain criteria and sometimes to "opt-out" clauses, to apply the terms of collective agreements beyond their signatories, thereby extending the agreements' effects on inequalities to a larger share of the workforce.

In the light of the disproportionate impacts of the COVID-19 crisis on women and the significant risks of further increasing existing inequalities to their detriment, wage policies are also an essential means of limiting the effects of the crisis on the gender pay gap. Achieving gender equality and tackling gender discrimination at work through a transformative agenda are a key element of reducing inequality overall. The Equal Remuneration Convention, 1951 (No. 100), aims to promote the application of the principle of equal remuneration for male and female workers for work of equal value. Additionally, the Discrimination (Employment and Occupation) Convention, 1958 (No. 111), calls for the elimination of all discrimination on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, in respect of all aspects of employment and occupation, through the concrete and progressive development of equality of opportunity in law and in practice.

As highlighted in target 10.4 of the United Nations Sustainable Development Goals (SDGs), to reduce inequalities it is necessary to combine social security transfers with fiscal and wage policies. As this report has shown, while more adequate minimum wages can contribute to reducing income inequality, the magnitude of the effect is often limited. This is because income inequality is driven by many different factors and cannot be appreciably reduced through one single policy measure. The analysis conducted for this report indicates that in the lower deciles of the income distribution many people are unemployed, underemployed, working in the informal economy or out of the labour force. This suggests that decisively reducing inequality requires combined and coordinated interventions targeting both primary distribution (incomes from employment and capital) and secondary distribution (through taxes and transfers), and also through the provision of public services.

15

Adequate wage policies as an "accelerator" of the Sustainable Development Goals

Looking towards 2030, while the COVID-19 crisis has slowed and is even threatening to wipe out recent progress towards achieving the United Nations 2030 Agenda for Sustainable Development, adequate wage policies could make a significant contribution to countering its negative impacts. The 2030 Agenda for Sustainable Development (UN 2015) notes with concern the "rising inequalities" and the "enormous disparities of opportunity, wealth and power" that exist in the world. The reduction of inequalities is thus identified as a central element of the 2030 Agenda, and this objective is reflected in several of the interrelated SDGs. Wage policies are explicitly highlighted in SDG 10, which calls for progressive reductions in "inequality within and among countries", including through "fiscal, wage and social protection policies". But the importance of wages goes well beyond this single Goal.

Wage policies influence or connect with not just one but multiple SDGs. While there is an explicit link with SDG 10, wages directly influence or connect with at least eight SDG targets under four different Goals. Figure 15.1 and box 15.1 illustrate some of these links. These multiple connections reflect the fact that wages influence the levels of income and consumption of households, and thus – as highlighted in this report – levels of poverty and inequality. In addition, wages can shape household choices and the ability of parents to invest in the education of their children. They can be an element of discrimination against women; they influence the sustainability of enterprises and economic growth; and they are also a factor in social, economic and political inclusion. Better wage policies may also contribute to the end of hunger, to the eradication of child labour and to the employment objectives of the 2030 Agenda.

Adequate wage policies should therefore be part of any development strategy. While economic and productivity growth are core elements of development objectives, wage policies can help translate those improvements into the achievement of a broader set of interrelated SDGs. Box 15.1 illustrates the synergies, and the strong forward and backward linkages – as well as feedback effects – that exist among the various Goals and targets. Adequate wage policies can contribute to higher welfare, more equity, and more inclusive patterns of growth and development. To do so, however, wage policies need to be adapted to the national context through social dialogue as well as institution building. Furthermore, wage policies should be rooted in a "rights-based approach" to ensure universal access to the Goals and future sustainability.

Adequate wage policies should therefore be part of any development strategy.

Figure 15.1 Wages as an accelerator for achieving the Sustainable Development Goals

17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.

17.3 Mobilize additional financial resources for developing countries from multiple sources.

1.1 and 1.2 Bring more of the world's population above international and national poverty lines.

2.1 End hunger by 2030.

2.3 Double the agricultural productivity and incomes of small-scale food producers.

4.1 Ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

5.1 End all forms of discrimination against women.

8.1 Sustain per capita economic growth.

8.5 Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

9.2 Promote inclusive and sustainable industrialization and significantly raise industry's share of employment and gross domestic product (GDP).

10.1 Progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

10.2 Empower and promote the social, economic and political inclusion of all.

10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

Source: ILO, based on UN (2015).

▶ Box 15.1 Wages and the Sustainable Development Goals

Wages directly influence or connect with eight SDG targets under at least four Goals; indirectly, with over ten targets, very probably more.

Examples of direct links between wages and SDG targets:

1.1 and **1.2** – Bring more of the world's population above international and national poverty lines.

5.1 – End all forms of discrimination against women.

8.1 – Sustain per capita economic growth.

8.5 – Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

10.1 – Progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

10.2 – Empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

10.4 – Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

SDG targets indirectly influenced by wages:

2.1 – End hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.3 – Double the agricultural productivity and incomes of small-scale food producers.

4.1 – Ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

8.6 – Substantially reduce the proportion of youth not in employment, education or training.

8.7 – End all forms of child labour.

8.8 – Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

8.10 – Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

9.2 – Promote inclusive and sustainable industrialization and significantly raise industry's share of employment and gross domestic product (GDP), in line with national circumstances, and double its share in least developed countries.

▶ 8 targets, 4 Goals

While there is an explicit link with SDG 10, wages directly influence or connect with at least eight SDG targets under four different Goals.

10.7 – Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.

17.1 – Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.

17.3 – Mobilize additional financial resources for developing countries from multiple sources.

Each of these targets is operationalized by one or more indicators used to monitor progress towards the SDGs. These indicators can be divided into four groups according to the way in which they are related to wages:

- *Results*: In these cases, wages are the measurement of performance – that is, changes in wages have a direct impact on the evolution of the indicator, and progress or achievement is indicated by data on wages. An example is indicator 10.4.1, "Labour share of GDP".
- *Input*: In this type of indicator, wages are a means of achieving the target and directly influence the performance of the indicator. An example is target 1.1, "Eradicate extreme poverty": wages increase the purchasing power of households, reducing income insufficiency for the satisfaction of basic needs.
- *Contributing*: These indicators are influenced by wages through an additional channel or mechanism. Examples include indicator 4.3.1, "Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months", and indicator 10.2.1, "Proportion of people living below 50 per cent of median income". Wage increases can provide households with sufficient means for parents to be able to afford sending their children to school.
- *Process*: These are indicators to which wages are linked in a recursive way. The evolution of the indicator has an impact on wages, and changes in wages can also be perceived as a by-product or consequence of the evolution of the indicator. An example is target 2.3, "Double the agricultural productivity and incomes of small-scale food producers". Wage increases enhance domestic demand in areas and products where small-scale food producers sell, enabling them to command prices that cover the costs of production and generate profits, thereby enhancing incomes. If agricultural productivity increases, the purchasing power of local customers, especially wage earners, will also increase, raising demand for goods.

Appendix I

Country-specific nominal wage and real wage growth, 2015–19

Nominal wages

Africa

Country name	Currency	2015	2016	2017	2018	2019	Source
Algeria	DZD	39 242	39 901	40 325	40 955		Office National des Statistiques
Benin	XOF	46 596					Institut National de la Statistique et de l'Analyse Economique
Botswana	BWP					5126	ILOSTAT
Central African Republic	XAF	161 839	161 060	176 810			Institut Centrafricain des Statistiques et des Etudes Economiques et Sociales
Côte d'Ivoire	XOF	796 620					Institut National de la Statistique
Egypt	EGP	3809	4082	4550	4784	5132	Egypt Central Agency for Public Mobilization and Statistics
Eswatini	SZL		4573				ILOSTAT
Ghana	GHS	884		689			Ghana Statistical Service
Guinea	GNF					143 981	Ministère de l'Economie et des finances Ministère de la fonction publique et réforme de l'administration
Kenya	KES	49 524	52 389	55 753	59 994	64 854	Kenya National Bureau of Statistics
Lesotho	LSL	2145	1899	1988	2069	2373	Lesotho Bureau of Statistics
Madagascar	MGA	64 500					National Statistical Institute of Madagascar
Malawi	MWK	103 083	108 333	125 000			National Statistical Office of Malawi
Mali	XOF	64 631	70 076	69 596	73 226		ILOSTAT
Mauritius	MUR	25 368	27 626	29 462	30 809	31 866	Central Statistics Office of Mauritius
Morocco	MAD	4910	5032	5104	5188		Caisse Nationale de Sécurité Sociale
Namibia	NAD		6759		7935		ILOSTAT
Nigeria	NGN	45 698	52 215	50 466			Nigeria National Bureau of Statistics
Rwanda	RWF	50 923	57 306	56 983	57 878		National Institute of Statistics of Rwanda
Senegal	XOF		116 476	156 074			Ministère de l'économie, des finances et du plan
Seychelles	SCR				13 378		ILOSTAT
South Africa	ZAR	16 957	18 035	19 650	20 884	21 958	Statistics South Africa
United Republic of Tanzania	TZS	403 729					Tanzania National Bureau of Statistics
Togo	XOF			89 297			ILOSTAT
Tunisia	TND	1389	1581				Tunisian National Institute of Statistics
Uganda	UGX			387 469			Uganda Bureau of Statistics
Zambia	ZMW					4010	Central Statistical Office of Zambia
Zimbabwe	USD					308	ILOSTAT

Americas

Country name	Currency	2015	2016	2017	2018	2019	Source
Argentina	ARS		11 243	13 898	17 638	24 177	Ministerio de Trabajo, Empleo y Seguridad Social
Belize	BZD	1199	1158	1198	1218		ILOSTAT
Bolivia (Plurinat. State of)	BOB	3160	3276	3372	3526	3627	ILO SIALC
Brazil	BRL	1879	2002	2103	2213	2304	Brazilian Institute of Geography and Statistics (IBGE)
Canada	CAD	4126	4145	4229	4338	4456	Statistics Canada
Colombia	COP	1 212 616	1 290 862	1 268 917	1 355 017	1 448 509	ILO SIALC
Costa Rica	CRC	579 249	613 977	632 926	645 022	669 281	Central Bank of Costa Rica
Cuba	CUP	687	740	767			Cuba National Office of Statistics
Dominican Republic	DOP	15 309	17 128				Oficina Nacional de Estadistica
Ecuador	USD	561	570	567	574	612	ILO SIALC
El Salvador	USD	300	302	307			Ministry of the Economy and General Direction for Statistics and Census
Guatemala	GTQ	2186	2227	2182	2349	2377	Guatemala National Institute of Statistics
Honduras	HNL	6403	6918	6799	6790	7490	Honduras National Statistical Institute
Jamaica	JMD	83 784					Statistical Institute of Jamaica
Mexico	MXN	6580	6852	7120	7449	7828	Mexico National Employment Service Job Portal
Nicaragua	NIO	8714	9292	10 239	10 757		Ministry of Labour of Nicaragua (MITRAB)
Panama	PAB	1115	1238	1359	1422		Panama National Institute of Statistics and Census
Paraguay	PYG	2 264 613	2 278 289	2 404 013	2 511 621	2 586 091	ILO SIALC
Peru	PEN	1358	1452	1467	1510	1570	ILO SIALC
Puerto Rico	USD	2288	2284	2298	2401	2370	US Bureau of Labor Statistics
Trinidad and Tobago	TTD	5561	5758				ILOSTAT
United States	USD	3745	3818	3927	4058	4173	US Bureau of Labor Statistics
Uruguay	UYU	22 755	27 383	30 293	32 125	34 746	ILO SIALC

Arab States

Country name	Currency	2015	2016	2017	2018	2019	Source
Bahrain	BHD	757	774	768	801		Kingdom of Bahrain Labour Market Regulatory Authority
Jordan	JOD	484	493	500	524		Jordan Department of Statistics
Kuwait	KWD	795	764	747			Kuwait Central Statistical Office
Oman	OMR	643	696	703	673	705	Oman Ministry of the National Economy
Qatar	QAR	10 568	10 793	11 099	11 121	11 183	Qatar Statistics Authority
Saudi Arabia	SAR	6413					ILOSTAT

Asia and the Pacific

Country name	Currency	2015	2016	2017	2018	2019	Source
Bangladesh	BDT		12 915	12 016			Bangladesh Bureau of Statistics
Cambodia	KHR	788 000	887 000	1 039 000			National Institute of Statistics
China	CNY	5169	5631	6193	6872	7542	National Bureau of Statistics China
Fiji	FJD		752	652	797		Fiji Islands Bureau of Statistics
Hong Kong (China)	HKD	14 848	15 271	15 703	16 488	17 108	Census and Statistics Department of Hong Kong
India	INR	10 885	11 674	12 399	13 143		India Ministry of Statistics and Programme Implementation
Indonesia	IDR	2 069 306	2 552 962	2 742 621	2 829 130	2 913 897	Statistics Indonesia of the Republic of Indonesia
Iran (Islamic Rep. of)	IRR	7 693 583					Statistical Centre of Iran
Republic of Korea	KRW	3 300 091	3 424 726	3 518 155	3 696 314	3 818 727	Ministry of Labour of Korea
Lao People's Dem. Rep.	LAK			2 354 377			ILOSTAT
Macau (China)	MOP	13 805	14 150	14 580	15 330	15 880	Statistics and Census Service Macao SAR Government
Malaysia	MYR	2947	3112	3300	3596	3699	Department of Statistics of Malaysia
Mongolia	MNT	808 000	861 900	944 500	1 002 900	1 124 300	Mongolia National Statistical Office
Myanmar	MMK	124 157		181 917	203 091	209 712	Ministry of Labour, Employment and Social Security
Pakistan	PKR	14 971			18 754		Government of Pakistan Statistics Division
Philippines	PHP	9752	10 325	10 691	11 407		National Statistical Office of the Phillipines
Singapore	SGD	4892	5074	5229	5410	5549	Statistics Singapore
Sri Lanka	LKR	24 139	27 091	29 691	31 554		Department of Census and Statistics
Taiwan (China)	TWD	49 024	49 266	50 480	52 407	53 657	National Statistics Republic of China (Taiwan)
Thailand	THB	13 487	13 729	14 766	14 944	15 200	National Statistical Office of Thailand
Timor-Leste	USD		322				ILOSTAT
Viet Nam	VND	4 656 000	4 985 000	5 370 500	5 767 750	6 714 500	General Statistics Office of Viet Nam
Australia	AUD	4946	5036	5135	5270	5406	Australian Bureau of Statistics
Japan	JPY	333 300	333 700	333 800	336 700	338 000	Japan Ministry of Health Labor and Welfare
New Zealand	NZD	4403	4641	4775	4923	5031	Statistics New Zealand

Europe and Central Asia

Country name	Currency	2015	2016	2017	2018	2019	Source
Albania	ALL	38 148	37 341	39 026	39 647		Albania National Institute of Statistics
Armenia	AMD	171 615	174 445	177 817	172 727	182 673	National Statistics Service of Armenia
Austria	EUR	4280	4390	4460	4570	4690	Statistics Austria
Azerbaijan	AZN	467	500	529	545	635	State Statistical Committee of the Republic of Azerbaijan
Belarus	BYN	671	723	823	971	1091	Republic of Belarus Official Statistics
Belgium	EUR	3445	3489	3558	3627		Belgium Ministry of Economic Affairs
Bosnia and Herzegovina	BAM	1289	1301	1321	1363	1422	Agency of Statistics for Bosnia and Herzegovina
Bulgaria	BGN	878	948	1037	1146	1274	Bulgarian National Statistical Institute
Croatia	HRK	7978	8037	8304	8612	8766	Republic of Croatia Central Bureau of Statistics
Cyprus	EUR	1883	1878	1891	1938	1979	Statistical Service of Cyprus
Czechia	CZK	27 811	29 061	31 109	33 684	36 336	Czech Statistical Office
Denmark	DKK	39 575	40 102	40 954	41 736	42 592	Statistics Denmark
Estonia	EUR	1065	1146	1221	1310	1407	Statistics Estonia
Finland	EUR	3333	3368	3395	3465	3527	Statistics Finland
France	EUR	2533	2572	2628	2677	2723	Eurostat
Georgia	GEL	900	940	999	1068	1129	National Statistics Office of Georgia
Germany	EUR	2761	2830	2902	2994	3088	Federal Statistical Office of Germany
Greece	EUR	1598	1547	1564	1585	1607	Eurostat
Hungary	HUF	247 924	263 171	297 017	329 943		Hungarian Central Statistics Office
Iceland	ISK	440 000	484 000	516 000	536 000	554 000	Statistics Iceland
Ireland	EUR	3043	3077	3137	3239	3354	Central Statistics Office of Ireland
Israel	ILS	9503	9724	10 095	10 584		Israel Central Bureau of Statistics
Italy	EUR	2171	2188	2196	2233	2251	Italy National Bureau of Statistics
Kazakhstan	KZT	126 021	142 898	150 827	163 257	187 510	Agency of Statistics of Kazakhstan
Kyrgyzstan	KGS	13 483	14 847	15 670	16 427		National Statistical Committee of the Kyrgyz Republic
Latvia	EUR	818	859	926	1004	1076	Statistics Latvia
Lithuania	EUR	921	998	1087	1201	1307	Statistics Lithuania
Luxembourg	EUR	4727	4772	4919	5078	5167	STATEC Luxembourg
Malta	EUR	1399	1469	1517	1581	1637	Malta National Statistics Office
Republic of Moldova	MDL	4538	4998	5587	6268		National Bureau of Statistics Moldova
Montenegro	EUR	725	751	765	766	773	Statistical Office of Montenegro
Netherlands	EUR	2405	2436	2460	2508		Statistics Netherlands
North Macedonia	MKD	32 173	32 822	33 688	35 625	37 446	Republic of Macedonia State Statistical Office
Norway	NOK	42 580	43 270	44 310	45 610	47 290	Statistics Norway
Poland	PLN	3908	4052	4284	4590	4918	Central Statistical Office of Poland
Portugal	EUR	1097	1108	1133	1170	1188	Gabinete de Estratégia e Planeamento
Romania	RON	2555	2809	3223	4357	4853	Romanian National Institute of Statistics
Russian Federation	RUB	34 030	36 709	39 167	43 724	47 867	Russia Federal State Statistics Service
Serbia	RSD	61 145	63 474	65 976	68 629	75 814	Statistical Office of the Republic of Serbia
Slovakia	EUR	883	912	954	1013	1092	Statistical Office of the Slovak Republic

Country name	Currency	2015	2016	2017	2018	2019	Source
Slovenia	EUR	1556	1585	1627	1682	1754	Statistical Office of the Republic of Slovenia
Spain	EUR	1902	1898	1900	1919	1955	Spain National Statistics Institute
Sweden	SEK	32 000	32 800	33 700	34 600	35 300	Statistics Sweden
Switzerland	CHF		7491		7603		Swiss Federal Statistical Office
Tajikistan	TJS	879	962	1144	1234		State Committee on Statistics of Tajikstan
Turkey	TRY				3960		TurkStat
Turkmenistan	TMT	1263	1381	1403			State Committee of Turkmenistan Statistics
Ukraine	UAH	4195	5183	7104	8865	10 497	State Committee of Statistics of Ukraine
United Kingdom	GBP	2198	2275	2331	2405	2475	UK National Statistics
Uzbekistan	UZS		1 293 800	1 453 200	1 822 200	2 324 500	State Committee of the Republic of Uzbekistan on Statistics

Real wages

Africa

Country name	2015	2016	2017	2018	2019
Algeria	–1.0	–4.4	–4.3	–2.6	
Benin	2.1				
Central African Republic	1.3	–4.9	5.8		
Côte d'Ivoire	21.6				
Egypt	–1.7	–2.8	–9.8	–13.0	–5.8
Kenya	–6.6	0.0	–2.6	3.2	2.3
Lesotho	20.9	–16.6	0.2	–0.6	8.3
Madagascar	–1.1				
Malawi	4.9	–13.7	3.4		
Mali	–12.5	10.4	–2.4	3.4	
Mauritius	1.8	7.8	2.9	1.3	2.5
Morocco	1.3	0.8	0.7	–0.2	
Mozambique	12.8	–1.1	–3.9	6.6	5.1
Namibia	–3.9	–3.9	3.0	3.0	
Nigeria	–13.4	–1.2	–17.0		
Rwanda			7.3	–1.9	–1.9
Senegal			32.1		
South Africa	2.1	–0.1	3.5	1.6	1.0
United Republic of Tanzania	–4.6				
Tunisia	1.9	2.5	1.3	–1.2	
Uganda	16.2	1.4	–8.3		
Zimbabwe	5.9	–1.4			

Americas

Country name	2015	2016	2017	2018	2019
Argentina			–1.6	–5.5	–11.2
Belize	–19.7	–4.0	2.3	1.4	
Bolivia (Plurinational State of)	–3.1		0.1	2.3	1.1
Brazil	–1.3	–2.0	1.5	1.5	0.4
Canada	0.7	–0.9	0.4	0.3	0.7
Chile	1.8	1.4	3.5	2.0	2.0
Colombia	1.1	–1.0	2.3	1.1	0.8
Costa Rica	1.1	6.0	1.5	–0.3	1.6
Dominican Republic	11.1	10.1	3.7	5.1	4.9
Ecuador	–0.1	–0.2	–1.0	1.5	6.1
El Salvador	1.4	0.1	0.5		
Guatemala	–2.2	–2.4	–6.2	3.7	–2.9
Honduras	–0.4	–0.4	–5.4	–4.3	5.6
Jamaica	–2.3				
Mexico	0.5	1.3	–2.0	–0.3	1.3
Nicaragua	2.8	3.0	6.1	0.1	
Panama	6.9	10.1	6.1	6.5	
Paraguay	1.3	0.9	0.4	1.6	
Peru	0.1	3.2	–1.7	1.6	1.7
Puerto Rico	2.1	0.1	–1.1	3.2	–1.2
Trinidad and Tobago	–2.2	0.5			
United States*	2.2	0.7	0.7	0.9	1.0
Uruguay	1.6	1.6	2.9	0.2	1.3

***** United States numbers are based on BLS CEU050 0000012

Arab States

Country name	2015	2016	2017	2018	2019
Bahrain	–0.4	–0.5	–2.1	2.2	–1.5
Jordan	1.2	2.7	–1.8	0.3	
Kuwait	4.2	–7.1	–0.6		
Occupied Palestinian Territory	–1.4	2.7	1.9	8.8	4.9
Oman	7.3	7.1	–0.6	–5.1	3.9
Qatar	–1.0	–0.5	2.4	0.0	0.9
Saudi Arabia	5.2				

Asia and the Pacific

Country name	2015	2016	2017	2018	2019
Australia	–0.1	0.6	0.0	0.7	1.0
Bangladesh	3.5	3.6	3.0	0.8	
Cambodia	21.3	9.3	13.8		
China	6.7	5.5	5.9	7.0	5.6
Fiji			–16.2	17.5	
Hong Kong (China)	1.2	0.4	1.3	2.5	0.7
India	2.8	2.6	2.5	0.0	
Indonesia	–0.4	19.2	3.5	0.0	–0.2
Iran (Islamic Republic of)	7.7	8.5	8.8		
Japan	0.3	0.2	–0.4	–0.1	–0.6
Republic of Korea	2.7	2.8	0.8	3.5	2.8
Macau (China)	0.4	0.1	1.8	2.1	1.2
Malaysia	4.0	3.4	2.2	7.9	1.8
Mongolia	–4.2	6.2	4.7	–1.4	2.8
Myanmar			13.3	5.4	–4.2
Nepal	0.7	2.4	5.5	3.4	5.9
New Zealand	2.4	4.7	1.0	1.5	0.7
Pakistan	8.9	4.0	4.0	4.0	
Philippines	1.1	4.6	0.7	1.4	
Singapore	4.0	4.3	2.5	3.0	1.9
Sri Lanka	15.5	7.9	2.8	1.9	
Taiwan (China)	3.1	–0.5	1.4	2.3	1.6
Thailand	2.8	1.6	6.8	0.1	0.9
Timor-Leste	–23.2				
Viet Nam	4.8	4.3	4.1	3.7	12.4

Europe and Central Asia

Country name	2015	2016	2017	2018	2019
Albania	0.3	–3.4	2.5	–0.4	
Armenia	7.5	6.9	–0.5	–4.3	6.9
Austria	1.3	1.6	–0.6	0.3	1.1
Azerbaijan	1.0	–4.8	–6.4	0.7	13.6
Belarus	–2.3	–3.8	7.5	12.6	7.3
Belgium	0.3	–0.5	–0.2	–0.4	1.0
Bosnia and Herzegovina	1.0	2.6	0.7	1.7	3.2
Bulgaria	8.0	9.5	8.1	7.7	8.4
Croatia	0.8	1.8	2.2	2.2	3.0
Cyprus	1.6	1.2	0.2	1.7	1.4
Czechia	3.4	3.8	4.5	6.0	5.2
Denmark	1.4	1.3	1.1	1.2	0.7
Estonia	5.9	6.8	2.8	3.7	4.8
Finland	0.9	0.7	0.0	0.9	0.6
France	2.1	0.8	0.1	–0.6	0.6
Georgia	5.8	2.2	0.2	4.2	0.8
Germany	2.2	2.1	0.8	1.2	1.6
Greece	0.2	1.4	–0.4	2.2	1.1
Hungary	4.4	5.7	10.3	8.3	
Iceland	5.1	8.2	4.8	1.2	0.5
Ireland	1.2	1.3	1.7	2.5	2.3
Israel	2.6	2.9	3.6	4.0	
Italy	1.1	0.9	–1.0	0.4	0.1
Kazakhstan	–2.3	–1.1	–1.7	1.7	9.1
Kyrgyzstan	3.1	9.7	2.3	3.2	3.1

Country name	2015	2016	2017	2018	2019
Latvia	6.7	4.9	4.8	5.7	4.1
Lithuania	6.1	7.6	5.1	7.8	6.3
Luxembourg	2.8	0.7	1.4	1.6	0
Malta	2.0	4.1	2.0	2.4	1.9
Republic of Moldova	1.0	3.0	4.9	8.9	10.1
Montenegro	–1.3	3.9	–0.5	–2.4	–0.2
Netherlands	1.7	1.2	–0.3	0.3	
North Macedonia	3.0	2.3	1.3	4.2	3.8
Norway	–1.5	–1.9	0.5	0.2	1.4
Poland	4.4	4.3	3.7	5.5	4.6
Portugal	–0.2	0.4	0.7	2.1	0.6
Romania	10.2	11.8	12.8	8.0	8.8
Russian Federation	–9.4	0.8	2.9	8.5	4.6
Serbia	–2.4	–1.7	0.9	3.9	8.4
Slovakia	3.2	3.8	3.3	3.6	5.0
Slovenia	0.9	2.3	0.4	2.1	2.9
Spain	1.6	–0.1	–1.8	–0.6	1.2
Sweden	2.0	1.5	1.1	0.4	0.4
Switzerland	1.5	1.1	–0.1	–0.4	0.5
Tajikistan	7.7	0.2	–0.4	0.3	–2.6
Turkey	5.6	7.6	1.2	–0.4	2.3
Turkmenistan	2.0	5.4	–5.9		
Ukraine	–20.2	9.0	19.1	12.5	9.8
United Kingdom	1.1	2.8	–0.2	0.7	1.1
Uzbekistan			–1.4	6.7	11.2

Appendix II

Minimum wage information for individual countries

Country	Region	Currency	Frequency	2015	2016	2017	2018	2019	Minimum wage rate calculation method
Algeria	**AFRICA**	DZD	Monthly	18000	18000	18000	18000	18000	One national minimum wage
Angola		AOA	Monthly	15003	15003	16503.3	16503.3	21454	National minimum wage floor
Benin		XOF	Monthly	40000	40000	40000	40000	40000	One national minimum wage
Botswana		BWP	Hourly	4.86	5.79	5.79	5.79	6.77	Rate applicable to most sectors
Burkina Faso		XOF	Monthly	34664	34664	34664	34664	34664	SMIG rate within SMIG/SMAG system
Burundi		BIF	Daily	160	160	160	160	160	Urban rate
Cabo Verde		CVE	Monthly	11000	11000	11000	13000	13000	One national minimum wage
Cameroon		XAF	Monthly	36270	36270	36270	36270	36270	One national minimum wage
Central African Republic		XAF	Monthly	35000	35000	35000	35000	35000	SMIG rate within SMIG/SMAG system
Chad		XAF	Monthly	60000	60000	60000	60000	60000	SMIG rate within SMIG/SMAG system
Comoros		KMF	Monthly	55000	55000	55000	55000	55000	One national minimum wage
Congo		XAF	Monthly	90000	90000	90000	90000	90000	One national minimum wage
Côte d'Ivoire		XOF	Monthly	60000	60000	60000	60000	60000	SMIG rate within SMIG/SMAG system
Democratic Republic of the Congo		CDF	Daily	1680	1680	1680	7075	7075	One national minimum wage
Equatorial Guinea		XAF	Monthly	117304	117304	117304	117304	117304	One national minimum wage
Eswatini		SZL	Monthly	420	420	420	420	420	Rate applied to unskilled workers
Gabon		XAF	Monthly	150000	150000	150000	150000	150000	One national minimum wage
Gambia		GMD	Daily	50	50	50	50	50	One national minimum wage
Ghana		GHS	Daily	7.00	8.00	8.80	9.68	10.65	One national minimum wage
Guinea		GNF	Monthly	440000	440000	440000	440000	440000	One national minimum wage

Country	Region	Currency	Frequency	2015	2016	2017	2018	2019	Minimum wage rate calculation method
Guinea-Bissau	AFRICA	XOF	Monthly	19030	19030	19030	19030	19030	One national minimum wage
Kenya		KES	Monthly	17200.03	17200.03	20296.04	21310.84	21310.84	Rate of machine attendant in municipalities and town councils of Mavoko, Riuru and Limuru
Lesotho		LSL	Monthly	1178	1178	1178	1178	1620	National minimum wage floor
Liberia		USD	Daily	3.5	3.5	3.5	3.5	3.5	Rate applied to unskilled labourers
Libya		LYD	Monthly	450	450	450	450	450	One national minimum wage
Madagascar		MGA	Monthly	133013.4	144003	155523	168019	200000	SMIG rate within SMIG/SMAG system
Malawi		MWK	Monthly	14326	17880.2	25000	25000	25000	One national minimum wage
Mali		XOF	Monthly	28465	40000	40000	40000	40000	SMIG rate within SMIG/SMAG system
Mauritania		MRO	Monthly	3000	3000	3000	3000	3000	SMIG rate within SMIG/SMAG system
Mauritius		MUR	Monthly	7100	7350	7550	8000	8500	Trainee rate before minimum wage introduced in 2018; Unskilled outside export processing zone rate
Morocco		MAD	Monthly	2570.9	2570.9	2570.9	2570.9	2698.8	SMIG rate within SMIG/SMAG system
Mozambique		MZN	Monthly	4815	5200	5695	6620	7000	Rate applied to manufacturing
Niger		XOF	Monthly	30047	30047	30047	30047	30047	One national minimum wage
Nigeria		NGN	Monthly	18000	18000	18000	18000	30000	One national minimum wage
Rwanda		RWF	Daily	100	100	100	100	100	One national minimum wage
Senegal		XOF	Monthly	36244	36244	36244	52500	55000	SMIG rate within SMIG/SMAG system
Seychelles		SCR	Hourly	26.7	33.3	33.3	33.3	34.97	Rate applied to workers (as opposed to casual workers)
Sierra Leone		SLL	Monthly	500000	500000	500000	500000	500000	One national minimum wage
South Africa		ZAR	Hourly	15.47	16.41	17.66	18.90	20.00	Contract cleaner "Area C" rate before minimum wage introduced in 2019
Sudan		SDG	Monthly	0.028	0.028	0.028	0.028	0.028	One national minimum wage
Togo		XOF	Monthly	35000	35000	35000	35000	35000	SMIG rate within SMIG/SMAG system
Tunisia		TND	Hourly	1.67	1.67	1.76	1.87	1.87	SMIG rate within SMIG/SMAG system
Uganda		UGX	Monthly	6000	6000	6000	6000	6000	One national minimum wage
United Republic of Tanzania		TZS	Monthly	115000	115000	115000	115000	115000	Rate applied to manufacturing
Zambia		ZMW	Monthly	700	700	700	1050	1050	Rate applied to unskilled workers (Grade I)

Country	Region	Currency	Frequency	2015	2016	2017	2018	2019	Minimum wage rate calculation method
Antigua and Barbuda	AMERICAS	XCD	Hourly	8.2	8.2	8.2	8.2	8.2	One national minimum wage
Argentina		ARS	Monthly	5588	7560	8860	11300	16875	One national minimum wage
Bahamas		BSD	Weekly	210	210	210	210	210	One national minimum wage
Barbados		BBD	Weekly	250	250	250	250	250	One national minimum wage
Belize		BZD	Hourly	3.3	3.3	3.3	3.3	3.3	One national minimum wage
Bolivia (Plurinational State of)		BOB	Monthly	1656	1805	2000	2060	2122	One national minimum wage
Brazil		BRL	Monthly	788	880	937	954	998	National minimum wage floor
Canada		CAD	Hourly	10.3	10.5	10.75	11	11.15	Lowest provincial rate
Chile		CLP	Monthly	241000	257500	270000	288000	301000	Rate for adults (multiple rates by age)
Colombia		COP	Monthly	644350	689455	737717	781242	828116	One national minimum wage
Costa Rica		CRC	Monthly	283799.64	289828.62	293132.67	300255.79	309143.36	Rate applied to unskilled workers
Dominica		XCD	Hourly	4	4	4	4	4	One national minimum wage
Dominican Republic		DOP	Monthly	7843	7843	9411.6	9411.6	10730	Rate applied to small enterprises
Ecuador		USD	Monthly	354	366	375	386	394	National minimum wage floor
El Salvador		USD	Monthly	250.025	250.025	304.166	304.166	304.166	Rate applied to manufacturing
Grenada		XCD	Daily	35	35	35	35	35	Rate applied to manufacturing
Guatemala		GTQ	Monthly	2394.4	2490.21	2643.21	2742.37	2742.40	Rate applied to manufacturing
Guyana		GYD	Monthly	35000	35000	44200	44200	44200	One national minimum wage
Haiti		HTG	Daily	225	300	350	420	500	Segment F, "Other manufacturing industries" (for export)
Honduras		HNL	Monthly	7222.01	7619.20	7871.42	8243.74	8636.96	Rate applied to manufacturing
Jamaica		JMD	Weekly	5600	6200	6200	7000	7000	National minimum wage floor
Mexico		MXN	Daily	70.10	73.04	88.36	88.36	102.68	National minimum wage floor
Nicaragua		NIO	Monthly	4285.84	4680.24	5074.31	5615.75	5615.75	Rate applied to manufacturing
Panama		PAB	Hourly	2.00	2.11	2.11	2.20	2.20	Rate applied to manufacturing (small businesses)
Paraguay		PYG	Monthly	1824055.6	1964507	2041123	2112562	2192839	National minimum wage floor
Peru		PEN	Monthly	750	850	850	930	930	One national minimum wage
Saint Kitts and Nevis		XCD	Weekly	360	360	360	360	360	One national minimum wage
Saint Vincent and the Grenadines		XCD	Daily	40	40	40	40	40	Rate applied to manufacturing

Country	Region	Currency	Frequency	2015	2016	2017	2018	2019	Minimum wage rate calculation method
Suriname	AMERICAS	SRD	Hourly	4.29	5.22	6.14	6.14	8.40	National minimum wage floor
Trinidad and Tobago		TTD	Hourly	15	15	15	15	17.5	One national minimum wage
United States		USD	Hourly	7.25	7.25	7.25	7.25	7.25	National minimum wage floor
Uruguay		UYU	Monthly	10000	11150	12265	13430	15650	One national minimum wage
Venezuela (Bolivarian Republic of)		VES	Monthly	9.64818	27.0921	177.507	450000	11250000	One national minimum wage
Iraq	ARAB STATES	IQD	Monthly	250000	250000	350000	400000	400000	Rate applied to unskilled workers
Jordan		JOD	Monthly	190	190	220	220	220	National general rate
Kuwait		KWD	Monthly			75	75	75	Private and oil sector rate
Lebanon		LBP	Monthly	675000	675000	675000	675000	675000	One national minimum wage
Oman		OMR	Monthly	325	325	325	325	325	One national minimum wage (only applies to nationals)
Syrian Arab Republic		SYP	Monthly	9765	9765	9765	9765	9765	One national minimum wage
Afghanistan	ASIA AND THE PACIFIC	AFN	Monthly	5000	5000	5500	5500	5500	Non-permanent private sector
Australia		AUD	Weekly	656.9	672.7	694.9	719.2	740.8	National minimum wage floor
Bangladesh		BDT	Monthly	1500	1500	1500	1500	1500	One national minimum wage
Cambodia		USD	Monthly	128	140	153	170	182	Minimum wage in textile, garment and shoe-sewing industries
China		RMB	Monthly	1250	1270	1400	1500	1500	Lowest class I rate of each province
Cook Islands		NZD	Hourly	6.25	6.25	7	7.25	7.6	One national minimum wage
Fiji		FJD	Hourly	3.15	3.15	3.28	3.28	3.28	National minimum wage floor
India		INR	Daily	160	160	176	176	176	National minimum wage floor
Indonesia		IDR	Monthly	1100000	1237700	1337645	1454154	1570922	Lowest provincial rate
Iran (Islamic Republic of)		IRR	Monthly	*(not available)*	9299310	9299310	11112690	15170000	One national minimum wage
Japan		JPY	Hourly	693	714	737	761	790	Lowest provincial rate
Kiribati		AUD	Hourly		1.30	1.30	1.30	1.30	Rate for local businesses and companies
Lao People's Democratic Republic		LAK	Monthly	900000	900000	900000	1100000	1100000	One national minimum wage
Malaysia		MYR	Monthly	900	1000	1000	1000	1100	Peninsular Malaysia rate
Marshall Islands		USD	Hourly	2	3	3	3	3	One national minimum wage
Mongolia		MNT	Monthly	192000	192000	240000	240000	320000	One national minimum wage
Myanmar		MMK	Daily	3600	3600	3600	4800	4800	One national minimum wage

Country	Region	Currency	Frequency	2015	2016	2017	2018	2019	Minimum wage rate calculation method
Nepal	ASIA AND THE PACIFIC	NPR	Monthly	8000	8000	9700	13450	13450	National minimum wage floor
New Zealand		NZD	Hourly	14.75	15.25	15.75	16.5	17.7	Rate for adults (multiple rates by age)
Pakistan		PKR	Monthly	13000	14000	15000	15000	17500	Unskilled worker, lowest provincial rate
Palau		USD	Hourly	3.25	3.5	3.5	3.5	3.5	One national minimum wage
Papua New Guinea		PGK	Hourly	3.36	3.5	3.5	3.5	3.5	One national minimum wage
Philippines		PHP	Daily	250	260	265	280	280	Lowest provincial rate, non-agricultural
Republic of Korea		KRW	Monthly	1166220	1260270	1352230	1573770	1745150	One national minimum wage
Samoa		WST	Hourly	2.3	2.3	2.3	2.3	2.3	SMIG rate within SMIG/SMAG system
Solomon Islands		SBD	Hourly	4	4	4	4	8	SMIG rate within SMIG/SMAG system
Sri Lanka		LKR	Monthly		12500	12500	12500	12500	One national minimum wage
Thailand		THB	Daily	300	300	300	308	313	Lowest provincial rate
Timor-Leste		USD	Monthly	115	115	115	115	115	One national minimum wage
Vanuatu		VUV	Hourly	170	170	170	200	220	One national minimum wage
Viet Nam		VND	Monthly	2150000	2400000	2580000	2760000	2920000	Lowest regional rate
Albania	EUROPE AND CENTRAL ASIA	ALL	Monthly	22000	22000	24000	24000	26000	One national minimum wage
Armenia		AMD	Monthly	55000	55000	55000	55000	55000	One national minimum wage
Azerbaijan		AZN	Monthly	105	105	116	130	250	One national minimum wage
Belarus		BYN	Monthly	218	239	265	305	330	One national minimum wage
Belgium		EUR	Monthly	1502	1531.93	1562.59	1562.59	1593.8	One national minimum wage
Bosnia and Herzegovina		BAM	Monthly		406	406	406	406	Minimum wage in Republika Srpska
Bulgaria		BGN	Monthly	380	420	460	510	560	One national minimum wage
Cyprus		EUR	Monthly	870	870	870	870	870	Rate applied to unskilled workers
Czechia		CZK	Monthly	9200	9900	11000	12200	13350	One national minimum wage
Croatia		HRK	Monthly	3029.55	3120	3276	3439.8	3750	One national minimum wage
Estonia		EUR	Monthly	390	430	470	500	540	One national minimum wage
France		EUR	Monthly	1457.52	1466.62	1480.27	1498.47	1521.22	One national minimum wage
Georgia		GEL	Monthly	40	40	40	40	40	One national minimum wage
Germany		EUR	Monthly	1440	1440	1498	1498	1557	One national minimum wage

Country	Region	Currency	Frequency	2015	2016	2017	2018	2019	Minimum wage rate calculation method
Greece	EUROPE AND CENTRAL ASIA	EUR	Monthly	683.76	683.76	683.76	683.76	758.3	One national minimum wage
Hungary		HUF	Monthly	105000	111000	127500	138000	149000	National minimum wage floor
Ireland		EUR	Monthly	1461.85	1546.35	1563.25	1614	1656.2	Rate for adults (multiple rates by age)
Israel		ILS	Monthly	4650	4825	5300	5300	5300	One national minimum wage
Kazakhstan		KZT	Monthly	21364	22859	24459	28284	42500	One national minimum wage
Kyrgyzstan		KGS	Monthly	970	1060	1200	1662	1750	One national minimum wage
Latvia		EUR	Monthly	360	370	380	430	430	One national minimum wage
Lithuania		EUR	Monthly	325	380	380	400	555	Rate applied to unskilled workers
Luxembourg		EUR	Monthly	1922.96	1922.96	1998.59	1998.59	2089.75	National minimum wage floor
Malta		EUR	Monthly	720.46	728.04	735.63	747.5	762	Rate for adults (multiple rates by age)
Montenegro		EUR	Monthly	288.05	288.05	288.05	288.05	331.33	One national minimum wage
Netherlands		EUR	Monthly	1507.8	1537.2	1565.4	1594.2	1635.6	Rate for adults (multiple rates by age)
North Macedonia		MKD	Monthly	13986	14563	17130	17370	17943	National minimum wage floor
Poland		PLN	Monthly	1750	1850	2000	2100	2250	One national minimum wage
Portugal		EUR	Monthly	589.17	618.33	649.83	676.67	700	National minimum wage floor
Republic of Moldova		MDL	Monthly	1000	1000	1000	1000	1000	National minimum wage floor
Romania		RON	Monthly	1050	1250	1450	1900	2080	National minimum wage floor
Russian Federation		RUB	Monthly	5965	7500	7800	11163	11280	National minimum wage floor
Serbia		RSD	Monthly	28491.92	28378.89	30586.31	33355.21	36365	One national minimum wage
Slovenia		EUR	Monthly	791	790.73	804.96	842.79	886.6	One national minimum wage
Spain		EUR	Monthly	756.7	764.4	825.65	858.55	1050	One national minimum wage
Slovakia		EUR	Monthly	380	405	435	480	520	One national minimum wage
Tajikistan		TJS	Monthly	250	400	400	400	400	One national minimum wage
Turkey		TRY	Monthly	1273.50	1647	1777.50	2029.50	2558.40	One national minimum wage
Turkmenistan		TMT	Monthly	535	590	650	715	790	One national minimum wage
Ukraine		UAH	Monthly	1378	1600	3200	3723	4173	One national minimum wage
United Kingdom		GBP	Hourly	6.7	7.2	7.5	7.83	8.21	National minimum wage floor
Uzbekistan		UZS	Monthly	130240	149775	172240	202730	634880	One national minimum wage

SMAG = *salaire minimum agricole garanti* (minimum wage for agricultural workers). SMIG = *salaire minimum interprofessionnel garanti* (interoccupational minimum wage).

Note: A blank cell indicates that no minimum wage was in existence at this date. For Belarus, Mauritania, Sao Tome and Principe, and Venezuela (Bolivarian Republic of), the minimum wage levels are shown in the latest main currency for the period of 2015–19.

Appendix III

Using minimum wage levels: Concepts and definitions

Part II, Chapter 7, of the report uses country-specific microdata – such as labour force surveys, or integrated household and labour surveys – to estimate the distribution of labour earnings, study the relative value of a country's specific minimum wage level (or levels), and compare these relative values across the countries and regions of the world.[1] Before any such comparison can take place, some of the variables employed in the analysis have to undergo conversion to enable correct comparisons of individuals' earnings within a country, and of minimum wage levels across countries. This appendix describes the conversions undertaken for this purpose.

Conversion of minimum wage levels to monthly estimates

When a country sets a statutory minimum wage, the given level has to be anchored to at least one working-time framework. For example, in the case of the United States the national benchmark is the hour, the current federal rate being US$7.25 per hour. In Spain, on the other hand, the benchmark is the month, the current rate being €1,050 per month – slightly less than a month if we consider the 14 payments required by law each year – although the law also stipulates rates for those who are paid on a daily basis or by the hour. In Mexico, meanwhile, the minimum wage is set per day's work, currently standing at 102.68 Mexican pesos per day.

One key objective of this report is to compare each country's minimum wage level with the labour income information provided in the surveys. In all 72 countries for which survey data have been used in the report, respondents declare monthly earnings – irrespective of whether they are wage employees, employers or own-account workers. In order to compare the earnings of wage employees with the country's minimum wage, we have converted minimum wage values to monthly equivalents in countries where the month is not used as the minimum wage benchmark. This conversion affects six of the countries in our sample, namely, Australia, Canada, Mexico, Tunisia, the United Kingdom and the United States. Whereas Canada's minimum wage is based on a week's work, and Mexico's on a day's work, for the remaining four countries in this group the minimum wage is defined per hour's work. In the case of Australia we have multiplied the weekly rate by 52 (weeks per year) and divided the amount by 12 (months per year) to arrive at an equivalent monthly minimum wage. For the countries that quote minimum wages in hourly rates, we have estimated the national monthly amount using the daily rate, multiplied by the median weekly number of hours worked by full-time workers, multiplied by 52 and divided by 12.[2]

[1] See Appendix V for an overview of the data sources used in the report.

[2] In all five countries where the minimum wage is provided in terms of an hourly rate, there is no specific value of "hours worked per week" that could be considered as the legal number for a full-time worker. Instead, these countries provide a range of values for work that should be considered full time. For example, in the United States, while there is no legal definition of how many hours constitute full-time work, the Government states that on average a full-time job amounts to about 40 hours per week (see https://www.dol.gov/general/topic/workhours/full-time). In Tunisia, a job is considered full time if the number of hours worked per week is between 40 and 48 (see https://www.oecd.org/employment/emp/Tunisia.pdf). In the case of Canada, full-time employment is defined as working more than 30 hours per week. In order to accommodate these "range-based" definitions in our estimates, we have used our microdata to estimate the median number of weekly hours worked by wage employees who define themselves in their survey responses as working full-time. We thus arrive at the median value of 40 hours worked by full-time workers in Canada, the United Kingdom and the United States. In contrast, in Norway and Tunisia the corresponding value is 38 and 48 hours, respectively.

Conversion of labour income of wage employees to full-time equivalent monthly earnings

The number of hours worked by wage employees varies significantly, with some working part-time and others full-time or even more than full-time. This means that the earnings of wage employees are not comparable unless we standardize them according to a common time framework. With the exception of data for Western European countries (discussed below), in all other surveys, the respondents state their monthly earnings together with the number of hours usually worked during a week. We use these two variables – monthly earnings and hours worked per week – to approximate the hourly wage earned by wage employees. To do this, we multiply the hours worked per week by 52 (weeks per year) and divide the result by 12 (months per year); the monthly amount earned is then divided by this figure.[3]

At this point, wage employees are comparable in terms of their earnings per hour; but, as noted above, the minimum wage at the country level is usually specified on a monthly basis. In order to compare individuals' earnings with their country's minimum wage, we first construct the variable "full-time equivalent monthly earnings", which corresponds to the individual's specific hourly earnings, multiplied by the expected total number of hours worked per month of a full-time worker. The latter figure is constructed using the estimated median value of hours worked per week among full-time workers, multiplied by 52 (weeks) and then divided by 12 (months). For example, in a country where the median weekly number of hours worked by full-time workers is 40, if a worker earns 3,900 local currency units (LCUs) per month working on average five hours per week, his or her full-time equivalent monthly earnings will be 31,200 LCUs. In contrast, a worker who earns 3,900 LCUs per month working usually 50 hours per week will be assigned the full-time equivalent monthly earnings of 3,120 LCUs.

The procedure used to identify "full-time monthly equivalent earnings" is slightly different in the case of data for Western European countries included in the report. For these, the report uses the micro-data sets from the European Union Statistics on Income and Living Conditions (EU-SILC), which are maintained by Eurostat (see Appendix V). For each individual, EU-SILC provides annual earnings along with the number of months worked per year; each respondent also declares whether in a given month they worked full- or part-time. Following Atkinson's method (Atkinson and Marlier 2010), we derive full-time equivalent monthly earnings from annual earnings by re-weighting part-time months into the hourly equivalents of full-time months. For example, if one month of part-time work is estimated to be equivalent to 60 per cent of a full-time month, a person who has worked 12 months part-time is assigned 7.2 full-time months per year. In another example, if in the course of one year a person has worked eight months full-time and two months part-time and been unemployed for the other two months, he or she will be assigned an equivalent of 9.2 full-time work months for that year. The weighting factor used in these calculations is based on the gender-specific ratio between the median hours worked by part- and full-time workers.[4] Once the variable "full-time equivalent months worked during the last calendar year" has been constructed, this is applied as a denominator to total declared annual labour earnings to arrive at the variable "full-time equivalent monthly labour earnings".

[3] Unfortunately, it is extremely rare for survey questionnaires to include a question on the number of weeks worked per month. Therefore, we approximate this missing value at 4.3, which corresponds to the number of weeks in a year divided by the number of months in a year.

[4] One of the problems with the cross-sectional version of EU-SILC is the year shift between current labour market characteristics and declared incomes, including earnings, the latter being based on "last calendar values". For example, the most recent data release (2018) provides information on annual earnings for 2017 but current hours worked during 2018. For the vast majority of respondents (about 95 per cent across all EU-SILC countries) this time shift is not a significant problem because they report working in the same employment as the last calendar year. Nevertheless, the assumption has to be made that each worker's labour market characteristics – such as hours, earnings and contractual conditions – have not changed. As a result, one can use "current" hours worked per week to approximate the hourly wage using the average monthly earnings from the previous calendar year – that is, total annual earnings divided by the number of months worked. However, this presents the problem that "current" hours worked are not representative of all the months worked for those workers who declare a mixture of full-time and part-time months. Atkinson assumed that although a person's number of hours worked can change between years, the distribution of hours worked in the population remains roughly constant over time (Atkinson and Marlier 2010, 219). Thus, the ratio between the median hour of part-time workers and the median hour of full-time workers should also remain constant. This ratio provides an approximation of the value (in terms of hours) of a part-time month relative to that of a full-time month. We also take into account the fact that women and men differ in the labour market with respect to hours of work, with women more likely than men to work part-time. Thus, the ratio between median full-time and median part-time hours can be estimated separately for women and men for each of the EU-SILC countries. In this way, we arrive at a full-time monthly equivalent income (yearly labour earnings divided by full-time equivalent month's work) without having to assume that currently declared hours provide a good approximation to all hours worked during the last calendar year.

Estimating the Kaitz index

The Kaitz index provides a currency-neutral relative measure with which to assess the level of the minimum wage in a country in relation to that country's labour income distribution. In this report we construct each country's Kaitz index value using estimates of the median and the mean values of its full-time monthly equivalent earnings distribution, constructed using the process described above. For all countries, the following rules apply:

- Only wage employees are considered when constructing the full-time monthly equivalent earnings distribution to estimate the mean and median values from which the Kaitz index is derived. The exclusion of other types of workers – particularly own-account workers or employers who claim regular earnings – is consistent with the fact that the legal framework of minimum wages applies to wage employees only.
- Across countries, the level of the minimum wage is usually quoted as a gross value, even if eventually the application of income tax, social security contributions and other deductions implies that earners at or in the neighbourhood of the minimum wage may receive net disposable earnings slightly below the quoted gross value. For most high-income countries (such as European countries) in our micro-data sets, the variable "earnings" is unambiguously provided in gross terms; therefore, for these countries, the comparison between earnings and minimum wage correctly classifies wage workers in relation to the minimum wage. However, in the case of middle- and low-income countries, survey respondents are often prompted to declare their earnings in net terms. For all these other countries, our estimates are therefore an approximation. The research carried out for this report shows that there can be substantial differences between net and gross minimum wages in certain countries.

Grouping workers in relation to the minimum wage

The report compares and analyses wage workers and their characteristics by grouping them according to the distance between their country's minimum wage in monthly terms and their own monthly labour income: the latter is based on the full-time equivalent monthly income, thus enabling comparisons of all wage workers irrespective of their working-time scheme. For the purposes of comparison in relation to the minimum wage, workers are divided into four groups:

- Workers below the minimum wage are those whose full-time equivalent monthly earnings are at or below 95 per cent of the country's monthly minimum wage level.
- Workers at the minimum wage are those whose full-time equivalent monthly earnings are above 95 per cent and at or below 105 per cent of the country's monthly minimum wage level.
- Workers at twice the minimum wage are those whose full-time equivalent monthly earnings are above 105 per cent and at or under 200 per cent of the country's monthly minimum wage level.
- Workers at more than twice the minimum wage are those whose full-time equivalent monthly earnings are above 200 per cent of the country's monthly minimum wage.

Appendix IV

Assumptions and definitions used in analysing the effect of minimum wages on household income inequality

Part II, Chapter 11, of the report applies different minimum wage scenarios to explore the effect of minimum wage policies on wages and household income inequality. The estimates presented rely on certain treatments of the data and the application of assumptions described in this appendix.

Labour earnings at the household level

The earnings of individuals are defined as income generated during a month as a result of the main paid labour market activity of a household member who participates in such paid activities. When the analysis is centred on wage employees, earnings include only wage earnings from their main job, but when estimates refer to household income earnings they include all wage earnings along with the labour income of employers and earnings received by own-account workers or workers in cooperatives and those working in family units.

In most labour surveys across the world, wage earners are asked to declare the number of jobs they hold (one, two or more than two jobs). In most cases, the proportion of workers who hold more than one job is below 10 per cent of all wage earners; in high-income countries it is usually below 5 per cent. Almost all surveys ask wage earners for details of the earnings and other characteristics of their "main job", but they do not usually ask respondents to declare earnings from, or the characteristics of, secondary employments. For the purpose of estimating the wage distribution among wage employees, and comparing this with the minimum wage prevailing in the country, earnings from the "main or principal job" is the correct variable to use. Thus, even if income from second or further jobs were available, we have not included these in our estimates of the wage distribution in analysing wages of individuals in relation to a country's minimum wage policy. For the very few countries for which we have data on secondary earnings, these are included as part of the "labour earnings generated at household level" but are not included as part of the (monthly) earnings generated by wage employees.[5]

[5] This affects the data from middle- and low-income countries only. In these countries, respondents are often asked to declare if they hold jobs other than their main job, and the characteristics of these other employment activities. In almost all cases, wage employees who hold secondary or further jobs declare these to be self-employment, and the number of hours usually worked in these other jobs is significantly below the number of hours dedicated to their main job. In those countries where surveys provide the amount of earnings from employment other than the main job of the wage employee, and even if secondary employment were also in the form of wage employment, it would be wrong to combine all the different wage earnings into a single amount. This is because people working for different employers might have their average earnings determined by different considerations with respect to the prevailing minimum wage policy in the country. In analysing the level of compliance with the minimum wage, we have to identify clearly whether the result of a contractual relation between a worker and the employer results in earnings that comply with the minimum wage legislation, as opposed to identifying whether a worker makes his or her earnings up to the minimum wage by means of several simultaneous employments. Furthermore, in middle- and low-income countries, workers who are classified as formally employed in their main job are usually informal workers in their secondary or other jobs. Considering secondary earnings would, therefore, also add confusion when distinguishing between formal and informal workers in the analysis. In the case of non-wage workers, the fact that they work for themselves or for units owned by their families implies that all their earnings – from their main declared job or from secondary and further employments – are rightly considered as part of the totality of earnings received in one month.

Finally, in a very few cases (often amounting to a statistically insignificant number in the data), own-account workers and employers declare negative amounts as the total earnings in the household. We chose to exclude these individuals – and all their family members – in order to avoid using negative values in the labour income distribution or the distribution of household income.

Household income

Household income includes all incomes generated at the household level, namely, labour income, capital gains including rental gains, net remittances, monetary estimation of home-produced goods and services, and pensions and social transfers received by household members. European countries for which we have data – namely, EU-SILC data – provide very detailed and accurate information on each component of income generated at the household level, in both gross and net terms. In the case of middle- and low-income countries, households are often asked to declare particular components of household income – such as remittances from abroad, in-kind payments or the monetary approximation of home production. However, more often than not, in middle- and low-income countries the person responsible for answering the questionnaire at the household level will be asked to approximate "total household income other than labour income" as a single amount. The fact that not all labour surveys are household surveys leads to a significant limitation in the amount of microdata that can be used to analyse the effect of minimum wages on household income. Of the 72 countries for which we have microdata – all of which are useful in analysing individuals as wage earners and their relation to the minimum wage – only 42 surveys provide the appropriate data at the household level that can be used to further study the impact of minimum wages on household income inequality. These 42 surveys do, nevertheless, enable us to study minimum wages and household income inequality in most of the main geographical regions in the world, namely Africa, Asia, Europe and Latin America.

All household members who are blood relations and relations by marriage of the household head are considered as members of the family and are included in the analysis. For example, the spouse, children, grandchildren, sons- and daughters-in-law of the head, and so on, are all considered members of the same household unit. In contrast, live-in domestic workers and others who live in the household but are not relatives of the household head are all excluded from the data when we perform the analysis at the household level – although we include them as independent workers when analysing the wage distribution of individuals at the country level. The reason for excluding those not related by blood or marriage to the household head is that their incomes are not part of the total income amassed by the household in which they live, and it cannot be assumed that non-relatives share incomes and resources in the same way as family members. Given that our analysis in this area focuses on studying the resources of households as units, and because domestic workers and household guests are likely to be members of other households whose characteristics are not picked up by the data, we necessarily need to exclude them from our sample when analysing household income.[6]

[6] The proportion of non-household members is negligible in European surveys and less than 2 per cent in middle- and low-income countries. One might suppose that by excluding live-in domestic workers from our sample we are likely to lose an important sector of labour market participants who are often affected by non-compliance with the minimum wage. As a matter of fact, though, the proportion of live-in domestic workers picked up by survey data is often negligible and not necessarily representative of the true population of live-in domestic workers in the surveyed countries. For example, in the case of Chile, the data would suggest that only 0.11 per cent of individuals represented in the data are live-in domestic workers; these amount to 0.33 per cent of wage employees in the sample, and 0.72 per cent of female wage employees. This may not necessarily represent the true proportion of live-in domestic workers in Chile. Although we are excluding these wage employees when analysing household income, their incomes may be expected to be picked up on aggregate by the data. For example, when in another household the respondent declares total incomes received by the household, and these include remittances that would have been earned by a household member who works and lives outside the house.

The distribution of households and individuals across the per capita household income spectrum

We convert household income into per capita household income in order to compare households in terms of their ability to make ends meet (purchasing power or standard of living). Instead of using the actual family size as the denominator to construct the variable "per capita household income", we use a conversion factor of family size that takes into account the economies of scale that arise when people live together, and also the fact that children in the household often consume less in terms of goods and services than adults in the same household. Following the formula presented in Deaton and Zaidi (2002), we derive the denominator in calculating per capita household income as $E = (A + \alpha.K)^{\theta}$. In this formula, A represents the number of adults in the household, K represents the number of children in the household, α represents the spending of a child relative to an adult and θ captures the economies of scale in a given household. Our estimates take into account the differences between economic regions in the relative value of a child's consumption and in the value of economies of scale achieved by households. Thus, a child in a high-income country is bound to have much higher spending needs (relative to the needs of an adult) than a child in a middle- or low-income country. Likewise, economies of scale – the savings that are achieved by sharing goods and services as a family unit – are higher in high-income countries, where housing costs and other living expenses are greater.[7]

We use per capita household income to rank households represented in the survey in each particular country, taking the household as the unit of research – as opposed to ranking individuals in the households using per capita household income. The difference between these two approaches is subtle and deserves explanation. If we rank households using per capita household income, each decile of the per capita household income distribution will contain exactly 10 per cent of households in the population, while the proportion of individuals in the population represented in each decile may be slightly above or below the 10 per cent mark. When analysing household income inequality, the objective is not to compare a "static" value across deciles of individuals in the population. Instead, the objective is to explore the effect on per capita household income of a range of (simulated) changes in the minimum wage. It is for this reason that the household becomes the unit of research and the unit that needs to be compared across the deciles. Ranking households rather than individuals, we find that each of the lower deciles of the distribution usually contains about 1 per cent more individuals than the 10 per cent expected had we ranked individuals instead, while each of the upper deciles contains slightly less than the 10 per cent expected had we ranked individuals instead. This follows from the fact that lower-income households are often larger in family size than higher-income households. In the middle of the per capita household income distribution, households in each of the deciles seem to hold approximately 10 per cent of individuals in the population – as represented by household data.[8]

All our estimates are based on weighted values using the frequency weights provided together with all other variables in the microdata sets. In the case of the EU-SILC surveys, the microdata provide cross-sectional weights that are specific to individuals and households. All other data sets used in the report are derived from household surveys and provide weights that are equally valid to weight the sample of the individuals and the sample of the households, as long as households are uniquely selected when analysing outcomes at the household level. Throughout the analysis, we apply weights to our sample to ensure that both individuals and households serve as a representative sample of the underlying populations.

[7] For more details on measuring per capita household income, see ILO (2014b, box A2).

[8] A further advantage of ranking households, as opposed to individuals, using per capita household income lies in avoiding the possibility that two or more members of the same household, at a point where per capita household income approaches the threshold between two deciles, are incorrectly classified in adjacent but different deciles. This is not a problem if we simply want to estimate household income inequality comparing deciles, but it could be a problem if we want to simulate changes in household income as a result of changes in the wages of their members, and members of the same household are located in different (albeit adjacent) deciles.

When analysing labour income among wage employees, we include only individuals aged 16–70, thus excluding very young or very old members of the household who may not be affected by a minimum wage policy. In several middle- and low-income countries, children aged 15 and under and household members above the age of 70 produce labour earnings – indeed, some of these countries design their surveys so that members as young as 10 years of age are questioned on matters of labour market participation. This is not the case in European and other high-income countries, where only individuals aged 16 and above are asked to respond to questions on labour market activities.

In our analysis, we have gathered data on earnings produced by children and those older than 70 as an additional source of income, and therefore we consider these earnings as part of total household labour income. However, we have avoided including these individuals in the analysis that simulates the effects of changes in minimum wages at the household level, particularly because in some countries their inclusion would significantly distort our simulation exercise at the low end of the per capita household income distribution.

Assumptions and minimum wage policy scenarios

Part II, Chapter 11, applies assumptions to simulate two outcomes deemed desirable when countries apply a statutory minimum wage. The first is that of achieving full compliance with the minimum wage so that all wage employees, formal and informal alike, are paid at least the gross minimum wage corresponding to their usual working-time practice. The second is a situation where all wage employees achieve at least two thirds (67 per cent) of the median wage, where the latter is estimated using the distribution of earnings among wage employees in the population. The assumption of a minimum wage that equals two thirds of the median wage (in the country) is based on the fact that low-paid jobs are usually defined as those that pay less than two thirds of the national median or mean gross hourly wage, using the "hourly" wage to avoid inferring that part-time work is necessarily low paid.[9] A comparison of countries in terms of achieving the common benchmark of 67 per cent of the median wage is also in line with the recent approach of the EU in seeking to achieve convergence in minimum wages. The principle underlying this objective is the potential of a common regional policy on minimum wages to strengthen the economic and social links among countries that share a common market.[10] A common argument or concern discussed when implementing a minimum wage or increasing an existing one is that such policies can lead to increasing unemployment (particularly in high-income countries) or increasing informality (particularly in middle- and low-income countries). To take this into account in our simulations, we consider employment losses among wage employees in our sample to emulate the loss in earnings that may occur within households as a result of each of the two minimum wage outcomes described above. Thus, with two minimum wage outcomes, each of which may lead to employment loss, we end up with four different scenarios. The mechanisms behind each of these four scenarios are explained below.

[9] This interpretation of "low-paid" follows the ILO definition, which has been adopted by other multilateral agencies such as the OECD and Eurostat in producing their statistical compendiums. For more information, see Grimshaw (2011).

[10] See the European Commission's consultation document, published on 14 January 2020, on the first phase of its consultation of European trade unions and employers' organizations on how to ensure fair minimum wages for all workers in the EU. It is available at: https://ec.europa.eu/commission/presscorner/api/files/attachment/860459/Consultation_fair_minimum_wages.pdf.pdf (accessed on 22 September 2020).

Scenario 1. Full compliance scenario assuming no employment losses

- **Step 1:** In each country, we estimate the hourly minimum wage corresponding to the minimum wage. To do this we estimate the median hours worked by fulltime wage employees, thus identifying the expected number of hours that a full-time worker would have to work in order to achieve the full-time monthly minimum wage. Using this median number of hours, we divide the gross monthly minimum wage by the median number of hours of a full-time worker times 52 (weeks) divided by 12 (months). This provides an approximation to the minimum wage per hour.[11]
- **Step 2:** We estimate the individual-specific minimum wage (ISMW) corresponding to the wage earner's declared number of hours worked per week, multiplied by the minimum wage per hour, multiplied by 52 and divided by 12. This is what a wage employee should receive per hour, at the minimum, if there is compliance with the minimum wage.
- **Step 3:** Wage employees who receive monthly earnings below their ISMW are assigned the ISMW value as their wages. Using this value, we re-estimate total household income and per capita household income for each of the households in the sample.

The comparison between inequality measures based on the original per capita household income and those simulated using per capita income under full compliance provides an estimate of how full compliance affects household income inequality. Two additional points need to be made about this scenario:

- As we have seen in the report, in some countries minimum wage levels are high in relation to the overall wage distribution. This is the case for countries with a high value on the Kaitz index – for example, a value above the 67 per cent benchmark. In these countries, where non-compliance is usually high, particularly among informal wage employees, it would be more realistic to assume that workers achieve at least a wage equal to the low-pay threshold. Therefore, in these countries, if a wage employee receives earnings below the specified minimum wage, we assume that they receive a monthly wage equal to 67 per cent of the median wage per month. To do this, we estimate the "individual-specific" 67 per cent of the median wage. This is constructed by estimating the hourly median wage among full-time wage employees, and multiplying it by each individual's hours worked per month (hours worked per week, multiplied by 52, divided by 12), multiplied by 0.67.
- The process explained in the above point is only applied to countries where the minimum wage is such that the Kaitz index is above 67 per cent. In these countries, some individuals who are classified as "receiving below the minimum wage" may in fact earn more than 67 per cent of the median wage. For example, suppose there is a country with a minimum monthly wage of 4,000 LCUs and a median wage of 3,600 LCUs. Those who earn 3,500 LCUs per month would be classified as earning below the minimum wage. However, with the country's Kaitz index at 90 per cent, the simulation exercise would assign them a value of 2,412 LCUs, which is less than what they actually earn per month. Thus, in countries where the Kaitz index is above 67 per cent, we simulate full compliance with a minimum wage at the level of "at least low pay" for those individuals who receive earnings below that target, and this group may be smaller in number than that of those who are originally classified as experiencing "non-compliance" with the statutory minimum wage.

[11] In Canada, Tunisia and the United States the minimum wage is already expressed in hourly terms, so that this step is not necessary for those countries.

Scenario 2. Full compliance scenario assuming employment losses as a result of increasing costs of production

Increasing the earnings of wage employees so that all wage employees reach the established minimum wage implies an increase in the average cost of production. Although we do not have this information at the enterprise level, we are able to approximate the change in the total wage bill at the country level and used this to simulate possible employment effects:

- **Step 1:** Using frequency weights in the population, we estimate the total wage bill with current levels of non-compliance.
- **Step 2:** We allow for the minimum wage under full compliance as described in scenario 1, and use the corresponding frequency weights to estimate the total wage bill under conditions of full compliance with the minimum wage (or with a target of low pay).
- **Step 3:** Comparing the amounts estimated in steps 1 and 2, we end up with an estimated increase in the total wage bill. For each 10 per cent increase in the total wage bill, we assume a 1 per cent employment loss among wage earners in the sample. Those wage earners that are randomly selected to simulate an employment loss are assigned zero earnings per month. Using such an assignment, we re-estimate total household income and per capita household income.

As under scenario 1, the comparison between inequality measures based on the original per capita household income and those simulated using per capita income under full compliance provides an estimate of how full compliance affects household income inequality. Again, two points need to be made:

- We randomly selected workers to lose their jobs from the bottom 50 per cent of the wage distribution, irrespective of their labour market characteristics. We used a sensitivity analysis that selected consecutively from the bottom 30 per cent to the bottom 50 per cent in blocks of 10 per cent. We did not detect significant differences in per capita household income, although it is an interesting exercise for the future to consider further refinements where employment losses occur at different levels across the wage distribution. Likewise, the simulation could have given a greater probability of employment loss to those in more vulnerable employment (such as those in temporary employment, informal wage earners, those working in small enterprises, and so on). We acknowledge the potential insights that could be gained by going beyond the single condition that was applied here – "an equal employment probability loss for all at the bottom half of the wage distribution" – but our results have considerable implications for policy design and evaluation even when using such a simple simulation strategy.
- Random assignment of lost employment is achieved by allowing each wage earner in the bottom 50 per cent of the wage distribution an equal chance of being drawn from a uniform distribution.

Scenario 3. All wage employees are paid a minimum wage equal to 67 per cent of the median wage in the country, assuming no employment losses

This simulation extends the assignment of the category "low-paid" to all workers in each country analysed in the report. Thus, in countries where the minimum wage is below 67 per cent of median earnings, anyone who earns below that level is assigned 67 per cent of median earnings – in relation to the number of hours each person works per month. Note that in countries where the minimum wage is such that the Kaitz index is above 67 per cent, scenario 3 is identical to scenario 1. This occurs mostly in a few middle- and low-income countries.

Scenario 4. All wage employees are paid a minimum wage equal to 67 per cent of the median wage in the country, assuming employment losses as a result of increasing cost of production

Starting from the results obtained in scenario 3, we apply the procedure described in scenario 2 to estimate the employment losses as a result of increasing the earnings of all wage employees to 67 per cent of the median, always considering the actual hours worked each month.

Appendix V

National data sources

Country	Region	Latest year	Data type	Data source
Argentina	Americas	2015	Encuesta Permanente de Hogares	NSO – latest data from ILO repository or SIALC
Armenia	Europe and Central Asia	2015	Labour force survey	National Statistical Service of the Republic of Armenia, INSTAT
Australia	Asia and the Pacific	2018	Household, Income and Labour Dynamics in Australia	Melbourne Institute of Statistics, University of Melbourne
Austria	Europe and Central Asia	2017	EU-SILC	Eurostat
Bangladesh	Asia and the Pacific	2017	Labour force survey	Bangladesh Bureau of Statistics
Belgium[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Bolivia, Pluri-national State of[a]	Americas	2018	Encuesta de Hogares	NSO – latest data from ILO repository or SIALC
Brazil[a]	Americas	2018	Pesquisa Nacional por Amostra de Domicílios	NSO – latest data from ILO repository or SIALC
Bulgaria[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Cambodia[b]	Asia and the Pacific	2019	Labour force survey	NSO – latest data from ILO repository
Cambodia[a]	Asia and the Pacific	2017	Socio-economic survey	NSO – latest data from ILO repository
Cameroon[a]	Asia and the Pacific	2014	Enquête Camerounaise Auprès des Ménages	NSO – latest data from ILO repository
Canada	Americas	2018	National labour force survey	NSO – data from ILO repository
Cabo Verde	Africa	2015	Survey on the minimum wage conducted in collaboration between ILO and Institution Nacional de Estatisticas Cabo Verde (INCEV)	ILO and INCEV
Chile[a]	Americas	2017	Encuesta Nacional de Empleo	NSO – latest data from ILO repository or SIALC
China	Asia and the Pacific	2013	Chinese Household Income Project	Chinese National Bureau of Statistics
Colombia	Americas	2018	Gran Encuesta Integrada de Hogares	NSO – latest data from ILO repository or SIALC
Costa Rica	Americas	2018	Encuesta Continua de Empleo	NSO – latest data from ILO repository or SIALC
Croatia[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Côte d'Ivoire[a]	Africa	2017	Enquête Nationale sur l'Emploi	NSO – latest data from ILO repository
Czechia[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Denmark[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Dominican Republic	Americas	2018	Encuesta Continua de Fuerza de Trabajo	NSO – latest data from ILO repository or SIALC

Country	Region	Latest year	Data type	Data source
Ecuador[a]	Americas	2019	Encuesta Nacional de Empleo, Desempleo y Subempleo	NSO – latest data from ILO repository or SIALC
Egypt	Africa	2012	Egypt Labour Market Panel Survey	Economic Research Forum; Central Agency for Public Mobilization and Statistics, Egypt
Estonia[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Finland[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
France[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Gambia	Africa	2018	Labour force survey	Gambia Bureau of Statistics
Greece[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Guatemala[a]	Americas	2018	Encuesta Nacional de Empleo e Ingresos	NSO – latest data from ILO repository or SIALC
Guyana[a]	Americas	2018	Labour force survey	NSO – latest data from ILO repository or SIALC
Honduras	Americas	2018	Encuesta Permanente de Hogares de Propósitos Múltiples	NSO – latest data from ILO repository or SIALC
Hungary[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Indonesia	Asia and the Pacific	2016	Labour force survey	Central Bureau of Statistics, Government of Indonesia
Ireland[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Italy[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Jordan[b]	Arab States	2014	Labour force survey	NSO – latest data from ILO repository.
Latvia[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Lithuania[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Luxembourg[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Madagascar	Africa	2012	National survey on employment and the informal sector	Institut National de la Statistique, Ministry of Economy of Madagascar
Malawi	Africa	2017	Labour force survey	National Statistical Office of Malawi; Ministry of Labour
Mexico	Americas	2018	Encuesta Nacional de Ocupación y Empleo	Instituto Nacional de Estadísticas y Geografía de México
Mongolia[a]	Asia and the Pacific	2016	Labour force survey	National Statistics Office of Mongolia
Myanmar[a]	Asia and the Pacific	2019	Labour force survey	NSO – latest data from ILO repository
Namibia	Africa	2016	Labour force survey	Namibia Statistics Agency
Nepal	Asia and the Pacific	2017	Labour force survey	Central Bureau of Statistics
Netherlands[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Niger[a]	Africa	2017	Enquête Nationale sur les Conditions de Vie des Ménages et l'Agriculture	NSO – latest data from ILO repository

Country	Region	Latest year	Data type	Data source
Norway[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Pakistan	Asia and the Pacific	2015	Labour force survey	Pakistan Bureau of Statistics
Philippines	Asia and the Pacific	2016	Labour force survey	Philippine Statistics Authority
Poland[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Portugal[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Republic of Korea	Asia and the Pacific	2016	Korean Labour and Income Panel Study	Korea Labour Institute
Romania[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Russian Federation[b]	Europe and Central Asia	2015	Survey of income and participation in social programmes	Russian Federal State Statistics Service
Serbia[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Sierra Leone	Africa	2014	Labour force survey	Government of Sierra Leone
Slovenia[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Spain[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Sri Lanka	Asia and the Pacific	2013	Labour force survey	Department of Census and Statistics, Sri Lanka
Sweden[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
Switzerland[a]	Europe and Central Asia	2017	EU-SILC	Swiss Federal Statistical Office
Thailand	Asia and the Pacific	2015	Labour force survey	National Statistical Office of Thailand; Government of Thailand
Tunisia	Africa	2014	Tunisia Labour Market Panel Survey	Economic Research Forum; Institute of National Statistics of Tunisia
Turkey	Europe and Central Asia	2017	Labour force survey	Turkish Statistical Institute
United Kingdom[a]	Europe and Central Asia	2017	EU-SILC	Eurostat
United Republic of Tanzania[a]	Africa	2014	Integrated labour force survey	National Bureau of Statistics
United States	Americas	2018	Current Population Survey	Bureau of Labor Statistics
Ukraine[b]	Europe and Central Asia	2012	Labour force survey	State Statistics Service of Ukraine
Uruguay[a]	Americas	2019	Encuesta Continua de Hogares	NSO – latest data from ILO repository or SIALC
Viet Nam[a]	Asia and the Pacific	2016	Labour and employment survey	General Statistics Office of Viet Nam; Ministry of Planning and Investment of Viet Nam

EU-SILC: European Union Statistics on Income and Living Conditions. NSO = national statistical office. SIALC = Labour Analysis and Information System for Latin America and the Caribbean.

Notes:
[a] Data sources used to simulate the effect of a minimum wage on income distribution (see Part II, Chapter 11).
[b] These countries have not been included in the estimation of the Kaitz index because the available information in the data cannot be used to attribute to wage earners their corresponding minimum wage.

References

Adams-Prassl, Abi, Teodora Boneva, Marta Golin, and Christopher Rauh. 2020. "COVID Inequality Project". Available at: https://sites.google.com/view/covidinequality/home.

Aiham, Ahmed. 2020. "Parliament Deliberates on Setting Minimum Wages between MVR 4000–8500". *The Edition*, 9 June 2020.

Alinaghi, Nazila, John Creedy, and Norman Gemmell. 2019. "The Redistributive Effects of a Minimum Wage Increase in New Zealand: A Microsimulation Analysis", Working Paper in Public Finance No. 02/2019. Wellington: Victoria University of Wellington, Victoria Business School.

Arango, Carlos A., and Angelica Pachón. 2004. "Minimum Wages in Colombia: Holding the Middle with a Bite on the Poor". Bogotá: Banco de la República.

Arias, Omar, and Melanie Khamis. 2008. "Comparative Advantage, Segmentation and Informal Earnings: A Marginal Treatment Effects Approach", IZA Discussion Paper No. 3916. Bonn: Institute of Labor Economics.

Atkinson, Andrew. 2020. "UK Should Delay Minimum Wage Rise to Help Companies, Says Think Tank". *Bloomberg*, 25 March 2020.

Atkinson, Anthony B., and François Bourguignon. 2015. "Introduction: Income Distribution Today". In *Handbook of Income Distribution*, Vol. 2, edited by Anthony B. Atkinson and François Bourguignon, xvii–lxiv. Amsterdam: Elsevier.

———, and Eric Marlier (eds). 2010. *Income and Living Conditions in Europe*. Luxembourg: Publications Office of the European Union.

Bargain, Olivier, Karina Doorley, and Philippe Van Kerm. 2019. "Minimum Wages and the Gender Gap in Pay: New Evidence from the United Kingdom and Ireland". *Review of Income and Wealth* 65 (3): 514–539.

Beramendi, Pablo, and David Rueda. 2014. "Inequality and Institutions: The Case of Economic Coordination". *Annual Review of Political Science* 17: 251–271.

Berman, Yonatan. 2020. "The Distributional Short-Term Impact of the COVID-19 Crisis on Wages in the United States", MPRA Paper No. 100466. Munich: University Library of Munich.

Boeri, Tito, Pietro Garibaldi, and Marta Ribeiro. 2010. "Behind the Lighthouse Effect", IZA Discussion Paper No. 4890. Bonn: Institute of Labor Economics.

Bonnet, Florence (ed.). Forthcoming. *Facts on Business Formality*. Geneva: ILO.

Bosch, Mariano, and Marco Manacorda. 2010. "Minimum Wages and Earnings Inequality in Urban Mexico". *American Economic Journal: Applied Economics* 2 (4): 128–149.

Brussevich, Mariya, Era Dabla-Norris, and Salma Khalid. 2020. "Who Will Bear the Brunt of Lockdown Policies? Evidence from Tele-Workability Measures across Countries", IMF Working Paper No. 20/08. Washington, DC: International Monetary Fund.

Cabo Verde, Ministry of the Economy, and ILO. 2017. *Proposta de Estratégia Nacional de Transição da Economia Informal à Formal em Cabo Verde: GETIF 2017–2020*.

Cajner, Tomaz, Leland D. Crane, Ryan A. Decker, John Grigsby, Adrian Hamins-Puertolas, Erik Hurst, Christopher Kurz, and Ahu Yildirmaz. 2020. "The US Labor Market during the Beginning of the Pandemic Recession", Working Paper No. 2020-58. Chicago: University of Chicago, Becker Friedman Institute for Economics.

Canada. 2020. "Hourly Minimum Wages in Canada for Adult Workers: Ottawa", Minimum Wage Database. Available at: http://srv116.services.gc.ca/dimt-wid/sm-mw/rpt2.aspx?GoCTemplateCulture=en-CA [13 Sep. 2020].

Canelas, Carla. 2014. "Minimum Wage and Informality in Ecuador", WIDER Working Paper No. 6/2014. Helsinki: United Nations University, World Institute for Development Economics Research.

Card, David, and Alan B. Krueger. 1995. "Time-Series Minimum-Wage Studies: A Meta-Analysis". *American Economic Review* 85 (2): 238–243.

Checchi, Daniele, and Cecilia García-Peñalosa. 2008. "Labour Market Institutions and Income Inequality". *Economic Policy* 23 (56): 602–649.

Cheng, Michelle. 2020. "Will Covid-19 Finally Take the Idea of Work-Sharing Mainstream?". *Quartz*, 20 April 2020.

Chile, National Statistics Institute. 2020. "Boletín complementario de la Escuesta de Remuneraciones y Costo de la Mano de Obra".

Cornia, Giovanni Andrea. 2012. "Inequality Trends and Their Determinants: Latin America over 1990–2010", WIDER Working Paper No. 2012/09. Helsinki: United Nations University, World Institute for Development Economics Research.

Costa Rica, Ministry of Finance. 2020. "Hacienda solicita a Procuraduría reconsiderar criterio sobre aumento salarial del sector público". 10 June 2020.

Crust, Erin E., Mary C. Daly, and Bart Hobijn. 2020. "The Illusion of Wage Growth". *FRBSF Economic Letter* 2020(26): 01-05.

Deaton, Angus, and Salman Zaidi. 2002. "Guidelines for Constructing Consumption Aggregates for Welfare Analysis", Living Standards Measurement Study Working Paper No. 135. Washington, DC: World Bank.

De Soto, Hernando. 2002. "Law and Property outside the West: A Few New Ideas about Fighting Poverty". *Forum for Development Studies* 29 (2): 349–361.

Dieppe, Alistair (ed.). 2020. *Global Productivity: Trends, Drivers, and Policies*. Washington, DC: World Bank.

Dinkelman, Taryn, and Vimal Ranchhod. 2012. "Evidence on the Impact of Minimum Wage Laws in an Informal Sector: Domestic Workers in South Africa". *Journal of Development Economics* 99 (1): 27–45.

Dube, Arindrajit. 2019. "Minimum Wages and the Distribution of Family Incomes". *American Economic Journal: Applied Economics* 11 (4): 268–304.

Dubois, Hans, and Anna Ludwinek. 2015. *Access to Social Benefits: Reducing Non-Take-Up*. Dublin: Eurofound.

Engbom, Niklas, and Christian Moser. 2018. "Earnings Inequality and the Minimum Wage: Evidence from Brazil", Opportunity and Inclusive Growth Institute Working Paper No. 7. Federal Reserve Bank of Minneapolis.

Engelhardt, Gary V., and Patrick J. Purcell. 2018. "The Minimum Wage and Annual Earnings Inequality", CRR Working Paper No. 2018-7. Boston: Boston College, Center for Retirement Research.

Ernst and Young Global. 2018. *Worldwide Personal Tax and Immigration Guide, 2018–19*.

———. 2019. *Worldwide Personal Tax and Immigration Guide, 2019–20*.

Estupiñan, Xavier, Anoop Satpathy, and Bikash K. Malick. 2020. "Discussion Paper: Wage Code and Rules – Will They Improve the Welfare of Low-Paid Workers in India?", 18 August 2020. New Delhi: ILO Decent Work Technical Support Team for South Asia and Country Office for India.

———, and Mohit Sharma, M. 2020. "Job and wage losses in informal sector due to the COVID-19 lockdown measures in India", August 2020. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3680379 [15 Oct. 2020].

Euronews. 2020. "Pandemia dita suspensão das negociações para subir salário mínimo", 16 April 2020.

European Commission. 2020. "Fair Minimum Wages: Commission Launches Second-Stage Consultation of Social Partners". European Commission Representation in Cyprus [website], 10 June 2020.

Fang, Tony, and Carl Lin. 2015. "Minimum Wages and Employment in China". *IZA Journal of Labor Policy* 4 (1): 1–30.

Fasih, Tazeen, Harry A. Patrinos, and M. Najeeb Shafiq. 2020. "The Impact of COVID-19 on Labor Market Outcomes: Lessons from Past Economic Crises". *World Bank Blogs*, 20 May 2020.

France, Ministry of Labour, Employment and Economic Inclusion. 2020a. "Situation sur le marché du travail durant la crise sanitaire au 7 juillet 2020". 8 July 2020.

———. 2020b. "L'emploi salarié". 11 June 2020. Available at: https://dares.travail-emploi.gouv.fr/donnees/lemploi-salarie.

Gamba, Laura. 2020. "Paraguay to Cut Public Sector Wages over COVID-19". *Anadolu Agency*, 31 March 2020.

García-Escribano, Mercedes, and Chadi Abdallah. 2020. "Issues When Cutting Government Pay to Help Reshuffle Spending in a Crisis, Fiscal Affairs", IMF Special Series on Fiscal Policies to Respond to COVID-19.

Gestión. 2020. "Ministra de Economía: 'No estamos en condiciones de comprometernos a un aumento del sueldo mínimo'". 16 April 2020.

Gindling, T.H. 2018. "Does Increasing the Minimum Wage Reduce Poverty in Developing Countries?". *IZA World of Labor*.

Grimshaw, Damian. 2011. "What Do We Know about Low-Wage Work and Low-Wage Workers? Analysing the Definitions, Patterns, Causes and Consequences in International Perspective", ILO Conditions of Work and Employment Series No. 28.

Hallward-Driemeier, Mary, Bob Rijkers, and Andrew Waxman. 2017. "Can Minimum Wages Close the Gender Wage Gap?". *Review of Income and Wealth* 63 (2): 310–334.

ILO (International Labour Office/Organization). 1944. *Declaration of Philadelphia*. International Labour Conference. 26th Session.

———. 2002. *Decent Work and the Informal Economy*, Report VI, International Labour Conference. 90th Session.

———. 2003. *Report of the Seventeenth International Conference of Labour Statisticians, Geneva, 24 November–3 December 2003*. ICLS/17/2003/4.

———. 2009. *Recovering from the Crisis: A Global Jobs Pact*. International Labour Conference. 98th Session.

———. 2013. *Domestic workers across the world: Global and regional statistics and the extent of legal protection*. Geneva.

———. 2014a. *Minimum Wage Systems: General Survey of the Reports on the Minimum Wage Fixing Convention, 1970 (No. 131), and the Minimum Wage Fixing Recommendation, 1970 (No. 135)*. ILC.103/III/1B.

———. 2014b. *Global Wage Report 2014/15: Wages and Income Inequality*. Geneva.

———. 2014c. *Transitioning from the Informal to the Formal Economy*. ILC.103/V/2.

———. 2015. *Indonesia: Trends in Wages and Productivity*. January 2015.

———. 2016. *Minimum Wage Policy Guide*. Geneva.

———. 2017. *World Social Protection Report 2017–19: Universal social protection to achieve the Sustainable Development Goals*. Available at: https://www.ilo.org/global/publications/books/WCMS_604882/lang--en/index.htm.

———. 2018a. *Women and Men in the Informal Economy: A Statistical Picture*, 3rd ed. Geneva.

———. 2018b. *Global Wage Report 2018/19: What Lies behind Gender Pay Gaps*. Geneva.

———. 2018c. *India Wage Report: Wage Policies for Decent Work and Inclusive Growth*.

———. 2019. *ILO Centenary Declaration for the Future of Work*. International Labour Conference. 108th Session.

———. 2020a. *ILO Monitor: COVID-19 and the world of work. Sixth edition*, briefing note, 23 Sep. (Geneva). Available at: https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_755910/lang--de/index.htm [15 Oct. 2020].

———. 2020b. *ILO Monitor: COVID-19 and the world of work. Third edition*, briefing note, 29 Apr. (Geneva). Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_743146.pdf [24 Aug. 2020].

———. 2020c. *ILO Monitor: COVID-19 and the world of work. Fifth edition*, briefing note, 30 June (Geneva). Available at: https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_749399/lang--en/index.htm [24 Aug. 2020].

———. 2020d. *Impact of lockdown measures on the informal economy*, brief, April (Geneva). Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/briefingnote/wcms_743523.pdf [3 Oct. 2020].

———. 2020e. *Working from home: Estimating the worldwide potential*, briefing note, 7 May (Geneva). Available at: https://www.ilo.org/global/topics/non-standard-employment/publications/WCMS_743447/lang--en/index.htm [24 Aug. 2020].

———. 2020f. *Protecting migrant workers during the COVID-19 pandemic: Recommendations for policymakers and constituents*, policy brief, 30 Apr. (Geneva). Available at: https://www.ilo.org/global/topics/labour-migration/publications/WCMS_743268/lang--en/index.htm [24 Aug. 2020].

———. 2020g. *ILO Monitor: COVID-19 and the world of work. Fourth edition*, briefing note, 27 May (Geneva). Available at: https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_745963.pdf [24 Aug. 2020].

———. 2020h. *Global Employment Trends for Youth 2020: Technology and the future of jobs* (Geneva). Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_737657.pdf [21 Aug. 2020].

———. 2020i. *Impact of the COVID-19 crisis on loss of jobs and hours among domestic workers*, factsheet, June (Geneva). Available at: https://www.ilo.org/global/topics/domestic-workers/publications/factsheets/WCMS_747961/lang--en/index.htm [3 Oct. 2020].

———. 2020j. *Temporary wage subsidies*, factsheet, 22 May (Geneva). Available at: https://www.ilo.org/global/topics/wages/publications/WCMS_745666/lang--en/index.htm [24 Aug. 2020].

———. 2020k. *Will COVID-19 impair the availability and quality of labour statistics?* (Geneva). Available at: https://ilostat.ilo.org/will-covid-19-impair-the-availability-and-quality-of-labour-statistics/ [18 Sep. 2020].

———. 2020l. *COVID-19 impact on the collection of labour market statistics*, ILOSTAT, 11 May (Geneva). Available at: https://ilostat.ilo.org/topics/covid-19/covid-19-impact-on-labour-market-statistics/ [12 Sep. 2020].

———. 2020m. *Dismantling the kafala system and introducing a minimum wage mark: New era for Qatar labour market*, press release, 30 Aug. (Geneva). Available at: https://www.ilo.org/beirut/projects/qatar-office/WCMS_754391/lang--en/index.htm#:~:text=Additional%20legislation%2C%20Law%20No.%2017,publication%20in%20the%20Official%20Gazette [17 Sep. 2020].

———. 2020n. *Report of the Committee of Experts on the Application of Conventions and Recommendations*. ILC.109/III(A).

———, JCC, and Ethiopoll. 2020. *Rapid labour force survey of COVID-19 impact in Ethiopia*, August.

IMF (International Monetary Fund). 2020a. *World Economic Outlook Update, October 2020: A Long and Difficult Ascent*. Washington, DC.

———. 2020b. "Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic". Available at: https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19.

Immervoll, Herwig. 2007. "Minimum Wages, Minimum Labour Costs and the Tax Treatment of Low-Wage Employment", IZA Discussion Paper No. 2555. Bonn: Institute of Labor Economics.

India, Ministry of Finance. 2020. *Economic Survey 2019–20*.

Ioakimoglou, Elias, and Eva Soumeli. "Low-Wage Workers and the 'Working Poor'". Eurofound. 16 September 2002.

ISSA (International Social Security Association). n.d. "Country Profiles". Available at: https://ww1.issa.int/country-profiles.

ITUC (International Trade Union Confederation). 2020. *ITUC global COVID-19 survey* (Brussels). Available at: https://www.ituc-csi.org/IMG/pdf/200603_ituc_covid-19_globalsurveyreport_en.pdf [15 Oct. 2020].

Jaumotte, Florence, and Carolina Osorio Buitron. 2015. "Inequality and Labor Market Institutions", IMF Staff Discussion Note No. SDN/15/14.

Jha, Somesh. 2020. "Punjab Drops Hike in Minimum Wage, Says Situation 'Not Appropriate'". *Business Standard*, 12 May 2020.

Karakitsios, Alexandros, and Manos Matsaganis. 2018. "Minimum Wage Effects on Poverty and Inequality", Department of International and European Economic Studies Working Paper No. 18-01. Athens: Athens University of Economics and Business.

Kristensen, Nicolai, and Wendy Cunningham. 2006. "Do Minimum Wages in Latin America and the Caribbean Matter? Evidence from 19 Countries", World Bank Policy Research Working Paper No. 3870.

Lee, David S. 1999. "Wage Inequality in the United States during the 1980s: Rising Dispersion or Falling Minimum Wage?". *The Quarterly Journal of Economics* 114 (3): 977–1023.

Levin-Waldman, Oren M., and Paul Lerman. 2017. "Is the Minimum Wage an Effective Response to Income Inequality?". *Challenge* 60 (6): 574–595.

Li, Shi, and Xinxin Ma. 2015. "Impact of Minimum Wage on Gender Wage Gaps in Urban China". *IZA Journal of Labor and Development* 4.

Lin, Carl, and Myeong-Su Yun. 2016. "The Effects of the Minimum Wage on Earnings Inequality: Evidence from China", IZA Discussion Paper No. 9715. Bonn: Institute of Labor Economics.

Litwin, Benjamin S. 2015. "Determining the Effect of the Minimum Wage on Income Inequality". Gettysburg: Gettysburg College.

Majchrowska, Aleksandra, and Paweł Strawiński. 2018. "Impact of Minimum Wage Increase on Gender Wage Gap: Case of Poland". *Economic Modelling* 70 (C): 174–185.

Maloney, William, and Jairo Mendez. 2004. "Measuring the Impact of Minimum Wages: Evidence from Latin America". In *Law and Employment: Lessons from Latin America and the Caribbean*, edited by James J. Heckman and Carmen Pagés, 109–130. Chicago: University of Chicago Press.

Marinakis, Andrés, and Carmen Bueno. 2014. "Incumplimiento con el salario mínimo: ¿culpa del nivel o debilidad institucional?". In *Incumplimiento con el salario mínimo en América Latina: El peso de los factores económicos e institucionales*, edited by Andrés Marinakis, 13–59. ILO.

Marx, Ive, Sarah Marchal, and Brian Nolan. 2012. "Mind the Gap: Net Incomes of Minimum Wage Workers in the EU and the US", IZA Discussion Paper No. 6510. Bonn: Institute of Labor Economics.

Miadhu. 2020. "This Is Not the Time for Minimum Wage: Qasim". 18 March 2020.

Militaru, Eva, Madalina Ecaterina Popescu, Amalia Cristescu, and Maria Denisa Vasilescu. 2019. "Assessing Minimum Wage Policy Implications upon Income Inequalities: The Case of Romania". *Sustainability* 11 (9).

Montes, Lorena Amurrio. 2020. "Incremento salarial se tratará luego de la pandemia". *Los Tiempos*, 1 May 2020.

Neumark, David, and William L. Wascher. 2008. *Minimum wages*. The MIT Press, Cambridge, Massachusetts.

New Zealand, Inland Revenue. n.d. "Independent Earner Tax Credit (IETC)". Available at: https://www.ird.govt.nz/income-tax/income-tax-for-individuals/individual-tax-credits/independent-earner-tax-credit-ietc.

OECD (Organisation for Economic Co-operation and Development). 2007. *Taxing Wages 2005/2006*. *Special Feature: The Tax Treatment of Minimum Wages*. Paris.

———. 2019a. *Negotiating Our Way Up: Collective Bargaining in a Changing World of Work*. Paris.

———. 2019b. *Taxing Wages 2017–2018*. *Special Feature: The Taxation of Median Wage Earners*. Paris.

———. 2020a. "Further empirical evidence on COVID-19 SME impact". In *Coronavirus (COVID-19): SME Policy Responses*, 8–11. Updated on 15 July 2020.

———. 2020b. *Tax and Fiscal Policy in Response to the Coronavirus Crisis: Strengthening Confidence and Resilience*. Version: 19 May 2020.

———. 2020c. *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*. Paris.

———, and ILO. 2019. *Tackling Vulnerability in the Informal Economy*, Development Centre Studies. Paris: OECD Publishing.

PwC (PricewaterhouseCoopers). 2019. "Individual Income Tax Parameters 2019", Tax Bulletin No. 2019/3.

———. n.d. "Worldwide Tax Summaries Online". Available at: https://taxsummaries.pwc.com/.

Rama, Martin. 2001. "The Consequences of Doubling the Minimum Wage: The Case of Indonesia". *Industrial and Labor Relations Review* 54 (4): 864–881.

Santiago, Silas, Mauro Oddo Nogueira, Sandro Sacchet de Carvalho, and Judith van Doorn. 2019. *Simples National: Monotax Regime for Own-Account Workers, Micro and Small Entrepreneurs – Experiences from Brazil*. ILO.

Scigliuzzo, Davide, Josh Saul, Shannon D. Harrington, Claire Boston, and Demetrios Pogkas. 2020. "The Covid Bankruptcies: Poke Joints to Stein Mart". *Bloomberg*, 9 July 2020.

Segal, Stephanie, and Dylan Gerstel. 2020. "Breaking Down the G20 Covid-19 Fiscal Response: June 2020 Update". Center for Strategic and International Studies [website], 2 July 2020.

Sindicato Empleados de Comercio de Junín. 2020. "Convenio de emergencia por suspensión de actividades para el sostenimiento de los puestos de trabajo y la actividad productiva". Sindicato Empleados de Comercio de Junín [website], 6 May 2020.

Small, Zane. 2020. "Jacinda Ardern Rules Out Delaying Minimum Wage Increase amid COVID-19 Economic Pressure". *Newshub*, 9 March 2020.

South Asia Monitor. 2020. "Minimum Wage to Come into Effect by End of 2021 in the Maldives". 26 August 2020.

Souza, Paulo Renato, and Paulo Eduardo Baltar. 1980. "Salário mínimo e taxa de salários no Brasil – réplica." *Pesquisa e Planejamento Econômico* 10 (3): 1045–1058.

Stewart, Frances. 2005. "Horizontal Inequalities: A Neglected Dimension of Development". In *Wider Perspectives on Global development*, edited by United Nations University World Institute for Development Economics Research, 101–135. London: Palgrave Macmillan.

Switzerland, Federal Council. 2020. "Coronavirus: Federal Council to Ease Further Measures from 11 May". 29 April 2020.

UN (United Nations). 2015. General Assembly resolution 70/1, Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1.

United Kingdom, Office for National Statistics. 2020. "Business Impacts of COVID-19 Survey (BICS) Results". Available at: https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/businessimpactofcovid19surveybicsresults.

United States, US Bureau of Labor Statistics. 2020. "How Many Workers Are Employed in Sectors Directly Affected by COVID-19 Shutdowns, Where Do They Work, and How Much Do They Earn?", *Monthly Labor Review*, April 2020.

United States, US Department of Agriculture, National Finance Center. 2019. "Taxes 19-13, California State Income Tax Withholding". Available at: https://www.nfc.usda.gov/Publications/HR_Payroll/Taxes/Bulletins/2019/TAXES-19-13.htm?taxmap=true.

UN Women (United Nations Entity for Gender Equality and the Empowerment of Women). 2020. *Addressing the Impacts of the COVID-19 Pandemic on Women Migrant Workers*, guidance note.

Wathan, Min. 2020. "Myanmar Minimum Wage Decision Faces Three-Month Delay". *Myanmar Times*, 20 May 2020.

World Bank. 2020a. *Commodity Markets Outlook: Implications of COVID-19 for Commodities*. April 2020.

———. 2020b. *Projected Poverty Impacts of COVID-19 (Coronavirus)*, brief. 8 June 2020.

———. 2020c. *Debt Service Suspension and COVID-19*, factsheet. 11 May 2020.

———. 2020d. "Productivity Growth, Key Driver of Poverty Reduction, Threatened by COVID-19 Disruptions", press release. 14 July 2020.

Advancing social justice, promoting decent work

The International Labour Organization is the United Nations agency for the world of work. We bring together governments, employers and workers to drive a human-centred approach to the future of work through employment creation, rights at work, social protection and social dialogue.

This report examines the evolution of real wages around the world, giving a unique picture of wage trends globally and by region. Following on the year's tumultuous events, the report includes preliminary evidence on how wages have evolved in the first half of 2020 during the COVID-19 crisis.

The 2020–21 edition also reviews minimum wage systems across the world and identifies the conditions under which minimum wages can reduce inequality. The report presents comprehensive data on levels of minimum wages, their effectiveness, and the number and characteristics of workers paid at or below the minimum wage. The report highlights how adequate minimum wages, statutory or negotiated, can play a key role in a human-centred recovery from the crisis.

"The *Global Wage Report* is central to the analysis of wage trends and labour market developments as well as to the theoretical debate about the role of labour in the economy. It is an indispensable publication for economists, trade unionists, employers and the interested public." – Hansjörg Herr, Berlin School of Economics and Law

ilo.org

International Labour Organization
Route des Morillons 4
1211 Geneva 22
Switzerland

ISBN 978-92-2-031948-2