



International
Labour
Organization

Inception Report for the Global Commission on the **Future of Work**



**Inception Report
for the Global Commission
on the **Future of Work****

Copyright © International Labour Organization 2017
First published 2017

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

Inception Report for the Global Commission on the Future of Work
International Labour Office – Geneva: ILO, 2017

ISBN 978-92-2-131371-7 (print)
ISBN 978-92-2-131372-4 (web pdf)

Also available in French: *Rapport initial pour la Commission mondiale sur l'avenir du travail* (ISBN 978-92-2-230974-9 (print); ISBN 978-92-2-230976-4 (web pdf)); and in Spanish: *Informe inicial para la Comisión Mundial sobre el Futuro del Trabajo* (ISBN 978-92-2-331067-7 (print); ISBN 978-92-2-331068-4 (web pdf))

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers. The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them. Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/publns.

This publication was produced by the Document and Publications
Production, Printing and Distribution Branch (PRODOC) of the ILO.

*Graphic and typographic design, layout and composition, copy editing,
proofreading, printing, electronic publishing and distribution.*

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

Code: DTP-JMB-REPRO



Contents

Foreword	v
Chapter 1. A global snapshot: Megatrends and the world of work	1
A. The current state of the world of work	1
B. Megatrends and implications for the future of work	8
Chapter 2. Work and society	15
A. The attributes of work that people value	15
B. Making “invisible” work “visible”	18
C. Work and well-being	18
D. Effective social protection for the twenty-first century	21
Chapter 3. Decent jobs for all: Full employment and raising standards of living	23
A. What future for “full employment”?	23
B. Technological changes and jobs: Risk or opportunity?	24
C. Potential for new jobs?	27
Chapter 4. The organization of work and production: “Labour is not a commodity”	29
A. Informal employment in the future	29
B. The organization of work within global supply chains	30
C. Diversification of the employment relationship	32
Chapter 5. The governance of work	37
A. Governance of work: The State, employers and workers	37
B. Innovation in governance and in labour regulation	41
C. The future of social dialogue and tripartism	42
Notes	47



Foreword

Almost one hundred years ago, in the wake of the First World War, the International Labour Organization (ILO) was founded to achieve social justice in the pursuit of universal and lasting peace. The quest for workers' well-being: physical, moral, and intellectual (Philadelphia Declaration, 1944) has encountered many obstacles along the way. But the ILO has performed at its best when confronted with the most difficult of challenges. In the midst of the Second World War, President Roosevelt of the United States, looking back at the founders' "wild dream" of raising labour standards "on an international plane" and the "wilder [dream] still" of tripartism, called on the ILO "to play an essential part" in re-establishing social justice.¹ During the most recent global financial and economic crisis, country leaders called on the ILO to ensure that recovery measures "promoted jobs" and "protected people".² We have achieved remarkable progress in economic well-being, poverty reduction and political democracy; but much work remains.

As the ILO approaches its centenary in 2019, the stakes are high – and intensifying – with respect to the importance of achieving social justice. Concern about economic growth and human progress is growing as inequality, insecurity and exclusion – which imperil lives and livelihoods and pose existential threats to social organization and democratic societies – become more widespread. Beyond 2019, the mandate to achieve the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) adds urgency and opportunity to the ILO's tasks, and underscores the critical role of environmental sustainability in creating decent work and an inclusive global economy.

At the same time, as a result of climate change, demographic shifts, technological change and, more broadly, globalization, we are witnessing transformations in the world of work at an unprecedented pace and scale. How do we harness these challenges to provide opportunities for achieving social justice in an increasingly complex world of work?

The ILO's Future of Work Centenary Initiative allows us to take a step back, providing the space to reflect on the profound challenges that lie ahead and how the ILO with its member States can best meet them and develop the future we want as we enter our second century. The Global Commission lies at the heart of this Initiative. The national dialogues in 110 of our member States, which preceded the Commission's work and whose results are now synthesized in a report, provide a rich discussion of priorities, challenges and opportunities at the national and international levels.

The Commission brings together policy-makers, thinkers, advocates, researchers and social partners, under the leadership of its two distinguished Co-Chairpersons, to provide guidance and recommendations for achieving our mandate as we move into our second century. We know that there is no one single Future of Work, even if our futures are ever more strongly interdependent. Challenges facing member States are very much a product of history,

demography, culture and, most importantly, level of economic and social development, as the national dialogues reveal. The diversity within the Commission reflects this critical dynamic.

I urge you to probe deeply those issues that you decide are most important for achieving the ILO's mandate. Both the Office and I welcome bold thinking that challenges the ILO's traditional wisdom as well as innovative policy recommendations that may require new approaches. The Office will endeavour to provide you with solid research in these areas and to support all aspects of your work.

This Inception Report raises the curtain on the work of the Global Commission. In keeping with the broad scope we hope you will bring to your work, it consciously avoids steering the Commission's deliberations towards specific issues or prejudging the nature of your guidance regarding the profound changes in the world of work and the development of a common vision of the future of work we want. Instead, the Report tries to set the stage for a rich discussion culminating in a Commission Report for the ILO centenary year, 2019.

To that end, we have organized the Inception Report as follows: Chapter 1 provides a snapshot of the megatrends affecting the world of work today. Chapter 2 examines the meaning of work for individuals and society. Chapter 3 discusses the ways in which technology and other trends are affecting job creation. Chapter 4 looks at the organization of work and production. Finally, Chapter 5 discusses the governance of work.

We are grateful for the hard work you will undertake to help guide the ILO during its second century in its quest for social justice.

GUY RYDER, ILO Director-General



CHAPTER 1

A global snapshot: Megatrends and the world of work

The world of work has constantly evolved since the founding of the ILO. The past hundred years have witnessed a number of policy achievements, but these successes remain partial. In addition, a number of key drivers or megatrends, notably globalization, technology, demography and climate change, continue to affect the world of work and the dramatic shift in their nature in recent years could impact the future of work in new ways. A better understanding of the world of work as it exists today and of the key drivers of change will equip tripartite constituents and policy-makers with the tools to shape the future of work. This chapter describes the most important of these trends and drivers to help lay the foundation for the Global Commission's work.

A. The current state of the world of work

Some progress in the world of work has been achieved

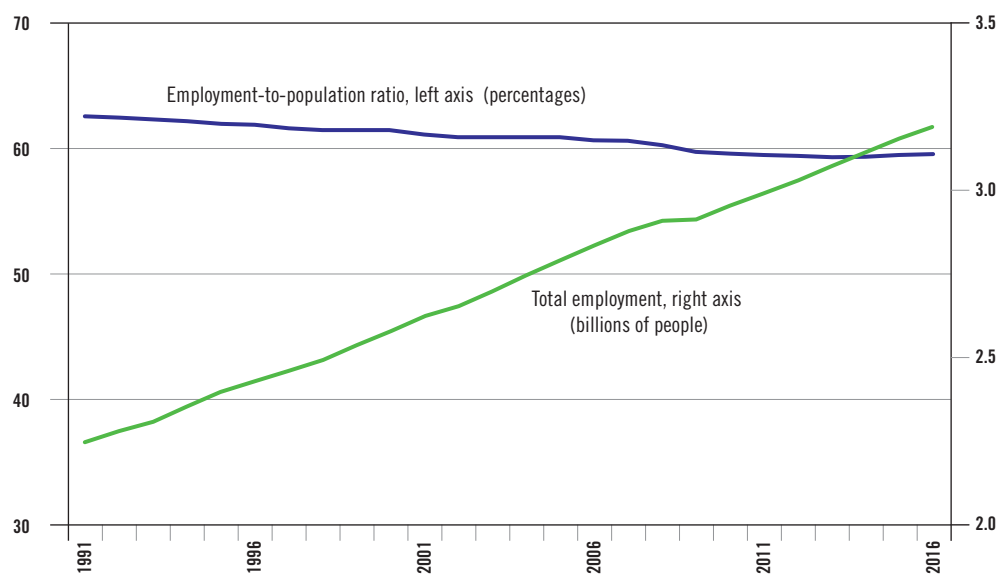
There has been considerable progress in terms of socio-economic development and recognition of rights.³ These include, but are not limited to, the following:

Job creation has been positive, albeit slightly below the rate of population growth: Total employment (including employees, contributing family workers, own-account workers and employers) continues to grow and has been accompanied by significant gains in educational attainment. In spite of several recessions, including the most recent global financial and economic crisis which began in 2008, total employment in 2016 stood at 3.2 billion (nearly 1 billion higher than in 1991). Nevertheless, the growth in jobs has fallen just short of working-age population growth; consequently, the employment-to-population ratio (ratio of employment to population for persons aged 15 and over) has fallen marginally between 1991 and 2016 (figure 1.1).

Increased female labour market participation: Along with policy efforts to improve women's rights, female participation in the labour market has risen substantially over the past century. The gender gap has narrowed in most regions, although low female labour force participation persists in some regions, such as the Arab States, Northern Africa, and Southern Asia. Currently, female labour market participation rates, at just over 49 per cent, remain nearly 27 percentage points below those of males. The ILO's Women at Work Centenary Initiative focuses on addressing structural and other barriers to greater female participation and closing the gender pay gap.⁴

Working poverty has declined: Since the introduction of the Millennium Development Goals, the share of extreme poverty has been halved and, according to recent ILO estimates, the

Figure 1.1. Total employment

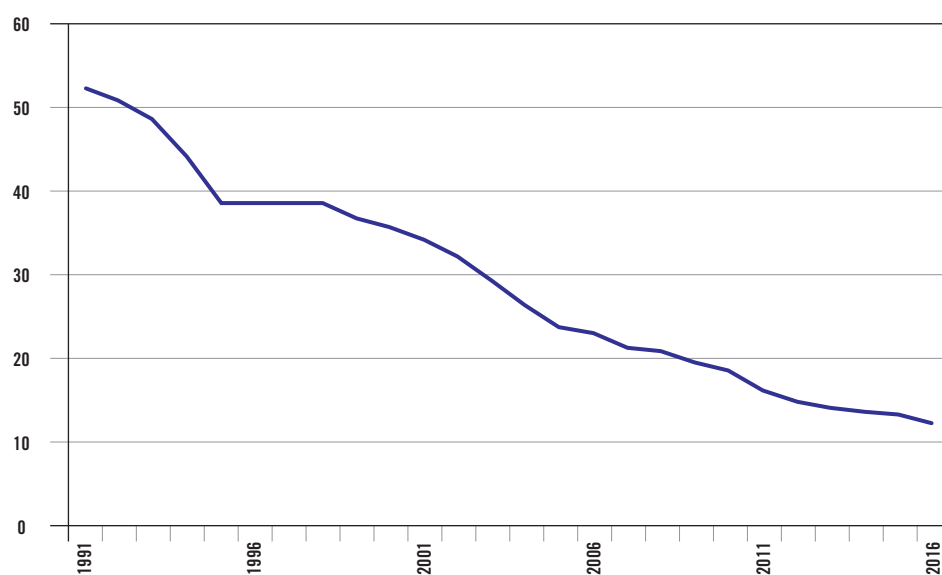


Source: ILOSTAT.

share of employed persons in emerging and developing countries living in extreme poverty (i.e. living with their families on less than US\$1.90 per person per day) fell from over 50 per cent in 1991 to just over 10 per cent in 2016 (figure 1.2).

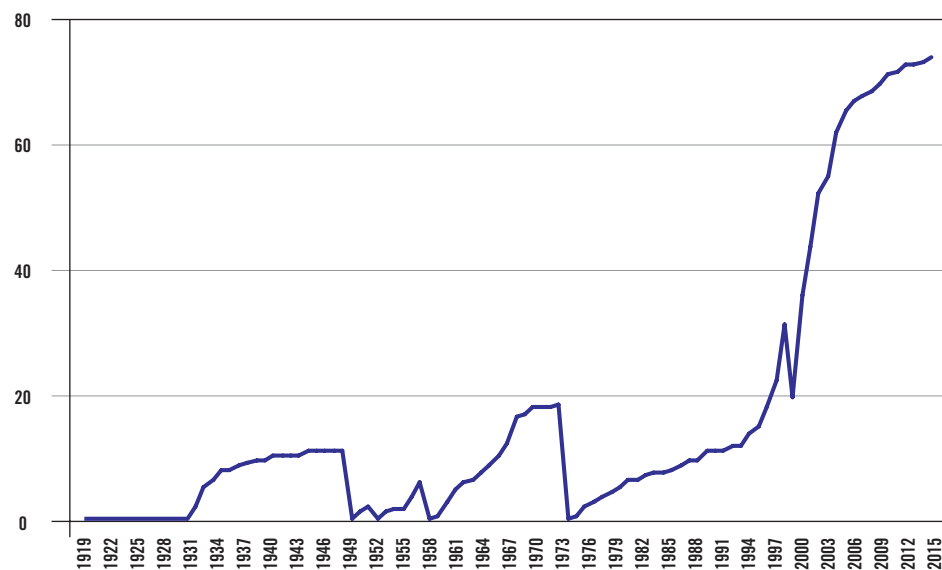
Gains in social protection: In the 1920s, nearly three out of four countries in the world had no social security systems in place and the minority – fewer than 50 countries – covered

Figure 1.2. Extreme working poverty in emerging and developing countries (percentages)



Source: ILOSTAT.

Figure 1.3. Ratification of core ILO Conventions (percentage of member States)



Source: ILO NORMLEX.

only a limited number of areas⁵ (work injury, health and pensions). Today, no country in the world is without any social protection programme, at least for some groups and specific risks. New ILO estimates show that, while only 29 per cent of the global population enjoy access to comprehensive social security systems in all areas, 45 per cent of the world is effectively covered in at least one social protection area.⁶

Improvements in occupational health and safety: Improvements in labour regulation have resulted in improved occupational health and safety for workers in many sectors, which has led to a reduction in workplace accidents and even the elimination of some occupational diseases. For instance, the number of fatal injuries per 1,000 workers has almost halved in recent years, from an average of 7.5 over the period 2003–2007 to 3.5 for the period 2011–2015.⁷

Improved ratification of ILO Conventions: Ratification of ILO Conventions – a first step towards implementation of international labour standards – has steadily increased. As of 2017, nearly three-quarters of the ILO’s 187 member States have ratified all of the eight core Conventions (figure 1.3).⁸

Progress in fundamental principles and rights at work: With ratifications of ILO core Conventions, member States have contributed to improvements in the implementation of the ILO fundamental principles and rights at work (freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labour, the abolition of child labour and the elimination of discrimination in respect of employment and occupation). Most notably, child labour worldwide has declined by over a third since 2000 alone, although it still affected 218 million children in 2016.⁹ New political and legal developments are enabling the growth and strengthening the role of workers’ and employers’ organizations in a number of countries. Many countries have also adopted legislation to address forced labour and trafficking in human beings, but enforcement remains a major challenge.

Increased incidence of formal wage-setting mechanisms: The vast majority of ILO member States have one or more minimum wages set through legislation or binding collective agreements. This has helped to improve prospects for decent wages and, in some instances, has acted as a benchmark for the informal economy and supported the promotion of equal pay for work of equal value between men and women.

Yet, unemployment levels remain high as the global labour force continues to grow

Although net job creation remains positive, it has not been sufficient to absorb the growth in the number of men and women looking for work. As of 2016, there were some 198 million jobless people across the globe actively seeking employment, nearly three-quarters of whom were living in emerging countries¹⁰ (figure 1.4). This translates into an estimated global unemployment rate of 5.7 per cent in 2016, slightly below the average rate of 6.1 per cent registered between 1991 and 2015. Women and young persons (aged 15–24) are more likely to be unemployed than their male and adult counterparts, respectively. In fact, among the nearly 200 million unemployed persons globally, over 70 million are aged 15–24.

Yet the usual measure of unemployment masks significant differences in decent work deficits that prevail across regions and countries. In emerging and developing countries,

Figure 1.4. Composition of working-age population by labour market status and country grouping, 2016



Source: ILOSTAT.

unemployment rates are lower than in developed countries (5.6 per cent versus 6.3 per cent), as the lack of unemployment protection (or incomes) may reduce the amount of time jobseekers spend looking for employment and could lead them into underemployment and taking a job that might not match their skills and experience or desired hours of work (in many instances this means taking up an informal job). In fact, the employment-to-population ratio, i.e. the share of employed people in the total working-age population (aged 15 years and above) is highest in developing countries. However, the fact that these countries have the highest rates of informality, underemployment and working poverty highlights the need to assess the quality of employment (not just the quantity) when evaluating labour market and social conditions.

Poor quality employment remains a key concern

In 2016, emerging and developing countries were home to a total of 783 million working poor (i.e. living on less than US\$3.10 per day, purchasing power parity), representing almost 30 per cent of all workers in these countries (table 1.1). Working poverty remains particularly acute in developing countries, where it affects 69 per cent of the employed population. In developed countries, the working poverty rate – defined in the developed country context

Table 1.1. Vulnerable employment, informality and working poverty, 2016

Vulnerable employment, 2016				
	Own-account workers		Contributing family workers	
	% total employment	millions	% total employment	millions
World	33.4	1 087.6	9.5	308.8
Emerging countries	37.1	894.9	9.7	233.4
Developing countries	52.6	140.0	26.3	69.9
Developed countries	9.2	52.6	0.9	5.4
Working poverty, 2016			Share of informal employment (%), 2016	
	% total employment	millions	Including agriculture	Excluding agriculture
Total emerging and developing countries	29.4	783.0	69.1	58.7
Emerging countries	25.0	599.3	67.2	58.2
Developing countries	69.0	183.6	92.5	79.7
Developed countries	15.0	70.0	18.3	17.1

Note: Given the different definitions of working poverty for developed countries and for emerging and developing countries, direct comparisons between the two measures and country groupings should be avoided. Informality figures are estimates for 2016, based on 109 developed, emerging and developing countries.

Source: ILO Trends Econometric Models, November 2016 (working poverty and vulnerable employment) and ILO calculations based on national household surveys (informal employment and working poverty in developed countries).

as the share of those with a per capita income below 60 per cent of the national median household income – is also significant, standing at 15 per cent in 2016, equivalent to over 70 million workers.¹¹

Globally, nearly 43 per cent of employed people, or 1.4 billion workers in 2016, were in own-account or contributing family work – referred to collectively as vulnerable forms of employment (table 1.1), which is often characterized by low pay, informality and limited social security coverage. Own-account workers represent over half of total employment in developing countries and one-third in emerging countries, while contributing family work remains widespread, mainly in the developing world. Own-account and contributing family workers in emerging and developing countries are three times more likely to be poor than their counterparts in wage and salaried employment.¹²

Vulnerable employment often overlaps with informality, especially in emerging and developing countries. In fact, informality is widespread in both developing and emerging countries, where it reaches more than 90 per cent and 67 per cent of total employment, respectively (table 1.1).

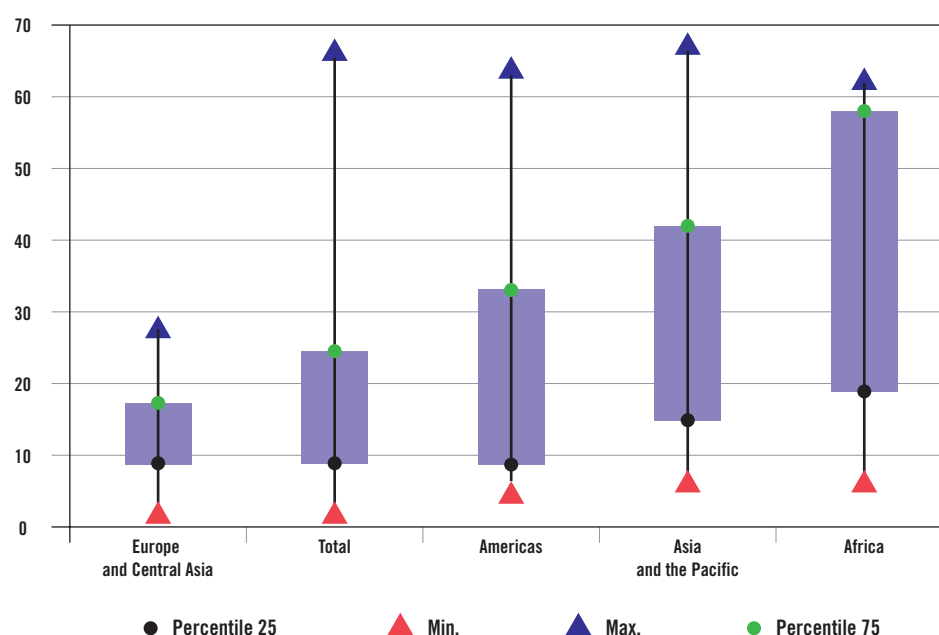
Diversification of employment forms

Concerns about job quality have grown in recent years due, in part, to the widespread incidence of non-standard forms of employment.¹³ For instance, according to the latest estimates, the mean share of part-time employment across countries with available data stood at around 16 per cent of total dependent employment.¹⁴ With respect to temporary employment, this figure rises to 20 per cent, with considerable variation across regions, the highest incidence, at 35 per cent, being found in Africa (figure 1.5). The proportion of temporary workers in total employment also varies considerably across countries within each of these regions.¹⁵ And while non-standard forms of employment can bring benefits to both individuals and employers, including but not limited to, helping individuals balance work and family responsibilities and enhancing firm flexibility, these forms of employment are often associated with job insecurity, earnings volatility, limited access to social protection schemes or training and career advancement (see Chapter 4) and job dissatisfaction (e.g. high rates of involuntary part-time and temporary employment in developed countries).

Income inequality remains elevated in most countries

Widening inequality is becoming a major feature of today's world of work, as the distribution between capital and labour and between individuals has shifted in many countries. Global figures suggest that labour productivity growth outpaced the growth of real wages in all but a few years between 2006 and 2015 (figure 1.6): overall, labour productivity expanded by 2.3 per cent per year, whereas wages grew by only 2.1 per cent. This means that although workers have become increasingly productive, the benefits of their work have increasingly accrued to capital income and to those at the top of the income distribution. In fact, all regions, with the exception of Latin America, have experienced a decline in the labour income share (i.e. share of total income going to labour rather than capital).¹⁶

Figure 1.5. Share of temporary employment in total employment, latest year (percentages)



Note: Refers to 66 countries in total, including 35 countries for Europe and Central Asia, 11 countries for Americas and Africa respectively, and nine for Asia and the Pacific. For 63 per cent of countries analysed, the latest year corresponds to 2015, for another 20 per cent it refers to the period 2011–2014 and earlier for the remainder.

Source: ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016); ILOSTAT.

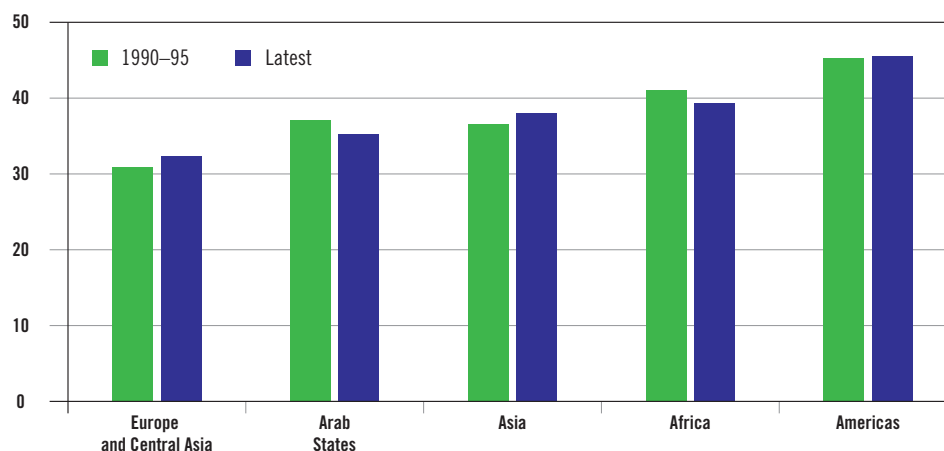
Figure 1.6. Gap between labour productivity and wage growth (percentage points)



Source: ILOSTAT.

Within-country inequality, as measured by the Gini index,¹⁷ has also grown in most regions (figure 1.7). Additionally, with the exception of Latin America, all other regions have experienced an increase in income inequality along with a decline in labour income share. In some instances, even where inequality has improved, it remains at high levels. This can dampen efforts to achieve poverty eradication, notably in Africa and parts of Asia and the Pacific, where substantial economic gains from the past decade were unevenly distributed.

Figure 1.7. Gini index developments by region



Source: ILOSTAT.

B. Megatrends and implications for the future of work

Technology, demography, globalization and climate change are key mega drivers of change in the world of work. Looking ahead, we need to understand how these megatrends will affect work and society in the future and how best to harness these trends to generate opportunities.

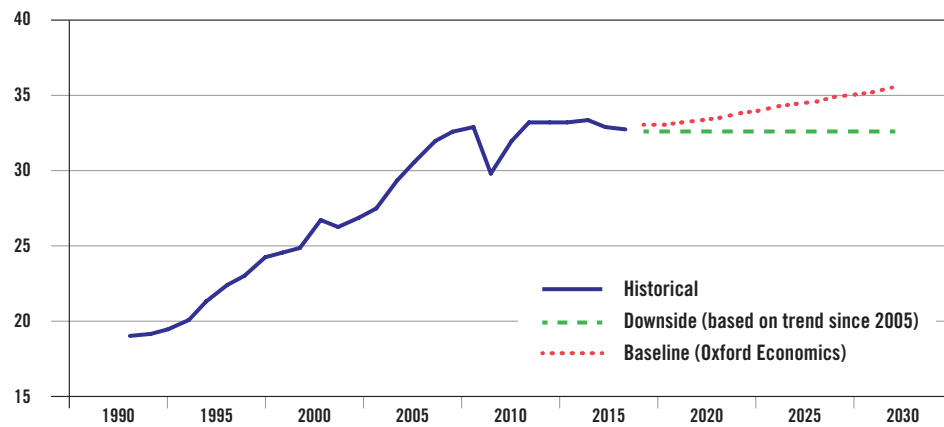
Globalization

Perhaps the most defining feature of the world economy over the last several decades has been globalization, which encompasses the internationalization of production, finance (including remittances), trade and migration.

This megatrend was partly a result of policy choices favouring liberalization, which were facilitated by technological advancement (and the Internet in particular). Globalization has, not surprisingly, encountered both opposition and support, with ongoing debates on whether it brings prosperity or merely inequality and injustice. In this context, the ILO's adoption in 2008 of the *Declaration on Social Justice for a Fair Globalization* is an effort to help member States achieve progress and social justice in an era of globalization.¹⁸ Renewed questioning of the established assumptions about globalization is now affecting political dynamics across the world. Recent (and divided) views in this context have focused on how trade gains have been distributed in terms of income and employment between and within countries. Against this backdrop, the world has recently seen significant stagnation in trade, which is projected to continue in the years to come (figure 1.8).

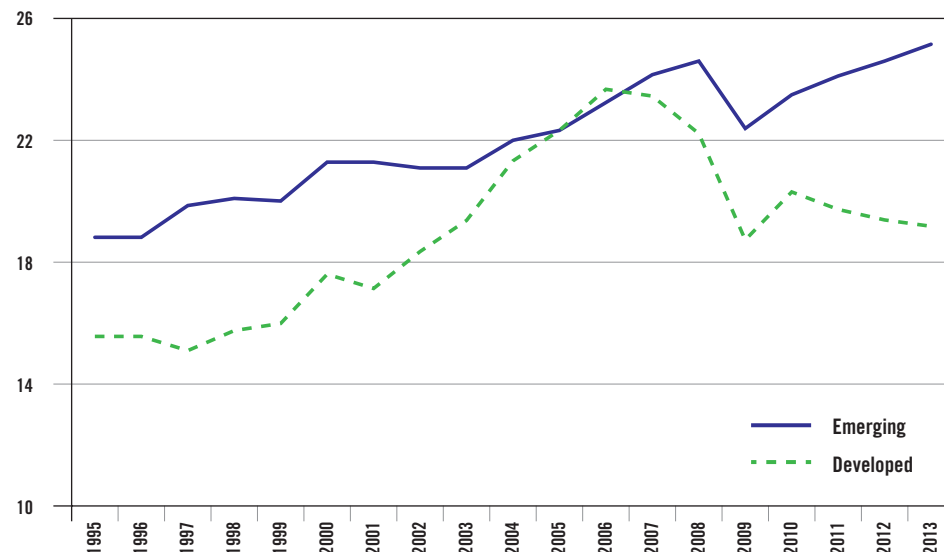
Another key aspect of globalization is the increasing financialization of business, with a focus on financial returns over real (non-financial) investment. In 2015, for example, portfolio investment and financial derivatives accounted for around 70 per cent of global financial flows, with the remainder being the more stable form of foreign direct investment.¹⁹ This phenomenon may encourage business to adopt more short-term and risky strategies and

Figure 1.8. Trade as a share of GDP (percentages)



Source: ILOSTAT and Oxford Economics.

Figure 1.9. GSC-related jobs (percentage of total employment)



Source: ILO: *World Economic and Social Outlook: Trends 2015* (Geneva, 2015).

to move away from productive investment. Ongoing financialization also has distributional consequences, contributing to reductions in the labour share of growth and thus increased income inequality. In this context, international financial flows could contribute to wider income inequality between countries (see Chapter 3).²⁰

Globalization has also caused changes in global production patterns (increasingly in the services sector) and resulted in significant impacts on enterprises and employment. This includes the fragmentation of production into tasks and activities, ultimately coinciding with the expansion of global supply chains (GSCs) (figure 1.9).²¹ This change has been facilitated by the reduction in trade and transport costs, as well as technology innovation. As trade

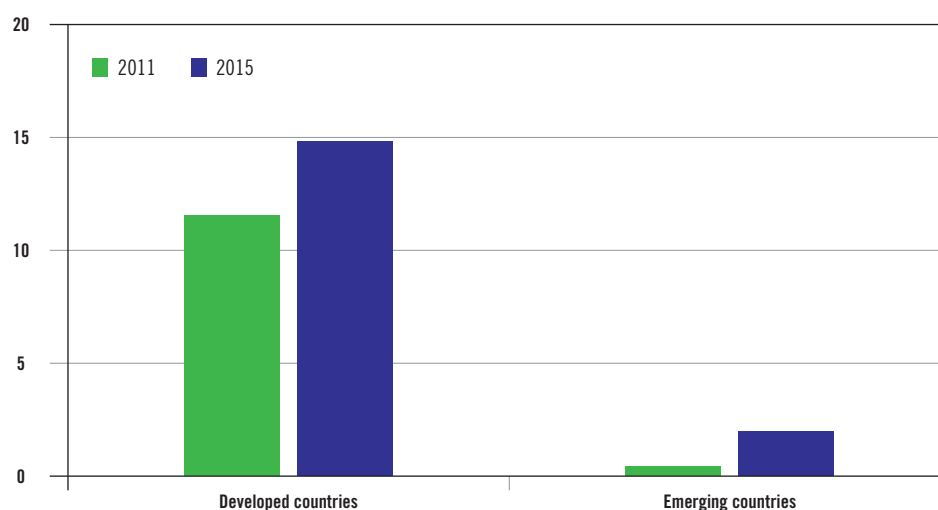
slows, it is unclear whether GSCs, along with the fragmentation of production, will continue to grow or change in nature; this uncertainty has implications for work and the organization of production (Chapter 4).

Technology

Technological change is a major driver of growth and development, yet it is equally associated with labour market change. New technological innovations underpinning the Fourth Industrial Revolution, such as Big Data, 3-D printing, artificial intelligence and robotics, to name a few, are having a transformative impact on the nature of work.²² For instance, since 2010, the number of operational industrial robots has increased by 9 per cent on average per year, reaching some 1.6 million units at the end of 2015. The deployment of robots is highly concentrated in the manufacturing sector (80 per cent) and within developed countries (80 per cent). Robot density – measured as the number of industrial robots per 1,000 people employed in the sector – ranges from 14 in developed countries to 2 in emerging ones (figure 1.10).²³ And while the prevailing evidence of past technological developments suggests that waves of technological change result in short-term job destruction followed by the creation of new and better jobs, today's technological advances are emerging at an unprecedented rate and changing work in ways not seen before.²⁴

Despite the anticipated gains in productivity that technology will bring over the long term, policy-makers will need to manage the unequal distribution of these gains and potential disproportional impacts by gender, sector and skill level. They will also need to assess the implications in terms of job quantity and job quality (see Chapter 3). In short, the impact of technology on the world of work will depend on how gains are distributed, given the widening income inequality among countries and regions, and whether the transition creates decent and quality work.

Figure 1.10. Robot density in manufacturing (robots/1000 persons)



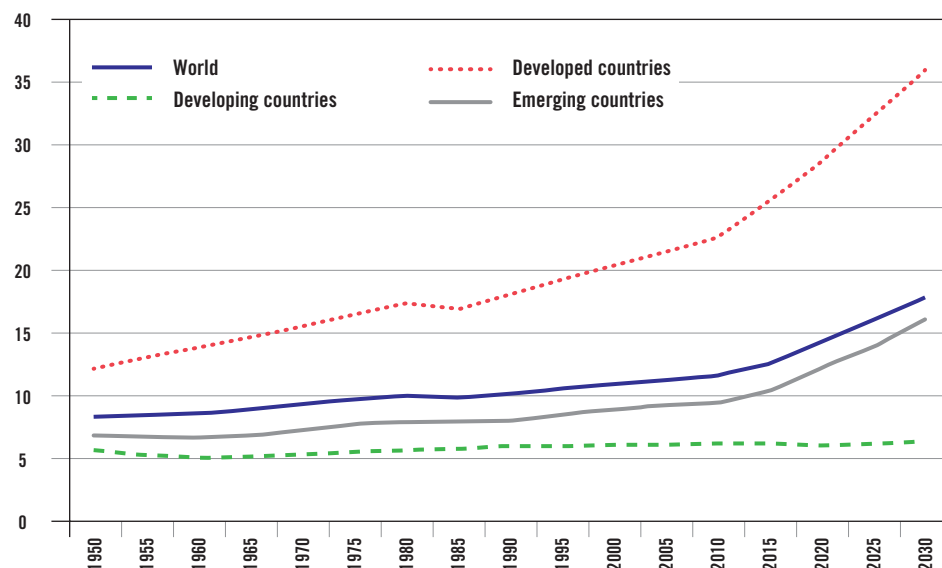
Source: ILO and World Robot Database, International Federation of Robotics.

Demography

While technology tends to dominate the debate about the future of work, for many countries demographics are generating policy debates of a very different kind. In emerging and developing countries, changing population dynamics have led to a bulge in the proportion of the young population entering the labour market, fuelling urbanization and contributing to international migration. There is a tremendous opportunity to leverage the potential of this sizeable youth cohort and accelerate economic growth; yet in many parts of the world, such as North Africa, youth unemployment stands at unprecedented levels. In developed countries, population ageing is increasing the importance of older cohorts. The global old-age dependency ratio – i.e. the ratio of people aged 65 and above to those aged 15–64 – has increased significantly over the past few decades and is expected to continue to rise even more markedly over the next 15 years. In fact, while in 1950 there were around eight people aged 65 and over per 100 persons of working age, in 2015 this number rose to over 12 and is projected to reach 18 by 2030. The ratio will remain significantly higher in developed countries, where it is expected to approach 36 by 2030, up from 25 in 2015. In emerging countries, the old-age dependency ratio should rise to 16, up from 10 in 2015. Conversely, it remains and will remain rather low (at around 6) in developing countries, suggesting that these countries have the potential to enjoy substantial demographic dividends as the numbers of youth-aged cohorts are expected to continue to grow (see figure 1.11).

While ageing reflects improvements in health and longevity, such a shift will place increasing pressure on those of working age, particularly in terms of care responsibilities. In the absence of productivity gains, this will lead to slower growth due to shrinking savings (as older people tend to save less) and is also likely to increase pressure on public finances, as demand for pensions and health care will rise.

Figure 1.11. Economic old-age dependency ratio
(ratio of the population aged 65+ to the working-age population aged 15–64)



Source: ILO calculations based on United Nations World Population Prospects, 2017 revision.

In some cases (especially in those countries in the developed world where the ageing process is taking place at a much faster rate), migration is increasingly seen as one of the potential avenues to mitigate lower labour force growth (others include extending the working lives of older workers and encouraging greater female labour market participation). This, combined with the fact that the intention to migrate to another country, especially among youth, remains elevated in much of the emerging and developing world, raises questions of labour market (and societal) integration (for migrants and other groups not previously engaged in the job market), as well as consideration of the effects of outmigration on development.

The transition to an older society and workforce and the shifting importance of different age cohorts, i.e. older workers, may change the perception of work and the desirability of certain types of work arrangements (Chapter 2). Meanwhile, longer life expectancy is likely to bring about employment opportunities in emerging sectors, such as the health and long-term care sectors (Chapter 3).

Climate change

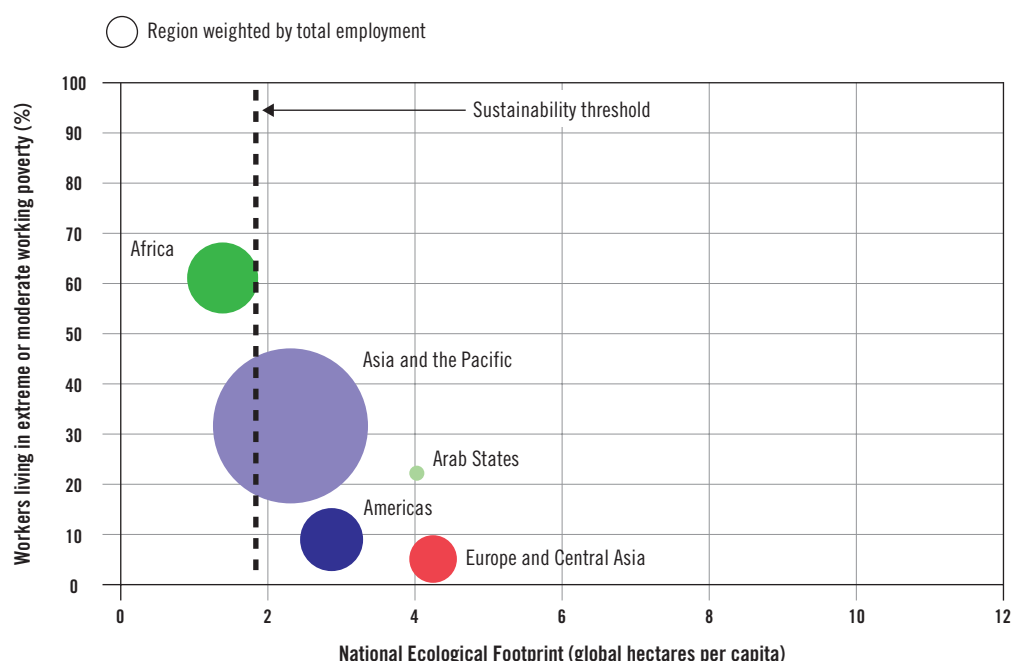
For some time now, humanity has tended to use more resources and generate more waste than can be regenerated and absorbed. This has led to, among others, the collapse of fisheries, soil degradation, forced migration, atmospheric and water pollution and the loss of biodiversity. Changes in temperature, rainfall and water levels, and extreme climate disasters like floods and droughts have also aggravated the issues faced by the agriculture sector in improving productivity, sustainability of food systems and global food security. For instance, cereal production in Africa is expected to weaken by about 3 per cent in 2030 as a result of climate change.²⁵ The 2030 Agenda for Sustainable Development and the SDGs articulate this challenge, highlighting how in the medium and long term decent work and environmental sustainability need to go hand in hand.

It is important to note that some of the progress in the world of work has been achieved at the expense of environmental sustainability. For instance, the remarkable reduction of working poverty in many countries was accompanied by an increasingly intense use of natural resources, or an increase in the ecological footprint (figure 1.12). The relationship between economic development and the environment has shifted: continued environmental degradation is now likely to destroy jobs and livelihoods, with the effects felt most severely among already vulnerable groups, including those displaced from their homes as a result of climate-related disasters, indigenous and tribal peoples and the poor.

At present, major shifts are needed in the world of work in order to meet climate change targets, reduce emissions and achieve a transition to a greener economy. Structural transformation with respect to industrialization continues to take place across emerging and developing countries; however, the environmental costs are high and, given the current trajectory, business-as-usual conditions will be insufficient to achieve climate change reduction targets. Moreover, escalating vulnerabilities from climate change could phase out some jobs or eliminate them entirely.

Renewable energy jobs may provide some replacement in the transition to a greener economy. For instance, the International Renewable Energy Agency reported in its Annual Review 2016 that the employment growth in renewable energy such as 5 per cent in 2015 was not

Figure 1.12. National ecological footprint and working poverty, 2012



Source: ILOSTAT and Global Footprint Network's 2016 National Footprint Accounts.

concentrated in industrialized countries; instead emerging ones such as China and India, accounted for a significant proportion of the new jobs. Further, growth in the renewables sector appears to be driven by net employment growth rather than displacement from the fossil fuel sector. ILO calculations suggest there may be net employment gains of between 0.5 per cent and 2 per cent, globally, to be derived from climate change responses by 2030.

At the same time, existing jobs will need to adapt to the requirements of a greening economy. This includes workplace environments and practices, skills and job profiles, product design and production – all of which will need to adjust accordingly. Manufacturers will have to produce more fuel-efficient means of transport; the agricultural sector will need to become more climate-resilient; and the services sector will need to adopt more energy-efficient techniques. Such measures reflect the transformations needed in the world of work to achieve climate change targets.

There is a strong consensus that the future of work and society must be grounded on environmentally sustainable development, i.e. a transformation towards sustainable consumption and production. A just transition will necessarily entail movements from one sector to another and changes in skill requirements – for both firms and individuals. In this regard, the objective of the ILO's Green Centenary Initiative is to help stakeholders better understand the challenges and opportunities of this transition, and support them in their role managing this change through effective evidence-based policy recommendations.²⁶

CHAPTER 2

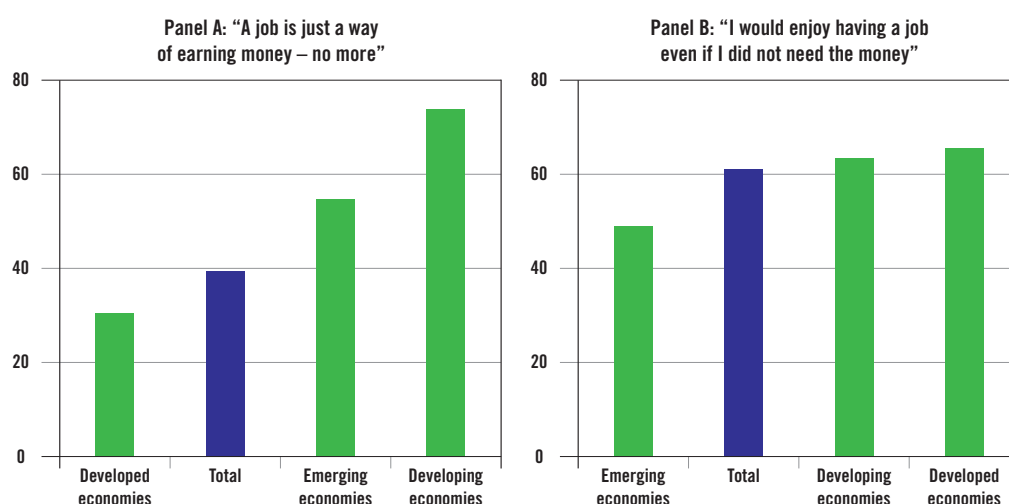
Work and society

The ILO's mandate rests on the conviction that work should allow the individual to satisfy not only material needs, but also the need for personal development and the desire to contribute to something larger than oneself or one's family.²⁷ Recent evidence demonstrates that people around the world share this conviction. There has been much progress in the past century towards allowing work to fulfil this potential. However, long-standing challenges persist and new ones are emerging. Chapter 2 explores the relationship between work, the individual and society. It tries to identify those aspects of work that are posing significant obstacles to fulfilment as well as the changing and diverse perceptions of work across the globe and potential policy avenues.

A. The attributes of work that people value

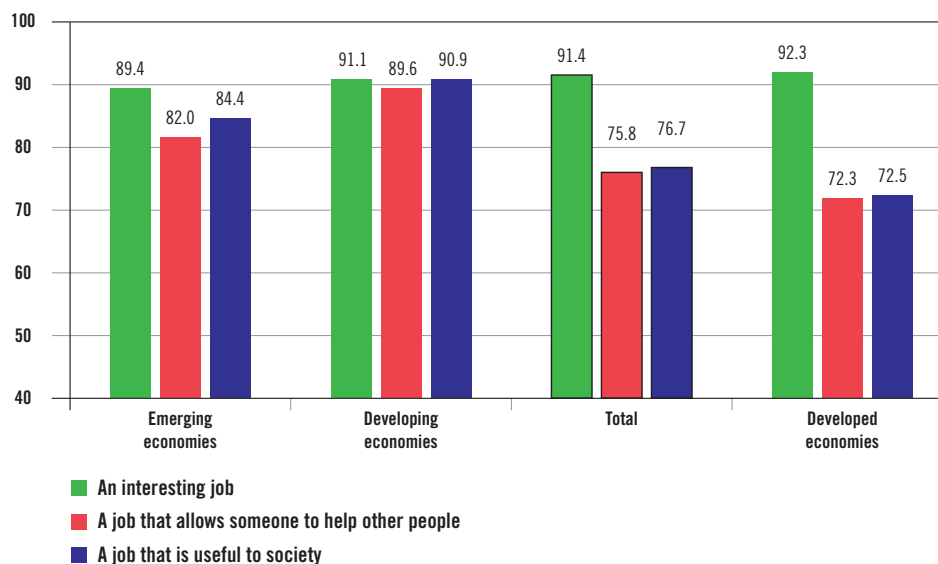
Most people continue to value work as more than a means of making a living. In 2015, for instance, only 39 per cent of respondents agreed that “[a] job is just a way of earning money – no more” (figure 2.1, panel A). The majority of people also agreed with “I would enjoy having a job even if I did not need the money” (figure 2.1, panel B). However, attitudes among workers vary according to levels of economic development, with the importance of paid work beyond satisfying material needs ranked lowest in countries with lower income. This reflects the simple fact that the vast majority of people in developing and emerging countries must work in order to meet their basic needs.

Figure 2.1. Work and money: People's views (percentage of respondents, 2015)



Source: ILO calculations based on International Social Survey Programme (ISSP), 2015.

Figure 2.2. Share of individuals who feel “an interesting job”, “a job that allows someone to help other people”, and “a job that is useful to society” are important or very important characteristics in a job, 2015 (percentage of respondents)



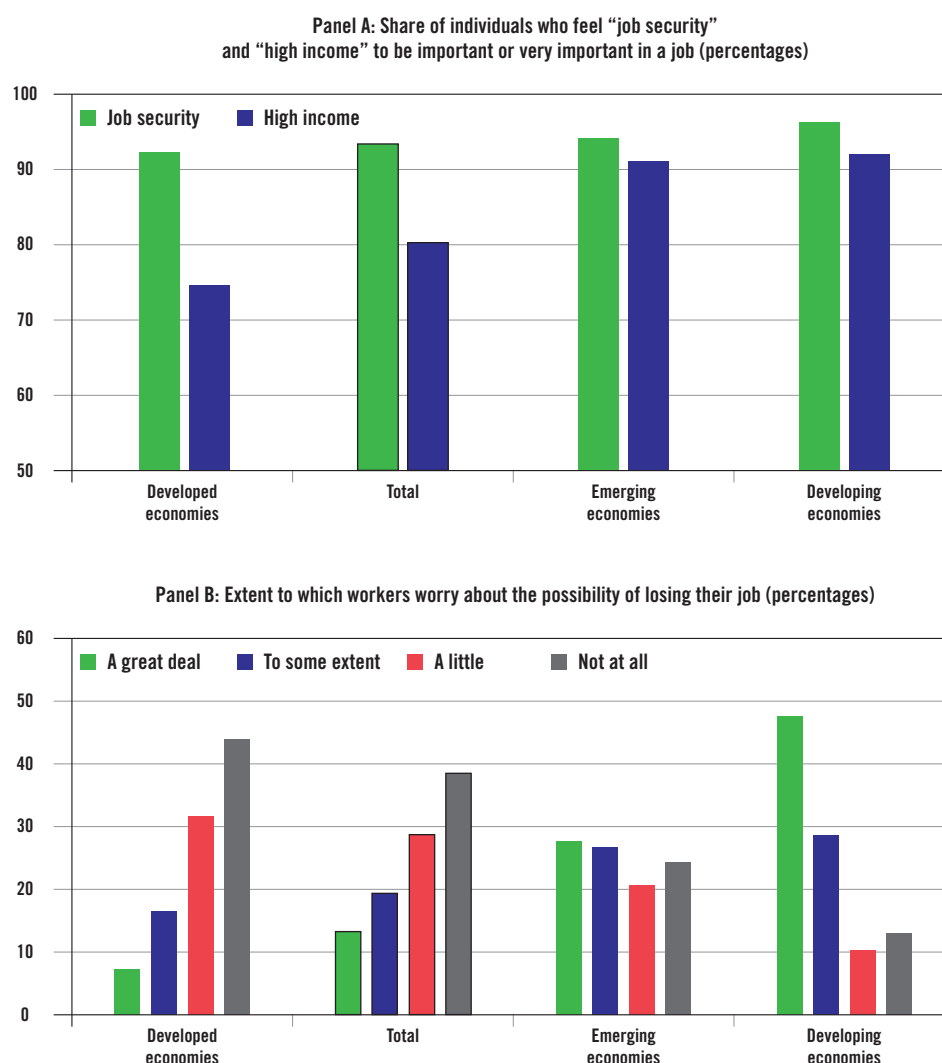
Source: ILO calculations based on ISSP, 2015.

Workers around the globe, with some variation across country income groupings, also value the contribution of a job to their individual experiences (interesting job) and appreciate the opportunity to help other people through their work (jobs which allow someone to help others) (figure 2.2). They also value the usefulness of work to society, particularly in developing and emerging countries. There is no strong evidence of significant shifts in the perceived importance of the value of work in this regard in recent years.

These results indicate that work remains important because of the social networks that are forged and maintained, the contributions to community that can be made and because it is a source of personal identity and meaning. The workplace also provides the environment for workers to organize and to ensure that their rights are protected. As work becomes fragmented and dispersed, there is a risk that the social relationships and networks created through work will erode²⁸ and it may be more challenging to engage in collective action, which could require different institutional settings (see Chapter 5).

Job security matters but is under growing pressure

Workers in all regions highly value “job security” and “high income” although, as indicated below, the relative weight of “high income” tends to be smaller in developed countries (figure 2.3, panel A). Consistently, workers rate job security as more important than “high income”. The evidence also demonstrates a high level of concern about job loss. The majority of people around the world believe that they are exposed to this risk, albeit to varying degrees (figure 2.3, panel B). Workers in developing countries also have a high risk of job loss, as educated unemployment, especially among youth, has been increasing. In a related survey, the most commonly valued immediate and long-term goals for students in Asia were to have a stable, secure employment and to earn a high income.²⁹

Figure 2.3. Share of people deriving value from various aspects of work, 2015 (percentages)

Source: ILO calculations based on ISSP, 2015.

There are signs of people’s disenchantment with their job and labour market prospects

Overall, workers still believe in the value of work, but their confidence in achieving these values through their work now and in the future is being challenged, which may reflect the profound changes noted in Chapter 1. According to Gallup’s World Poll, the overwhelming majority of workers find it difficult to feel engaged with their jobs.³⁰ Given this tension between expectations of work and people’s actual experience, it is understandable that, according to Gallup, roughly one-third of workers think that their own job is not ideal. This perception generates a strong interest in changing jobs, but people are equally aware of today’s stark reality: jobs are “scarce resources” where they live. This is likely to explain, at least partially, why more than 25 per cent of respondents worldwide would like to leave their country permanently.³¹

An important issue in the context of the future of work is the extent to which the value of work and people’s belief in it are associated with the attributes of traditional work and

the standard employment relationship; and, if that is the case, how new forms of work will impact those perceptions? (See also Chapter 4.) Some of these issues are discussed in section C below.

B. Making “invisible” work “visible”

Many forms of human activity with economic and social value are still not properly recognized as “work”. Of particular note in this regard are unpaid care and household-related activities – which are performed overwhelmingly by women. This includes caring directly for family members and others, as well as other activities associated with home-based work that ensure the maintenance and reproduction of people and societies.³² These activities have traditionally not been considered as productive work and remain largely unpaid and invisible. The challenge is particularly acute in the informal economy, which dominates in developing and emerging countries.³³ It is also worth noting that other forms of work, such as the contributions made by volunteer workers, which contribute directly to development efforts, are also often not fully recognized.

There have been increased efforts at the international level to recognize all paid and unpaid work as a productive activity, and new statistical definitions covering paid and unpaid forms of work have been agreed globally.³⁴ However, current data collection efforts still fall short of adequately capturing the economic and social value of unpaid care work on a wide scale.³⁵ Existing country-level estimates highlight the economic significance of unpaid household services, beyond their individual and social value.³⁶

Digital labour: A new form of “invisible” work

Technological change and digitalization are creating new forms of invisible work, such as “virtual labour” or “digital labour”. This work engages individuals in the gig economy or crowdsourcing activities, including, for example, as micro-taskers or virtual assistants and performing a variety of tasks that underlie social media activities. A common misperception is that algorithms and new technologies do the work supplied through these information and communication technology (ICT) channels. In fact, “invisible workers” – human labour behind the technology – perform much of this work.³⁷ These workers are “invisible” in the sense that their work has no dedicated location and their employment relationship is often not recognized. The extent to which virtual labour will come to represent a significant portion of the global labour force remains unclear. In addition, whether these forms of work will ultimately fall within the ambit of the employment relationship, become new types of informality or fail to fall within existing regulatory frameworks also remains uncertain.

C. Work and well-being

Research on workers’ well-being has so far largely focused on physical safety and health at work (see also Chapter 1). Well-being in this respect, however, is a much broader concept. In particular, as the way we work is rapidly changing, it is urgent to develop a broader understanding of the factors affecting workers’ psychological health and ability to contribute

productively to their community – re-emphasized by the above evidence that a job brings much more value to the individual than just the income it generates.

Safety and health at the workplace: Unresolved challenges and emerging risks and opportunities

Since its inception, the ILO has placed great emphasis on workplace safety, particularly by introducing an effective framework for successful management of safety and health challenges for all workers.³⁸ Evidence shows that those countries which embraced this comprehensive approach with workers' participation and effective welfare regimes have achieved greater levels of safety and health.³⁹ In other countries, inspection systems that operate according to a coherent national policy have also had a positive effect on safety.⁴⁰

Nevertheless, occupational safety and health continues to pose a global challenge. According to the ILO, more than 7,600 people die each day as a result of work-related injuries and illnesses, totalling more than 2.7 million deaths per year.⁴¹ Annually, approximately 320 million on-the-job accidents occur, many of which result in extended absences from work.⁴²

Continued transformations in the world of work, especially those arising from new technologies, are both offering new opportunities to improve workplace safety and creating new risks. On the one hand, new technologies are making working environments safer as advanced robotics are keeping workers out of harm's way in some traditional (often dangerous) machine processes. On the other hand, there is a large and growing array of hazardous chemicals, notably new and potentially hazardous materials related to nanotechnologies and new work processes.⁴³

In addition, the transformations in the world of work call upon us to revisit the notion of well-being at work and expand it beyond just the physical attributes to include a number of relevant issues such as, but not limited to, the importance of a good "social" environment, reasonable workload and, as discussed above, the meaningfulness of work. This brings to the fore other risks, notably psychosocial risks, that are not necessarily new but are associated – at least in part – with the changing nature of work.

The meaning of work as revealed by increasing psychosocial risks

Researchers have studied the psychosocial risks arising in the current workplace.⁴⁴ These risks are becoming a more pervasive feature of work environments and are related to the growing problems of work insecurity (see section A) and work intensification.⁴⁵ A number of studies have shown that a lack of job security, caused by restructuring, and contractual arrangements such as temporary and third-party contracts, may also give rise to psychosocial risks.⁴⁶ For example, while recent technological advances, such as telework and ICT-mobile work (T/ICTM), create greater autonomy,⁴⁷ they also appear to be associated with higher levels of work intensity, as they blur the boundaries between workplace and home, as well as between time spent on and off the job. Given that temporary workers are often ineligible to join the trade union at their workplace,⁴⁸ they tend to be in a weaker position to safeguard their own health and well-being.

Just as work affects well-being, so does the lack of work. Intermittent work – jobs interspersed with bouts of unemployment – can be especially damaging to worker well-being.⁴⁹ Similarly, unemployment and underemployment have profound consequences for the well-being of workers and their families, as well as the communities in which they live. In-depth reviews of the relationship between unemployment and health have found strong, epidemiological evidence of a (positive) correlation between unemployment and many adverse health outcomes.⁵⁰

While the current knowledge of psychosocial risks has concentrated on industrialized countries, developing countries share these risks.⁵¹ Occupational safety and health (OSH) experts from developing countries have ranked psychosocial risks second after injury and accident prevention among workplace issues requiring urgent attention in developing countries.⁵² Experts have pointed to the pressing need to more clearly understand the interaction of broader socio-economic issues on psychosocial risks, including poverty and violence, and also the effect of new but insecure industries and working arrangements that have emerged as a result of globalization and climate change (including international migration).⁵³

In this respect, a number of studies point to increased psychosocial risks associated with the evolving workplace and raise questions about how to ensure that all workers continue to derive meaning from their jobs.

Balancing work and family

Work represents a significant share of one's life but, historically, the way of dividing time between work, family and leisure has differed considerably across countries, depending on a range of factors, notably societal and cultural norms. Despite much progress in reducing working hours in the past century, working time remains a major challenge for workers in maintaining a healthy and balanced family life, especially in developing countries where working hours continue to be typically very long, often exceeding the weekly threshold of 48 hours specified in the ILO Hours of Work (Industry) Convention, 1919 (No. 1). In developed countries, recent years have seen significant slowdowns in working-hour reduction.

Interestingly, however, the evidence shows that, on average, people want to spend more time in paid jobs while also demonstrating a preference to spend more “time with family”. The recent ILO/Gallup survey found that balancing work and family is the biggest challenge for women in developed and emerging countries, and ranked as the second biggest challenge in developing countries.⁵⁴ In addition, people want time for leisure, whether for individual, family or social reasons. Not surprisingly, people are increasingly faced with the difficult task of organizing their time to better balance their competing needs and demands, especially when work intensifies and is precarious.

In light of this, many have argued for a progressive reduction of normal hours of work for all workers, facilitating a more gender-neutral division of labour in the household, as well as promoting more sustainable living.⁵⁵ There is also an argument to help alleviate some of the responsibilities associated with care – which are now integral to workers' daily lives in all countries, whether rich or poor. It will be essential to design and implement leave policies that complement paid work and distribute care work more equitably between men and women.

D. Effective social protection for the twenty-first century

Strong and effective social protection policies, as well as others that address income and hours at work, can help alleviate many of the risks and insecurities in the current workplace, as well as supporting those who are not in the labour market, like children, persons unable to work or older persons.

Opportunities and challenges to the extension of social protection

As noted in Chapter 1, the world has achieved significant progress in expanding social protection. At present, 45 per cent of the population is effectively covered in at least one social protection area, yet only 29 per cent of the world's workers enjoy comprehensive coverage in all areas of social security.⁵⁶ Even in countries where social protection systems are well-established, many workers are not covered or are inadequately covered, for a variety of reasons.

In recent years, countries have improved their social protection systems, along with the concept of a social protection floor, embodied in the ILO Social Protection Floors Recommendation, 2012 (No. 202), which guarantees at least a basic level of social security for all, including “basic income security” and access to essential health care. Contributory mechanisms (in which workers make a contribution that varies by income), and in particular social insurance, therefore play a key role in ensuring higher levels of protection and meeting the social security needs of many workers. Inevitably, contributory social insurance is linked to employment, either through an explicit link to economic activity as an employee or a self-employed person, or implicitly, on the assumption that contribution capacity equates to a certain level and regularity of income.⁵⁷ For this reason, it is widely recognized that a combination of contributory and non-contributory elements is key to building a comprehensive social security system with a strong floor of social protection.

Additional challenges remain. Cuts in social protection systems in both the developed and developing world, in response to recent short-term austerity or fiscal consolidation pressures, have affected the adequacy of benefits and increased the risk of poverty.⁵⁸ Climate change may also diminish economic activity, thereby placing additional strain on social protection systems. Women are often over-represented in employment where social protection is frequently limited or not applicable. These challenges add to the long-standing difficulties of covering workers in the informal economy.

Universal social protection and the debate on basic income

As a response to these challenges, some scholars and policy-makers have argued for the need to delink social protection from employment by creating a universal basic income that would provide a flat unconditional benefit to all citizens or residents of a country, regardless of income. Proponents argue that a sufficiently large benefit can eliminate absolute poverty, is easy to administer and is less prone to leakage or corruption. By raising the reservation wage of workers, the benefit can also act as a deterrent against poor quality jobs, encouraging employers to improve pay and working conditions. The idea of universal basic income has received strong support among some experts.

Basic income also attracts many critics.⁵⁹ They argue that, in order to be effective, benefit levels would need to be sufficiently high. They also argue that they would be costly, difficult to implement and would displace spending on necessary health and other social services. Others fear that such a grant would deter individuals from working, that households with adequate income would receive an unnecessary benefit and that a universal basic income would not address the structural causes of poverty and inequality.

The future of protection and welfare

The debate regarding universal basic income has just begun. While some communities are piloting a version of this scheme, there is limited information so far to evaluate its impact on individuals, inequality, social protection systems, economies, as well as on work itself. Other innovative ways of providing social protection have also been proposed. For instance, some scholars have argued for the need to reconfigure unemployment insurance as “employment insurance” that would include a system of entitlements to training that would belong to the individual instead of the job. This would support workers with the greatest need for continuing education, who often do not have the resources to pay for it themselves, particularly when accompanied by a period of unemployment, as well as workers in small- and medium-sized enterprises (SMEs) who are less likely to benefit from employer-sponsored training.

CHAPTER 3

Decent jobs for all: Full employment and raising standards of living

This chapter turns to the critical question of how to create decent jobs for all in the future when megatrends such as technological and demographic changes (Chapter 1) will affect labour demand and supply in a complex and profound way. The policies we implement to manage these processes will determine labour market and social outcomes, such as job quantity, job quality and income distribution and must be formulated accordingly. Chapter 3 looks at new job dynamics and related policy issues.

A. What future for “full employment”?

Examining the future sources of job creation returns us to the issue of full employment, one of the ILO’s “solemn obligations” (Philadelphia Declaration, 1944), which is reiterated in the 2030 Agenda for Sustainable Development. In light of the rapidly changing context of the world of work elaborated on in the previous two chapters, questions are inevitably raised about the effectiveness and appropriateness of current policy setting and instruments. As recent experiences such as the global financial and economic crisis remind us, full employment cannot be achieved without “employment-friendly” macroeconomic policies.

Challenging times for macroeconomic policies for full employment

Recent years have seen an erosion of the effectiveness of prevailing macroeconomic policies, notably with regard to their ability to prevent the rise in unemployment and, in turn, provide a boost to job creation. In monetary policy, for instance, policies have shifted away from employment objectives towards price-related targets (e.g. inflation). At the same time, in the wake of the global financial and economic crisis, co-ordinated fiscal stimulus played a central role in limiting jobs losses, but subsequent fiscal consolidation efforts – despite the persistence of high unemployment and long-term unemployment in a number of countries – has limited the potential of additional public spending to boost economic activity (which has also affected adequacy of social protection coverage; see Chapter 2). In parallel, a number of reforms focused, in part, on fostering labour market flexibility with a view to enhancing economic growth and job creation, but with debatable outcomes on job quantity and job quality. There is widespread concern that these changes may reinforce conditions for secular stagnation, i.e. extended periods of low growth.

Thus, there appears to be scope for more “employment-friendly” macro policies, but in developing these, there are two major factors which have only recently been recognized as important for the policy framework: financialization and inequality.

Financialization may intensify tensions in the world of work

Financialization – characterized by an increasing role of finance in economic activities – affects all three levels of the economy: industry, firm and workers (including their households). The financial industry is growing in terms of GDP and non-financial firms are relying more on the financial market. In some instances, this has meant that instead of allocating resources towards productive investment, firms have sought (potentially higher) returns through financial assets. Financialization is also observed widely at the household level as reflected in growing financial asset holdings, and has a global dimension including an increase in global financial flows as discussed in Chapter 1.

This global phenomenon, when not properly regulated, renders the economy and the labour market more volatile and vulnerable. It incentivizes short-term profits, often with serious distributional consequences and potential negative implications over the medium to longer term with respect to employment creation, productivity and enterprise sustainability.

Inequality is increasingly seen as a macroeconomic issue

Historically, inequality has largely been seen as a social and normative issue but is now increasingly recognized as an economic issue. There is growing evidence that excessive inequality negatively affects economic performance in various ways.⁶⁰ First, high and rising levels of inequality may trigger waves of political instability, which tends to translate into economic uncertainty; in turn, this discourages investment and job creation. Second, high inequality can lead to public resistance to pro-growth policies such as trade and technology. Third, income inequality can also depress consumption and weaken aggregate demand. Finally, inequality can lead to high levels of debt and to greater financial instability as people take on greater risk.⁶¹ In fact, some argue that this was a key factor behind the global financial and economic crisis.⁶²

B. Technological changes and jobs: Risk or opportunity?

New waves of technological changes and job quantity: The policy context

Studies about net job creation or destruction in the context of technological changes are important because they provide information and insights into the changing nature of work. The ILO is no stranger to the debate about whether technological change will bring about job destruction or creation. Having launched the debate on “automation” when the term was coined in the 1950s, the ILO continued to revisit the issue throughout the remainder of the twentieth century. Overall, pessimistic scenarios turned out to be overstated, at least in terms of employment levels, although that did not prevent new forms of “techno-pessimism” from emerging. Yet, as noted in Chapter 1, the specific disruptions created by the current wave of technological change may yield different and unintended consequences, especially regarding the distribution of the “technological dividend”. Therefore, the question is whether this time is different.

What recent studies say about technology and job quantity

Some studies⁶³ expect more than half of all current jobs to either change significantly or disappear entirely (see table 3.1). This is partially a result of the nature of technological change in computing, mechanics and biochemistry, where a much larger range of tasks is seen to be under threat when compared to previous waves of technological change.

Table 3.1. Estimates of the impacts of technology on employment

Organization	Estimates
University of Oxford	47% of workers in US at high risk of having jobs replaced by automation
PricewaterhouseCoopers	38% of jobs in US, 30% of jobs in UK, 21% in Japan and 35% in Germany at risk of automation
ILO (Chang and Huynh)	ASEAN-5: 56% of jobs at risk of automation in next 20 years
McKinsey	60% of all occupations have at least 30% technically automatable activities
OECD	OECD average: 9% of jobs at high risk. Low risk of complete automation but substantial share (between 50% and 70%) of automatable tasks at risk
Roland Berger	Western Europe: 8.3 million jobs lost in industry against 10 million new jobs created in services by 2035
World Bank	Two-thirds of all jobs in developing countries are susceptible to automation

Great care, however, should be taken in interpreting these estimates, since many of the studies look at the probability that a job *could be* automated, not the probability that it (or the tasks therein) *will be* automated.⁶⁴ In light of the significant financial cost often associated with adopting and implementing advanced technologies, the difference between “could be” and “will be” is likely to be substantial, especially in developing countries. In addition, the destruction of certain specific tasks within a job does not necessarily mean that the whole job will disappear; it will simply require workers to adapt to new work environments where they co-work alongside (smart) machines and robots (“co-bots”).⁶⁵ In short, some of the current estimates of “technological unemployment” may be overblown.

A more balanced approach should also consider the potential of job creation through technological changes. For instance, income and productivity gains from current technological improvements will lead to additional demand for existing goods and services or demand for entirely new ones, giving rise to previously unknown occupations (e.g. social media manager).⁶⁶ In the absence of policies to help shape the outcomes, the result of these opposing effects (i.e. substitution/job replacement vs job creation resulting from productivity and income) will eventually determine the final outcome of aggregate employment levels.

Sharing “technological dividends”: Job quality and distributional considerations

Regardless of the overall impact on jobs, technological change will not affect all individuals equally. Already we observe job polarization, as jobs in both low- and high-skilled occupations have increased, while this is not the case with middle-skilled routine occupations, at least in

developed countries. Studies on robotization show that the risk of job loss is high for routine and manual jobs, including potentially in some service industries. In the absence of adequate opportunities to acquire new relevant skills, many of those who are at risk of job loss may be forced to take lower skilled and lower paying jobs, putting further downward pressure on pay in the low-wage sector.⁶⁷ This could also give rise to precarious forms of employment increasing alongside long-term unemployment.⁶⁸

Sharing of technological dividends from the current and future waves of innovation has become a major issue. In this respect it is worth noting the differences in access to technology, both within and across countries, e.g. variations by income grouping, between rural and urban areas, by gender, by age groups and even between sectors. For example, the digital economy generates substantial gains in productivity and profits from larger, global markets,⁶⁹ but so far the technological dividends generated in the digital sectors have not spilled over to the rest of the economy, and thus risk deepening some of the prevailing inequalities, notably between capital and labour.⁷⁰ Together with the broader macroeconomic context, these changes raise concerns about how productivity gains from new forms of technology, such as robotization and artificial intelligence, will be shared.

Technology change: Adjustment costs for individuals, firms and regions can be high

Reallocating jobs involves moving people (to the extent feasible or desirable) and resources across the economy, including between firms, sectors and locations. Evidence from the past suggests that, if not managed properly and in a timely manner, such adjustment processes can lead to increases in firm closures, skills mismatch and unemployment, with widening spatial inequalities (sometimes extensive), particularly the divide between rural and urban areas (and often with significant political consequences).⁷¹

In short, the real challenge of technological change is therefore how to support firms in this transition and facilitate workers moving (both spatially and in terms of competencies) from old to new jobs and how to share productivity gains equitably.⁷²

Skills for the future

While to date there has been evidence of job polarization in terms of skills, increasingly robots and computers are “learning” skills and mastering competencies – at a faster pace than before – that were previously thought to be the unique realm of human accomplishment. Indeed, technological change and current shifts in occupational patterns are transforming the need for skills. What skills will workers need and how will they acquire them? Cognitive abilities and complex problem-solving skills are increasingly becoming more important than physical strength or even technical skills.⁷³ This shift away from skills and towards competencies requires well-tuned training and educational institutions that are informed by the views of the social partners, including facilitating the school-to-work transition, and promoting continuous upgrading of skills and competencies across the occupational spectrum. At the same time, however, shifts in the employment relationship towards more temporary, less secure jobs raise questions about how best to implement policies to ensure that individuals get the support to

acquire the right skills and competencies throughout their working life (see also Chapter 4).⁷⁴ Policies targeted at women and youth in agriculture, a sector which possesses enormous untapped potential for job creation and livelihood alternatives can contribute significantly to the narrowing of inequality between rural and urban areas.

C. Potential for new jobs?

The success of these investments in education and skills will depend, foremost, on the availability of jobs for which workers are trained. Where will the new jobs come from?

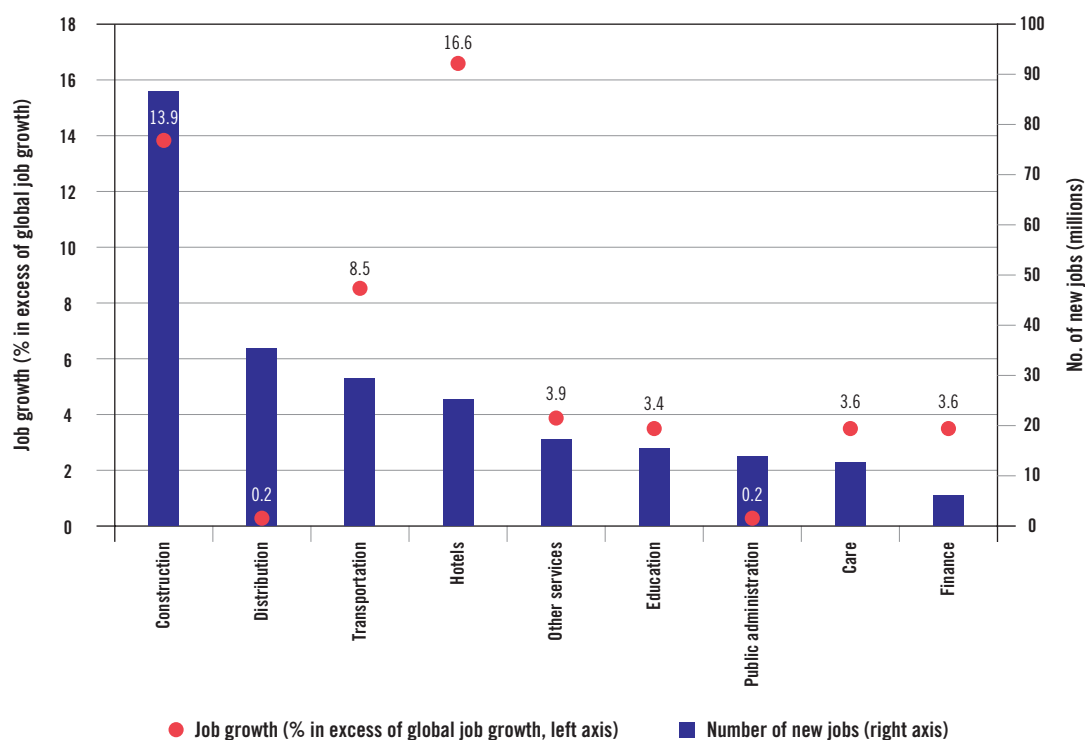
Traditionally, manufacturing was seen as the engine of growth and job creation through spillovers to the rest of the economy. However, in recent decades, its relative importance in employment in developed countries has been declining – the phenomenon which is often dubbed the “factory-free economy”.⁷⁵ Current advancements in technology mean that, even if manufacturing’s value added continues to expand, fewer workers are likely to find employment on the shop floor. This trend will probably continue in the near future.⁷⁶

At the same time, these technological transformations are likely to bring down costs in the provision of services, making them more accessible to a larger group of consumers. In addition, ageing populations, the rise of the global middle class and changes in life styles, and improvements in the participation of women in the world of work continue to generate growing demand for services, especially in the care economy – although, as noted in Chapter 2, pervasive gender stereotypes perpetuate significant decent work deficits in this sector and most care work continues to be unpaid, preventing the development of a larger, diversified care services market. As a result, most global employment growth is likely to come from service industries over the coming years (figure 3.1). In addition, the construction industry is anticipated to provide a large number of additional jobs up to 2020.

The changing landscape for job creation in the future offers an opportunity for the developing world but, at the same time, poses additional challenges to development policies. Reducing technological gaps is a persistent challenge for developing countries. Basic deficits in housing, infrastructure, education, reliance on the informal economy (see Chapter 4) and substantial decent work deficits in agriculture in much of the developing world create a far different role for technology than in the majority of emerging and developed countries. And the weakening job creation capacity of manufacturing has implications for the conventional approach, which tends to emphasize the strategic importance of that sector as a critical source of both economic growth and employment. Current global policy environments, such as trade and foreign direct investment flows, add another dimension of uncertainty to development policies. The shift to a greener economy is already creating employment opportunities across a number of sectors and more ambitious strategies in this regard could result in even more job gains by stimulating new investments.⁷⁷

Our ability to address these challenges will, in many respects, determine whether we create a future of work that provides sustainable and inclusive growth for the world’s workers and closes the inequality gap.

Figure 3.1. Projected global employment growth in construction and services, 2015–20



Note: The job growth figures in percentages indicate the additional growth of jobs expected over and above the increase in the total number of jobs worldwide.

Source: ILOSTAT.

Scope for an integrative policy framework for full and productive employment

Current macroeconomic and technological trends pose significant challenges for achieving full and productive employment and decent work for all. The discussion in this chapter shows that an integrative framework that creates the enabling conditions for strong growth, together with policies that support workers and firms to transition and adjust to new areas of activity, is necessary. Education and skills policies are of central importance in this respect. The discussion also highlights the fact that targeting growth will not be sufficient if trends in inequality and financialization are not reversed.



CHAPTER 4

The organization of work and production: “Labour is not a commodity”

For nearly a century, the ILO has championed work that embodies the criteria enunciated in its Constitution and the Declaration of Philadelphia, based on the bedrock principle that “labour is not a commodity”. The world of work, as discussed in the previous chapters, has undergone profound changes in the past several decades. Yet, in many emerging and developing countries, informal employment persists and remains widespread (see Chapter 1). In addition, the structure of contemporary enterprises differs vastly from the vertically integrated, nationally based and focused firms of an earlier era of capitalism. This has had profound implications for the nature of work itself and has raised questions about the quality of employment. Ongoing changes in work and production have led to an increased incidence of various forms of “non-standard employment” (NSE) that in some cases lack some or all of the protections typically afforded to workers in standard employment.

Acknowledging that the organization of work has changed and in view of the advent of new technological developments, are new approaches needed to facilitate the transition from informal to formal employment? As the production of goods and services becomes increasingly fragmented, how do we ensure the continued promotion and protection of decent work? What are the potential policy responses to address the challenges associated with some forms of NSE and ensure that all workers are afforded the same rights and benefits? This chapter examines the critical and complex issues raised by the growing diversity of employment forms and the insecurities this may bring in the context of the continuing mandate of the ILO.

A. Informal employment in the future

Informal employment persists as a main feature of the labour market in many emerging and developing countries. The world has seen steady progress in the transition from informality to formality, but at an unacceptably slow pace.⁷⁸ A key question for policy-makers and constituents is whether, and in which manner, the changing nature of work will affect the transition from informal to formal employment and what new approaches may be needed to address this challenge. The success of promoting this transition holds the key to addressing decent work deficits in emerging and developing countries.

What are the challenges for enterprises and workers in the informal economy?

A striking feature of informality is its sheer diversity. Informal work includes, for example, subsistence farming and survivalist waste picking; it also includes informal work in the formal sector, such as informal wage labour or home-based work.

These different types of informal work occur outside of the framework of labour and social security laws. Without the protection of laws and regulations covering minimum wages, hours of work, social protection, collective bargaining, OSH, among others, informal workers are deprived of the benefits of economic development.

Enterprises operating in the informal economy also contend with a lack of fair and enforceable rules. They suffer from weak property rights regimes and are often unable to access public services or formal sources of credit that would help them to grow and become more productive. Informal enterprises face additional challenges, including ease of entry into the formal sector and high levels of competition.

Formalizing the informal economy: Prospects for the future

The deficits described above for both workers and enterprises demonstrate the importance of including informal workers within the scope of labour and social security laws, as well as establishing and promoting an enabling environment for sustainable enterprises. In this respect, the Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204), lays out a comprehensive policy framework to address these challenges.

The past few decades have been characterized by robust economic growth rates in emerging and developing countries alongside a persistent and high incidence of informality. This suggests that economic growth strategies alone will not be enough to address the challenges of informality. This notion is particularly relevant against the backdrop of emerging evidence that indicates the persistence of lower economic growth prospects than before.

Technology, demography, and climate change – three of the emerging drivers in the world of work – will help shape new approaches to addressing informality on a sustainable basis. Climate change continues to pose challenges for agricultural livelihoods in the developing world, where the prevalence of informal employment is the highest. Unlike in many developed countries, the youth population will continue to grow in most developing countries, which, in the absence of strong job growth and employment-friendly approaches to development, may add increased pressure to resort to informality. In this context, whether technology can be harnessed for inclusive growth has become an urgent question.

B. The organization of work within global supply chains

In recent decades, international trade and the production and distribution of goods (and services) has become increasingly dominated by global supply chains (GSCs). GSCs operate

across many sectors of the economy, including (but not limited to) textile, clothing, retail, footwear, automotive, food and agriculture, seafood, fisheries, electronics, construction, tourism and hospitality, horticulture and transport.⁷⁹

GSCs have had a positive impact on job creation, particularly in light of demographic changes such as ageing, urbanization, population growth and the increase in women's participation in the labour market. For instance, GSCs are estimated to account for 450 million jobs worldwide (see Chapter 1).⁸⁰ Participation in GSCs also increases people's chances of getting a foothold in the world of formal work and their ability to support themselves and their families.⁸¹ GSCs have also boosted entrepreneurship and economic growth via technological transfers and the adoption of new production practices.⁸²

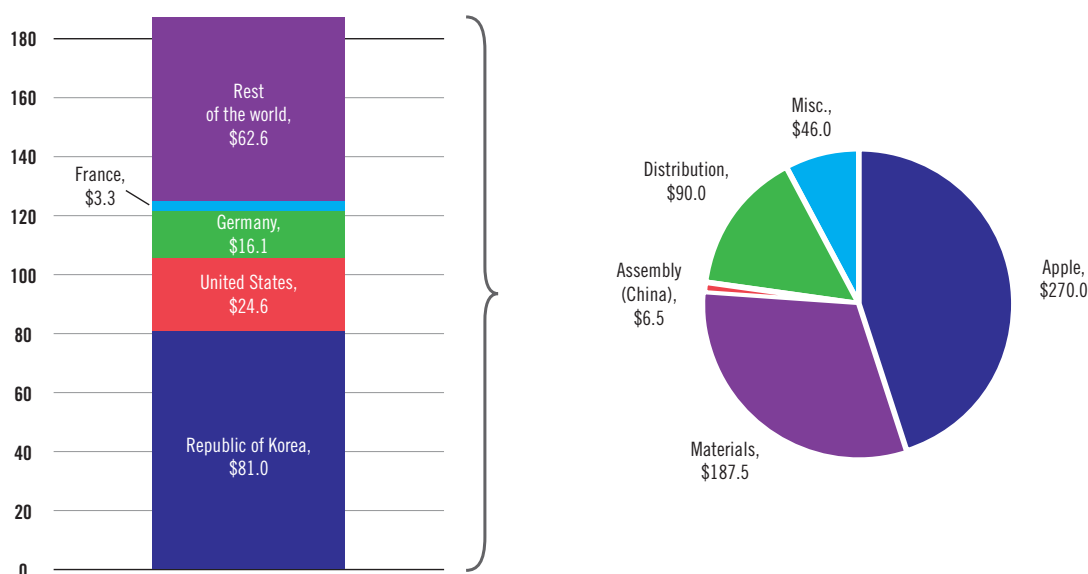
The effects of this dispersed organization in supply chains can be straightforward but, for most products, chains are complex, involving the supply of inputs, their production and their distribution throughout the world. Sourcing and production in this manner can have important implications for work, work quality, governance and income distribution. In particular, in some instances it has led to concerns regarding OSH, wages and working time as well as challenges associated with ensuring labour rights, notably freedom of association and collective bargaining. Firms that source their goods from entities along the supply chain do not necessarily employ the workers in those enterprises. Thus, they have no legal responsibility for labour violations that may occur in those entities, despite the fact that their sourcing practices have significant impact throughout the chain.

With respect to distribution and potential implications for development, it is worth noting that, in some GSCs, the gains or profits are captured by firms responsible for the design and marketing of the product. Apple's iPhone is a case in point (figure 4.1). For the Apple iPhone 4, an assembler in China received only 1 per cent of the US\$600 retail price (US\$6), whereas Apple captured nearly half of it (\$270). Materials used in the manufacture of the iPhone were sourced from throughout the globe.

Governments may have limited capacity to effectively monitor and enforce compliance with laws and regulations. Businesses themselves have long adhered to corporate codes of conduct governing labour and human rights in the enterprises from which they source. These often include auditing regimes to verify compliance by their contractors, as well as best practice sharing, complaints mechanisms, peer learning, guidance and capacity building. Numerous empirical studies have analysed such private compliance initiatives. The UN – by endorsing the Guiding Principles on Business and Human Rights (UNGPs) – has created a framework to address the role of businesses in dealing with human rights abuses that may occur in their operations.⁸³

Whether or not GSCs will continue to dominate global production and remain a key engine of development is not yet known. However, if competition along GSCs grows, sourcing practices will continue to affect enterprises and workers in various ways. This has enormous implications for poverty, inequality and sustainability, and therefore remains an area to which policy-makers, along with the social partners, should pay particular attention.

Figure 4.1. Value creation and capture for Apple's iPhone 4 (in US\$)



Source: Koen De Backer: *Global value chains: Preliminary evidence and policy issues* (Paris, OECD, 2011).

C. Diversification of the employment relationship

The “standard employment relationship”, i.e. full-time work understood to be indefinite employment in a subordinate employment relationship, while still the most common form of salaried employment in developed countries, has nonetheless lost ground over the past few decades, in both developed and developing countries, to NSE, as firms have restructured their organizational and management practices, not only to deal with the challenges of globalization, but also to respond to regulatory changes and gaps as well as demands from workers for more flexible arrangements. NSE is a grouping of employment arrangements that deviates from standard employment and includes temporary employment, part-time work, temporary agency work and other multiparty employment relationships, disguised employment relationships and dependent self-employment.⁸⁴ The regulatory context in a particular country often determines which form of NSE predominates (see also Chapter 1).

Of notable concern is the advent of “on-call” work, including “zero-hours” contracts (with no guaranteed minimum hours) and the “gig economy”, although limited data exists on the extent of these and other forms of NSE. The limited data on temporary agency work shows that it can range from 1 to 6 per cent of wage employment, but these figures do not include other forms of labour contracting, which can be widespread. In the United Kingdom, in the last quarter of 2016, there were 905,000 individuals with zero-hours contracts, representing 2.8 per cent of all people in employment.⁸⁵

Although the “gig” or “platform economy” comprises a small proportion of the labour force – in the United States, different estimates place it at around 0.5 per cent, it is growing. The gig economy comprises two types of work: “crowdwork” and “work on-demand via apps”.

Crowdwork is performed remotely on online platforms. It emerged with the growth of the Internet and the need to have human input into a range of tasks for the smooth functioning of web-based industries. It grew also because it is a form of work organization that allows the parcelling of jobs into discrete tasks, thus providing significant cost savings and the ability to improve service delivery. These tasks can include computer programming, data analysis and graphics as well as clerical “micro-tasks”. Workers can perform the tasks from anywhere in the world, depending on the decisions of those who control the platform and as long as they have a reliable Internet connection. “Work on-demand via apps” is work that is performed locally involving services such as transport, cleaning and running errands, channelled through apps designed and managed by companies that set standards of service for the workforce.

Despite its relatively small size, the platform economy has received considerable media attention because of the controversy around the legal framework in which individuals in these employment relationships perform their work. For the most part, platforms have classified their workers as “independent contractors” or self-employed, which means that in some cases they fall outside the legal requirements governing the employment relationship. Consequently, a number of high-profile court cases regarding the legal classification of workers in the gig economy have taken place, but the issue remains unresolved. At the same time, some have argued for the creation of a new type of employment relationship for workers in the gig economy, sometimes called “dependent contractor” or “independent worker”, with some, but not all, of the rights of the traditional employee.⁸⁶

Implications for workers, firms and society

The growth of NSE raises a number of concerns with respect to job quality and job security (table 4.1). Productivity may also fall if significant parts of the workforce are in non-standard arrangements. In addition, what may be desirable and beneficial for the individual worker or enterprise in the short term can have negative consequences at the more aggregate level in the longer term.

Workers who voluntarily choose to be in non-standard arrangements, such as those who work part time in order to combine paid work with unpaid care activities or who prefer a temporary contract because they are only available for work for a short period of time, typically have a more positive reaction to these types of work arrangements than those who resort to NSE because they cannot find standard employment. Flexible working arrangements can facilitate the labour market participation of many workers, including those with care responsibilities and, as such, can be a particularly effective tool for encouraging women to join the workforce.

Workers also fare better in these jobs when national legislation stipulates and enforces equal treatment among contractual forms, assures that workers receive employment and related social security benefits on a pro-rata basis, and assigns joint and several liability when there are multiple parties in the employment arrangement. As a result, some workers in the gig economy can face many of the same challenges (see box 4.1).

In addition, NSE can have wider implications for society at large. Widespread use of NSE may lead to greater volatility in employment with consequences for social and economic

Table 4.1. Potential challenges of NSE for workers

<i>Employment security</i>	Transitions from temporary to permanent employment are limited, typically ranging from a yearly rate of under 10 per cent to around 50 per cent. The greater the incidence of temporary employment in the country, the greater the likelihood that workers will transit between NSE and unemployment, with the possibility of transitioning to better jobs being less likely.
<i>Earnings</i>	The risk of substantial wage penalties relative to comparable standard workers. For temporary employment, studies indicate that wage penalties can reach up to 30 per cent. Part-time employment is associated with wage penalties in Europe and the United States, but in Latin America, where it is less widespread and mainly used by higher skilled workers, there is evidence of wage premiums among salaried employees.
<i>Hours</i>	Workers in on-call employment and casual arrangements typically have limited control over when they work, with implications for work–life balance, but also for income security, given that pay is uncertain. Variable schedules also makes it difficult to take on a second job.
<i>Occupational safety and health (OSH)</i>	Significant OSH risks due to a combination of poor induction, training and supervision, communication breakdowns (especially in multi-party employment arrangements) and fractured or disputed legal obligations. Injury rates are higher among workers in NSE.
<i>Social security</i>	Some categories of workers may be excluded by law from social security coverage altogether, or they may not reach minimum thresholds with respect to the duration of employment, working time or earnings. Even when they are formally protected, lack of continuity in employment and short working hours may result in inadequate coverage or limited benefits during unemployment and retirement.
<i>Training</i>	Workers in NSE are less likely to receive on-the-job training, which can have negative repercussions on career development, especially for young workers.
<i>Representation and other fundamental rights at work</i>	Workers in NSE may lack access to freedom of association and collective bargaining rights either for legal reasons or because of their more tenuous attachment to the workplace. They may also face other violations of their fundamental rights at work, including discrimination and forced labour.

Box 4.1. Potential risks of the gig economy: A case study

In November and December 2015, the ILO conducted a survey of 1,100 workers on two leading micro-task platforms to learn about their employment patterns, work histories and financial security.

While the workers generally appreciated the ability to work from home, many expressed their dissatisfaction over low pay and insufficient work. Part of the low hourly earnings stemmed from time spent looking for more work on the platform or from taking unpaid qualification tests to qualify for work when it became available. Indeed, for every hour of paid work, workers averaged 18 minutes of unpaid work, driving down average earnings.

Worker pay was also compromised by the lack of protections regulating this form of work due to the fact that they are, for the most part, classified as independent contractors. This means there is no floor protecting wages, allowing earnings to fall below the minimum wage of many of the countries where the workers lived. Moreover, there are no paid breaks or periods of leave, and workers bear all the costs of social security contributions, or risk not being covered by social security in the event of disability, job loss or retirement.

As employment in the gig economy is likely to expand in the years to come, there is a growing need for policies, including regulatory responses, not only to ensure decent work, but also to minimize any negative societal effects resulting from the lack of employment and income security and social protection.

Source: ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).

stability. Research shows that temporary and on-call workers have more difficulty getting access to credit and housing.⁸⁷

Studies also show that firms which rely heavily on NSE tend to shift their human resource strategies away from training and development of in-house employees towards identifying the skills sets they can acquire from the market. There is evidence that firms which make greater use of NSE tend to underinvest in training, for both temporary and permanent employees, as well as in productivity-enhancing technologies and innovation.⁸⁸ Thus, over-reliance on NSE can lead to a gradual erosion of firm-specific skills within the organization, limiting its ability to respond to changing market demand.

This issue could become particularly acute as firms and workers try to adapt to the jobs of the future. Research shows that technology will require jobs that stress collaborative and problem-solving skills. Policy-makers will need to ensure that enterprises and workers have the tools necessary to harness the benefits of technology for sustainable and inclusive growth.

Finally, if changes in the organization of production and work continue to lead to a diversification of employment forms, a comprehensive policy response will be needed to ensure the promotion of decent work and equality treatment for all workers.



CHAPTER 5

The governance of work

Governance occupies a central role in the world of work through laws and regulations, employment contracts, collective agreements, international labour standards, labour market policies, voluntary codes of conduct and other corporate social responsibility efforts. In each of these areas, governments, along with employers' and workers' organizations, play a key role in governance. Confronted with the profound changes in the world of work outlined in this report, the governance of work faces unprecedented challenges at the global, national and transnational levels.

Are existing institutions and tools fit for purpose to address the challenges of the future? What is the role of the State in shaping the future of work? What are the challenges that governments and employers' and workers' organizations face, individually and collectively? How will States, employers and workers collaborate to design and implement institutions and tools for the governance of work in the future? What role will voluntary private forms of self-regulation play? How will employers and workers organize collectively, and how will their forms of collective organization ensure legitimate representation in collaborative processes? How could the governance of work at the transnational level be enhanced? Should new institutions and instruments emerge in this respect? This chapter addresses these issues.

A. Governance of work: The State, employers and workers

Across the world today the State, employers' organizations and trade unions face pressures for change. These pressures differ, but they all create strains on the model of governance that has prevailed for over a century.

The State and the governance of work

Some of the challenges to the governance of work reflect policy choices by States. Over many decades and in many situations, arguments for deregulation of labour markets and structural reforms have prevailed. This has taken place in a context of intensified economic competition induced by globalization that is putting pressure on labour and social protection legislation as well as on labour market institutions. In some cases, structural adjustment programmes supported by international financial institutions have demanded deregulation. In others, governments deregulated labour markets as part of wider deregulatory platforms. Early in the twenty-first century, efforts to quantify and compare the impact of different labour regulatory regimes led to assertions that "light" regulation is associated with economic growth, prompting government action consistent with that view.⁸⁹ More recently, a number of

countries pursued vigorous deregulation of labour markets as part of a package of austerity policies and fiscal consolidation following the global financial and economic crisis. These policies include changes to legal frameworks for collective bargaining (e.g. raising thresholds for collective bargaining representativeness and promoting firm-level bargaining in addition to – or sometimes as a preferred option to – sectoral collective bargaining systems).

The role of the State in the governance of work faces other challenges. Many States are encountering severe resource deficits. Others suffer from democratic deficits or challenges regarding the labour administration system, and some governments lack the political will to engage in collaborative governance of work.

From the perspective of international law and international relations, the governance of work has also become more complicated as an increasing number of cross-border organizations adopt standards that are not always in line with international human and labour rights instruments. Additionally, the current state of international labour standards does not always fully respond to the challenge of how to reach all workers, regardless of their contractual situation. New international and regional norms overlap and in some cases conflict with each other, and may raise questions of consistency with existing national governance.

Labour standards also feature in systems of private governance (such as corporate codes of conduct), many of which have emerged with the evolution and growth of GSCs.⁹⁰ This has been accompanied by the proliferation of non-judicial complaint and redress mechanisms. The co-existence and sometime interaction of private and public governance of labour standards give rise to many questions about the effectiveness of such dual systems.

International trade and increased globalization, including through supply chains, have also combined to create space for single actors to exercise significant power over work in multiple and often distant jurisdictions (Chapters 3 and 4). A single multinational enterprise (MNE), for example, through orders for production in low-income countries, might account for an identifiable proportion of that country's GDP – and probably an identifiable and perhaps significant proportion of formal employment. The actions and decisions of such actors have a considerable effect on the governance of work, and yet may well occur beyond the reach of effective state governance.

Change and evolution in employer and worker organizations

Membership in trade unions has been waning over the past two decades. Between 2005 and 2015, trade union density, which measures trade union membership as a proportion of all employees, has fallen steadily in many parts of the world, although it remained stable in some countries – particularly those with union-administered unemployment insurance – and increased in a few others (e.g. Chile, Denmark, Norway and Uruguay).⁹¹

Many reasons account for the decline in membership and density, including structural changes in the economy (e.g. the decline in manufacturing employment), disruptive employer attacks on unions, demographic changes, increasing unemployment, reforms to labour market governance and the rising share of non-standard forms of employment. There are questions regarding whether the current model of trade unionism which emerged during the Ford,

assembly-line production era of the early twentieth century is fit for purpose in the context of the platform economy.

Despite these falls in membership, trade unions remain the largest membership-based organizations worldwide and continue to be the most important form of voice for millions of workers. In many countries, trade union membership remains many times higher than political party membership.⁹² Globally, the International Trade Union Confederation (ITUC) represents 181 million workers. And, importantly, workers' demand for unions is strong: studies and surveys highlight the unmet demand for union voice in different parts of the world.⁹³

Trends in employers' organizations present a mixed picture. Employers' organizations have traditionally sought to organize and advance the collective interests of employers in the labour market, alongside trade associations which organize the interests that business has in other markets. Although relevant data and analysis are rather limited, there are indications that, overall, membership in employers' organizations has remained more or less stable.⁹⁴

Employers' and business organizations face a number of other challenges. The heterogeneity of enterprises, including small, medium-sized and multinational enterprises, makes it challenging to articulate a cohesive business voice. In some regions, SMEs remain the weakest associational representation.⁹⁵ MNEs have, in some instances, chosen to influence national policy and regulatory strategies directly – whether at home or in other countries – rather than through collective forms of interest representation. While the institutional context of multi-employer bargaining and/or extension of collective agreements sustained membership strength in some countries,⁹⁶ the erosion of collective bargaining resulted in a change in this “logic” for collective action. Some employers became reluctant to join an employers' organization where membership meant that they would be bound by the terms of a collective agreement that would otherwise not apply to them.

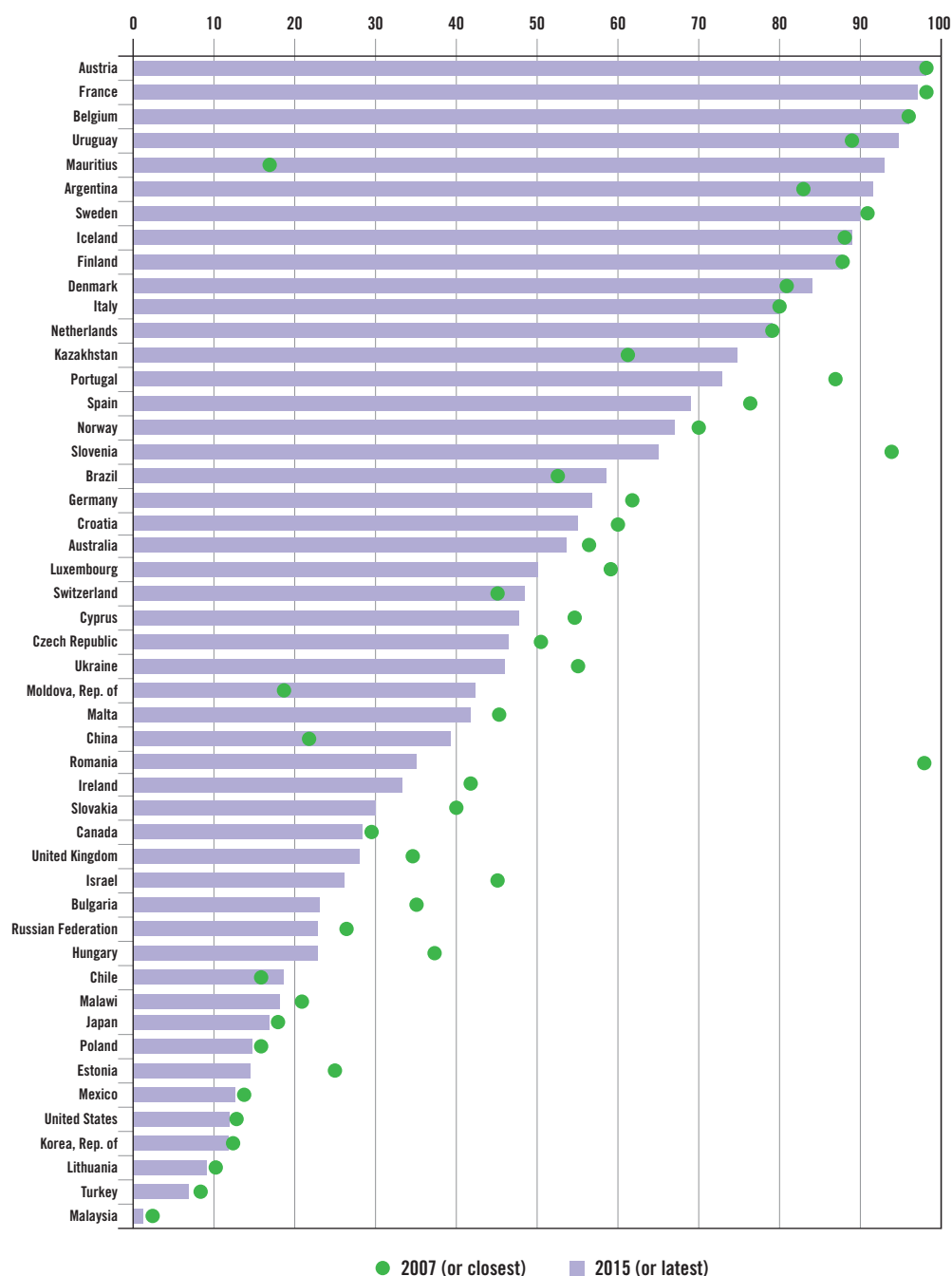
Economic change and globalization do not appear to have undermined the capacity of employers' organizations to attract members. The reasons vary and are related to the adaptive strategies of employers' and business associations as they assess alternative organizational forms, links with members and the provision of services.⁹⁷

Regulating work through collective bargaining

There have also been profound changes in the role of collective agreements. First, bargaining coverage – which measures the proportion of workers whose working conditions are governed by collective agreements – has declined in many countries, especially since the global financial and economic crisis (figure 5.1).

The extent of the fall in coverage has been particularly large in some countries, especially the crisis-ridden European countries receiving international financial assistance. Yet other countries have supported inclusive collective bargaining through a range of policy measures, leading to expanded coverage of collective agreements. The growing decentralization of collective bargaining across different systems underlies these trends. These two contrasting cases show that the sharp decline in collective bargaining coverage was not the direct result of employer resistance to collective bargaining or declining membership in unions – although

Figure 5.1. Coverage of collective agreements, 2007 and 2015 or latest year (percentage of employees)



Source: ILOSTAT.

neither factor helped the situation – but rather the result of policy-induced changes reversing government support for collective bargaining.⁹⁸

Looking ahead, the higher diversity of working arrangements, shifts in corporate governance strategies and the emergence of global production networks all present challenges for organized

labour relations and collective bargaining. Moreover, in many countries work in the informal economy still falls outside the purview of formal industrial relations institutions altogether.

B. Innovation in governance and in labour regulation

The future of work will be shaped by our tools of governance as well as the processes by which these are designed. It will require innovation in governance and harnessing the potential complementarities between different forms of governance. At an international level, it will require significant efforts to shape a new global consensus on the governance of work with a view to ensuring policy coherence within the multilateral system – the 2030 Agenda for Sustainable Development constitutes an important opportunity in this respect. It will also require the review and updating of international labour standards to ensure their continued relevance.

Innovation in the governance of work

The practice and theory of governance are evolving across all areas of policy. Recent developments show the importance of encouraging actors at different levels to try new ways of addressing policy challenges, to share the outcomes, and then to determine collaboratively how to draw on the lessons and to proceed.⁹⁹

Although the State remains the central and essential actor in ensuring governance, new forms of governance emphasize the value of public participation as a democratic practice.¹⁰⁰ However, these new models of participation must begin with a normative, rights-based approach in order to achieve effective outcomes.

A critical issue is whether the process empowers those who are otherwise excluded, allowing them to influence the design and implementation of policy.¹⁰¹ A related issue is the respective roles of public and private forms of governance. A growing empirical literature suggests that, with careful design, private governance can play a positive role in contributing to the reinforcement of public governance institutions and outcomes.

At the national level, the governance of work has long mirrored the ILO's global model, functioning as a collaboration between States, and representatives of employers and workers. This long history provides a basis for innovations in the governance of work, especially in respect of promoting workplace compliance through labour inspection. This capacity for change has become increasingly important as the workplace has evolved. In Indonesia, for example, the government is increasing its capacity to promote compliance with the establishment of its Labour Norms Cadres initiative. Enterprises are required to have a member of staff who acts as an in-house expert on the national legal framework. One of their functions will be to guide a self-assessment of compliance, which will then be verified by the labour inspectorate. In Brazil, the interaction between the association of leading apparel retailers (ABVTEX) and the labour inspectorate has led to complementary monitoring arrangements, and an expansion of the influence of the labour inspectorate to the lower tiers of the apparel value chain.¹⁰²

Innovation in the governance of work also touches other areas of policy, at both the international and national level. National monitoring committees have been established in some countries

to encourage national actors to resolve labour disputes in the context of GSCs (e.g. Colombia). International framework agreements signed by multinational corporations and Global Union Federations, albeit still limited in numbers and falling short of being enforceable, reinforce (not replace) both protective and participatory standards at the country level. Some States have taken steps to better align and integrate protective and participatory standards in labour market policies. Current examples include the introduction of a new statutory minimum wage in both Germany (2015) and South Africa (2017) alongside measures to strengthen collective bargaining.

C. The future of social dialogue and tripartism

The future of the governance of work will also be determined by the future of industrial relations, social dialogue and tripartism. However, employers' and workers' organizations have been under growing pressure at a time when governance requires ever-stronger participation and regulatory innovation. As result, the effectiveness and legitimacy of these organizations and of social dialogue in the governance of work will depend on their capacity, first, to elicit participation in the generation and sharing of the "fruits of economic progress",¹⁰³ and second, to credibly represent the interests of employers or workers. "If the representative legitimacy of the partners to engage in social dialogue is called seriously into question, the place of tripartism as a keystone of governance will be too."¹⁰⁴

Employers' organizations and trade unions

While some global trends are worrying, there are also "green shoots". New ways of organizing workers are emerging in a range of employment contexts, including the gig and informal economies. These developments highlight the importance of alliances with other actors, and of new sources of power.

First, at the micro level, new initiatives and organizational forms are emerging which are drawing on new sources of power. Workers' centres in the United States are local NGOs which organize low-wage vulnerable workers (e.g. migrant workers) largely in communities and not primarily at the workplace. These established institutions offer a mix of advocacy and services. There are new organizations of informal workers, such as the South African Informal Traders Alliance (SAITA) that was launched to give voice to street traders in response to the growing numbers of self-employed workers on the streets of South Africa's cities.¹⁰⁵ They draw on new sources of power or "symbolic leverage" (moral power) to argue for the need to restore dignity and deliver social justice to economically marginalized workers. They organize at the community level, appealing to "citizenship" rather than labour rights.¹⁰⁶ These organizations are transient and continually evolving and best described as a "workers' aggregation" rather than a trade union.¹⁰⁷ While there is clearly still an appetite for organization and collective action, these initiatives remain diffuse and limited in scope.

Second, experimentation with different organizational forms is prevalent in the gig economy. A range of organizational strategies and types of collective action are emerging, including the formation of new unions for gig workers that rely on community-based organizing strategies (box 5.1).¹⁰⁸

Box 5.1. Organizing the gig economy

In the United States, unions and union federations have developed three distinct strategies to provide gig workers with opportunities for agency and collective voice. These include legal challenges that would bring them under the umbrella of existing labour laws, the formation of independent worker guilds that bargain directly with labour platforms, and the creation of municipal laws that expand bargaining rights to self-employed gig workers.

Many individual and class action suits have contended that gig or platform workers have been improperly classified and that they should be considered to be employees. Workers' organizations have also brought claims: in New York City, the New York Taxi Workers Alliance brought a successful claim with two Uber drivers that resulted in their being deemed eligible for unemployment compensation, which is generally reserved for employees. Establishing legal precedents that expand labour platforms' scope of responsibility to include gig workers brings them one step closer to being recognized as employees. In time, it could open the door for a formal unionization campaign.

Other unions have set up workers' guilds to bargain collectively with employers. Also in New York City, the International Association of Machinists and Aerospace Workers union has worked in partnership with Uber to establish the Independent Drivers Guild. The partnership details have not been released publicly, but the guild offers legal services, free classes in safety and health and wellness, and policy advocacy (see <https://drivingguild.org/idg-benefits/> [1 May 2017]). Although this strategy may lack transparency, guilds could help the labour movement build relationships with gig and platform-based workers.

In Seattle, the Teamsters Union worked to lobby for a municipal law that would allow gig workers with independent contractor status to bargain collectively about the terms and conditions of their work. The law has been challenged repeatedly by prominent gig and platform-based companies; appeals are pending and the provision has not yet been implemented.

Third, there is evidence of union renewal, and of unions reaching out beyond their core constituencies to organize and represent the economically and socially marginalized.¹⁰⁹ This version of renewal emphasizes the need for trade unions to gain inspiration from a “sword of justice” viewpoint, turning (or returning) to a conception of organizations campaigning for rights and contesting inequality and insecurity. This approach requires cooperation between trade unions and other social movements that may not have engaged previously. There is clearly a need to reconstruct social solidarities – in the plural – if governance is to be effective in addressing inequality through inclusive regulatory strategies.

Turning to employers' and business organizations, expectations about the role of business in society and the need for ongoing support for SMEs, which in many countries account for a significant share of work and employment, reinforce the importance of ensuring a cohesive employers' voice. In Western Europe, employers' organizations and business associations are adapting their organizational structure as well as their activities to the changing needs of business.¹¹⁰ A similar adaptation is under way in other parts of the world. This includes the rationalization of membership through mergers with trade associations and the creation of “dual associations”, and functional adaptations, reorienting from narrow labour market governance to broader policy advocacy for an enabling business environment and offering a range of business services.¹¹¹ A number of organizations, such as the New Zealand Business Association, have opened up new categories of membership to accommodate heterogeneous business interests. Faced with declining membership, German employers' organizations began to offer *Ohne Tarifbindung* (OT) membership (not bound by collective agreements) to maintain their strength.

The question may be one of accommodating “voice” within reflexive governance processes that require collaboration between different interest groups yet continue to recognize the representative legitimacy of membership-based interest organizations.

Tripartism: Still a relevant model of governance?

The ILO's founding instruments recognize the need for social dialogue between governments, workers' and employers' organizations as key to the governance of work, as well as to the process of rethinking governance to meet current and future challenges. Sometimes, this has been criticized for allowing the vested interests of employers' and workers' organizations to dominate policy debates, to the exclusion of other important interests (for example, those in the informal economy) and the common good. Some see an inherent paradox in corporatist policy-making: workers' organizations are required to make concessions and are inevitably co-opted into governance, rendering them unable to effectively represent the interests of the working class. In some countries, two of the pillars of tripartism – workers' and employers' organizations – are weak, raising questions of how to include voice beyond these membership-based organizations. Finally, detractors claim that, while tripartism is certainly the most participatory form of labour market governance, it is time-consuming and not well-suited to times of abrupt change or economic crisis.

The record of tripartism during the economic crisis goes a long way towards countering these arguments. Whether responding to the oil shocks, the Asian financial crisis and/or the great recession of 2008/09, governments and the social partners used tripartite social dialogue to weather these crises.¹¹² Tripartism was used by a number of governments as a tool for shaping complex solutions to difficult problems, which then facilitated the rapid and smooth implementation of agreed policy measures. These might otherwise have met with resistance that, in turn, would have slowed down the implementation of crucial measures and the adjustment of the economy.

Moreover, many institutions of tripartite social dialogue do find ways either to include broader interests in relevant policy discussions, or to bring voices from civil society into structures that are described as “tripartite-plus”. This introduces a new level of complexity: civil society is not generally a collective actor (membership-based organization), but rather a constituency characterized by interest groups. Nevertheless, the instruments for governance at the ILO already envisage the participation of these various interests. For example, in respect of the setting of statutory minimum wages, the Minimum Wage Fixing Convention, 1970 (No. 131), makes provision for the consultation and participation of representatives of employers' and workers' organizations. Such tripartite processes can and do include the representation of other interests, such as small businesses or workers in the informal economy that may not necessarily be represented by the employers' and workers' organizations participating. Similarly, at the international level, where governments, employers' and workers' organizations are involved in setting international labour standards, this model of tripartism has included other interests, where appropriate.¹¹³

* * *

The future of work may be very different from the one which has characterized the world during the ILO's almost 100 years. When governments, employers and workers come together at the ILO to seek consensus on the many work-related challenges that will face them in the future, they are guided by a fundamental desire for social justice. This universal mandate encompasses a rich variety of national specifics – and is none the weaker for it.

The remarkable changes in the world of work present new challenges, not only for conditions of work, but also for social regulation. All forms of governance will continue to require the effective representation of the interests of governments, employers and workers. It is likely that part of the solution will lie in shaping a new political consensus on the governance of work at the global level. This will need to be accompanied by efforts to elicit the views and interests of other actors who, while not necessarily enjoying “representative legitimacy” in the sense of membership, nor indeed even being part of the organization’s governance structure, can play a part in the pursuit of social justice.

Notes

Foreword

¹ G. Rodgers, E. Lee, L. Swepston and J. Van Daele: *The International Labour Organization and the quest for social justice, 1919–2009* (Geneva, ILO, 2009), p. 1.

² ILO: *Recovering from the crisis: A Global Jobs Pact* (Geneva, 2009).

Chapter 1

³ For most labour market indicators, the earliest data available are from 1991.

⁴ ILO: *World Employment and Social Outlook: Trends for women 2017* (Geneva, 2017).

⁵ Social protection, or social security, is a human right and is defined as the set of policies and programmes designed to reduce and prevent poverty and vulnerability throughout the life cycle. Social protection includes nine policy areas: child and family benefits, maternity protection, unemployment support, employment injury benefits, sickness benefits, health protection, old-age benefits, disability benefits and survivors' benefits. Social protection systems address all these policy areas by a mix of contributory schemes (social insurance) and non-contributory tax-financed benefits, including social assistance.

⁶ ILO: *World Social Protection Report 2017–19* (Geneva, 2017).

⁷ Calculations from ILOSTAT for 80 developed, emerging and developing countries.

⁸ The rate of ratification falls temporarily when a new Convention is introduced as it takes time before countries ratify. It may also fall, although to a lesser extent, when new members join.

⁹ ILO: *Global estimates of child labour 2016* (Geneva, 2017).

¹⁰ For the list of countries by income grouping, see ILO: *World Employment and Social Outlook: Trends 2017* (Geneva, 2017), Appendix A.

¹¹ ILO: *World Employment and Social Outlook 2016: Transforming jobs to end poverty* (Geneva, 2016).

¹² Ibid.

¹³ This includes: temporary arrangements (fixed term contracts and casual work); part-time and on-call work; temporary agency work or other multi-party employment arrangements; and disguised employment relationships and dependent self-employment.

¹⁴ Based on 132 countries with available data. See ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).

¹⁵ The largest cross-country variation is registered in the Americas, where the share of temporary employment ranges from around 4 per cent in Brazil to over 62 per cent in Peru. Differences across countries of Asia and the Pacific are also wide-ranging, from 6 per cent in Australia to over 67 per cent in Viet Nam. Similarly, in Africa this percentage ranges from 5.6 per cent in Morocco to over 62 per cent in Mali. Cross-country variation is less significant in Europe and Central Asia, where in half of the countries shares of temporary employment cluster between 9 and 17 per cent. When analysing the share of temporary workers in total employment across countries, it should be kept in mind that there are differences in the definitions and types of temporary employment used across countries. For example, in developed countries, fixed-term contracts account for the bulk of temporary employment, whereas in emerging and developing countries, seasonal and casual work are more prevalent; see ILO: *World Social and Economic Outlook 2016: Transforming jobs to end poverty* (Geneva, 2016).

¹⁶ ILO: *Global Wage Report 2014/15: Wages and income inequality* (Geneva, 2014).

¹⁷ The Gini index is a measure of income inequality ranging from 0 (complete equality) to 100 (complete inequality).

¹⁸ See http://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/genericdocument/wcms_371208.pdf.

¹⁹ IMF: *Balance of payments and international investment position statistics (BOP/IIP)*, IMF Data access to microeconomic and financial data. Available at: <http://data.imf.org/?sk=7A51304B-6426-40C0-83DD-CA473CA1FD52> [Dec. 2017].

²⁰ ILO: *World of Work 2011* (Geneva, 2011).

²¹ ILO: *World Employment and Social Outlook 2015: The changing nature of jobs* (Geneva, 2015).

²² K. Schwab: "The Fourth Industrial Revolution: What it means and how to respond", in *Foreign Affairs*, 12 December 2015. Available at: <https://www.foreignaffairs.com/articles/2015-12-12/fourth-industrial-revolution>.

- ²³ ILO calculations, based on IFR World Robotics database and ILO Trends Econometric Models, November 2016. Within each country grouping there is substantial variation of the degree to which countries deploy robots. Across developed economies, countries like the Republic of Korea, Japan, Germany and Sweden show 20 or more robots per 1,000 manufacturing workers. This value ranges between 10 and 14 in countries such as the United States, Spain, Italy and Austria, and between five and eight in the United Kingdom, France and Canada. In emerging economies, the adoption of robots in manufacturing is still underdeveloped. China and Thailand show the highest robot density, deploying around two robots per 1,000 manufacturing workers – more than double the density found in other large emerging countries, such as South Africa, Mexico, Turkey, Brazil and the Russian Federation.
- ²⁴ I. Nübler: *New technologies: A jobless future or golden age of job creation?*, Research Department Working Paper No. 13 (Geneva, ILO, 2016).
- ²⁵ FAO: *World agriculture: Towards 2015/30* (London, Earthscan, 2003).
- ²⁶ ILO: *Work in a changing climate: The Green Initiative*, Report of the Director-General, Report I, International Labour Conference, 106th Session, Geneva, 2017.

Chapter 2

- ²⁷ ILO: *The future of work centenary initiative*, Report of the Director-General, Report I, International Labour Conference, 104th Session, Geneva, 2015.
- ²⁸ Ibid.
- ²⁹ ILO: *ASEAN in transformation: Perspectives of enterprises and students on future work* (Geneva, 2016).
- ³⁰ According to Gallup's World Poll, 65 per cent of people report they are “not engaged” in their job and an additional 15 per cent report they are “actively disengaged”.
- ³¹ The desire to migrate is driven by a number of factors, including perceptions about the labour market, but also, importantly, humanitarian reasons and the presence of geopolitical tensions and conflict.
- ³² See L. Benería, G. Berik and M. Floro: *Gender, development and globalization: Economics as if all people mattered* (New York and London, Routledge, 2015); J.W. Budd and D.A. Spencer: “Worker well-being and the importance of work: Bridging the gap”, in *European Journal of Industrial Relations* (2015, Vol. 21, No. 2), pp. 181–196; and S. Himmelweit: “The prospects for caring: Economic theory and policy analysis”, in *Cambridge Journal of Economics* (2007, Vol. 31, No. 4), pp. 581–599.
- ³³ A.K. Franck and J. Olsson: “Missing women? The under-recording and under-reporting of women's work in Malaysia”, in *International Labour Review* (2014, Vol. 153, No. 2), pp. 201–229.
- ³⁴ See Resolution I concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians (ICLS) in 2013.
- ³⁵ Some progress has occurred in recent years in making “invisible” work “visible”. One significant area is statistics. Decades-long debates over inclusive methods to account for unpaid household production have resulted in a number of innovations and revisions to national accounts and labour statistics which recognize and capture all productive activities, paid and unpaid, as “work”. For instance, in 1993, at the International Conference for Labour Statisticians (ICLS), the boundaries of the “labour force” were broadened to include production of (some) goods and services within the household, for own consumption. Further, in 2013 the Conference adopted a more comprehensive statistical measurement, which recognizes and captures all productive activities, paid and unpaid, as “work”. These efforts at the international level also paved the way for the adoption of the Home Work Convention, 1996 (No. 177), and the Domestic Workers Convention, 2012 (No. 189).
- ³⁶ If such services are valued on the basis of their replacement (i.e., market) costs, they amount to 20 to 60 per cent of GDP in 2015. For example, in India unpaid care work is estimated at 39 per cent of GDP, in South Africa 15 per cent, among Latin American countries the value is estimated at 26–34 per cent of official GDP for Guatemala and 32 per cent for El Salvador. See UNDP: *Human Development Report 2015: Work for human development* (New York, NY, 2015). Available at: http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf.
- ³⁷ V. De Stefano: “The rise of the ‘just-in-time workforce’: On-demand work, crowdwork and labour protection in the ‘gig-economy’”, Conditions of Work and Employment Series No. 71 (Geneva, ILO, 2016); for more details, see W.R. Poster, M.G. Crain and M.A. Cherry: “Introduction: Conceptualizing invisible labor”, in M.G. Crain, W.R. Poster and M.A. Cherry: *Invisible labor: Hidden work in the contemporary world* (Oakland, CA, University of California Press, 2016), pp. 3–27.

- ³⁸ Nevertheless, a number of countries retained separate regulation for high-hazard workplaces (such as mines and oil and gas production), shipping and aviation (see ILO: *Labour protection in a transforming world of work: A recurrent discussion on the strategic objective of social protection (labour protection)*, Report VI, International Labour Conference, 104th Session, Geneva, 2015).
- ³⁹ ILO: *Labour protection in a transforming world of work: A recurrent discussion on the strategic objective of social protection (labour protection)*, Report VI, International Labour Conference, 104th Session, Geneva, 2015.
- ⁴⁰ D. Levine, M. Toffel and M. Johnson: "Randomized government safety inspections reduce worker injuries with no detectable job loss", in *Science* (2012, Vol. 336(6083)), pp. 907–911.
- ⁴¹ ILO: *Snapshots on occupational safety and health*. The ILO at the XXI World Congress on Safety and Health at Work 2017: A Global Forum for Prevention, 3–6 September 2017, Singapore. Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/meetingdocument/wcms_572867.pdf.
- ⁴² ILO: *General survey on occupational safety and health instruments concerning the promotional framework, construction, mines and agriculture*, Report III (Part IB), International Labour Conference, 106th Session, Geneva, 2017.
- ⁴³ It is expected that by 2020, approximately 20 per cent of all goods manufactured around the world will be based to some extent on the use of nanotechnology, which has wide applications in manufacturing, agriculture and construction. Yet little is known about the impact of nanotechnology on health. In addition, out of the 110,000 synthetic chemicals that are produced in industrial quantities, adequate hazard assessment data are available for around 6,000 and occupational exposure limits have been set for only 500–600 hazardous chemicals (ibid.).
- ⁴⁴ Psychosocial risks refer to "those aspects of the design and management of work and its social and organizational contexts which have the potential for causing psychological or physical harm". See ILO: *Workplace stress: A collective challenge* (Geneva, 2016), p. 3.
- ⁴⁵ European Agency for Safety and Health at Work: *New and emerging risks in occupational safety and health* (Luxembourg, 2009).
- ⁴⁶ This section draws on M. Quinlan: *The effects of non-standard forms of employment on worker health and safety*, Conditions of Work and Employment Series No. 67 (Geneva, ILO, 2016), which provides a review of the occupational safety and health risks of non-standard employment. See also A. Callea, F. Urbini and D. Bucknor: "Temporary employment in Italy and its consequences on gender", in *Gender in Management, An International Journal* (2012, Vol. 27, No. 6), pp. 380–394; V. Carrieri, C. Di Novi, R. Jacobs and S. Robone: "Insecure, sick and unhappy? Well-being consequences of temporary employment contracts, factors affecting worker well-being: The impact of change in the labor market", in *Research in Labor Economics* (2014, Vol. 40), pp. 157–193; K. Tsuno, N. Kawakami, A. Tsutsumi, A. Shimazu et al.: "Socioeconomic determinants of bullying in the workplace: A national representative sample in Japan", in *PLOS ONE*, DOI:10.1371/journal.pone.0119435 March 9, 2015 1/15; see also A. LaMontagne, P. Smith, A. Louie, M. Quinlan et al.: "Unwanted sexual advances at work: Variations by employment arrangement in a sample of working Australians", in *Australian and New Zealand Journal of Public Health* (2009, Vol. 33, No. 2), pp. 173–179.
- ⁴⁷ Eurofound and ILO: *Working anytime, anywhere: The effects on the world of work* (Publications Office of the European Union, Luxembourg, and ILO, Geneva, 2017).
- ⁴⁸ D. Walters and P. James: "What motivates employers to establish preventive management arrangements within supply chains?", in *Safety Science* (2011, Vol. 49), pp. 988–994.
- ⁴⁹ R. Malenfant, A. LaRue and M. Vézina: "Intermittent work and well-being: One foot in the door, one foot out", in *Current Sociology* (2007, Vol. 55, No. 6), pp. 814–835.
- ⁵⁰ R.L. Jin, C.P. Shah and T.J. Svoboda: "The impact of unemployment on health: A review of the evidence", in *Canadian Medical Association Journal* (1995, Vol. 153, pp. 529–540); C.D. Mathers and D.J. Schofield: "The health consequences of unemployment: the evidence", in *The Medical Journal of Australia* (1998, Vol. 168, No. 4), pp. 178–182.
- ⁵¹ E. Kortum, S. Leka and T. Cox: "Psychosocial risks and work-related stress in developing countries: Health impact, priorities, barriers and solutions", in *International Journal of Occupational Medicine and Environmental Health* (2010, Vol. 23), pp. 225–238.
- ⁵² Ibid.
- ⁵³ Ibid.
- ⁵⁴ ILO and Gallup: *Towards a better future for women and work: Voices of women and men* (2017), p. 45. Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_546256.pdf.

- ⁵⁵ See the New Economics Foundation website on 21 Hours, available at: <http://neweconomics.org/2010/02/21-hours/>.
- ⁵⁶ ILO: *World Social Protection Report 2017–19* (Geneva, 2017).
- ⁵⁷ ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).
- ⁵⁸ I. Ortiz, M. Cummins, J. Capaldo and K. Karunanethy: *The decade of adjustment: A review of austerity trends 2010–2020 in 187 countries*, ESS Working Paper No. 53 (The South Centre, Initiative for Policy Dialogue and ILO, New York, NY and Geneva, 2015).
- ⁵⁹ See, for instance, OECD: *Basic income as policy option* (Paris, 2017).

Chapter 3

- ⁶⁰ J.D. Ostry, A. Berg and C.G. Tsangarides: *Redistribution, inequality, and growth*, IMF Staff Discussion Note 14/02 (Washington, DC, IMF, 2014). Available at: <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2016/12/31/Redistribution-Inequality-and-Growth-41291>.
- ⁶¹ R.G. Rajan: *Fault lines: How hidden fractures still threaten the world economy* (Princeton, NJ, Princeton University Press, 2010); J.B. Taylor: “Getting back on track: Macroeconomic policy lessons from the financial crisis”, in *Federal Reserve Bank of Saint Louis Review* (2010, Vol. 92/3), pp. 165–176; M. Kumhof, R. Rancière and P. Winant: 2015. “Inequality, leverage, and crises”, in *American Economic Review* (2015, Vol. 105, No. 3), pp. 1217–1245.
- ⁶² J.D. Ostry, P. Loungani and D. Furceri: “Neoliberalism: Oversold?”, in *Finance and Development* (2015, Vol. 53, No. 2), pp. 38–41.
- ⁶³ J.-H. Chang and P. Huynh: *ASEAN in transformation – The future of jobs at risk of automation*, Bureau for Employers’ Activities Working Paper No. 9 (ILO Regional Office for Asia and the Pacific, Bangkok, 2016), available at: http://ilo.org/public/english/dialogue/actemp/downloads/publications/2016/asean_in_transf_2016_r2_future.pdf; C.B. Frey and M. Osborne: *The future of employment: How susceptible are jobs to computerisation?*, Oxford Martin School Working Paper (Oxford, 2013), available at: <http://www.oxford-martin.ox.ac.uk/publications/view/1314>; Roland Berger: *The Industrie 4.0 transition quantified* (Munich, Roland Berger, 2016), available at: https://www.rolandberger.com/de/Publications/pub_the_industrie_4_0_transition_quantified.htm; McKinsey Global Institute: *Technology, jobs and the future of work* (Washington, DC, 2016); PricewaterhouseCoopers: *The long-view: How will the global economic order change by 2050?* (London, 2017); World Bank: *World Development Report 2016: Digital dividends* (Washington, DC, 2016).
- ⁶⁴ D. Kucera: *New automation technologies and job creation and destruction dynamics*, Employment Policy Brief (Geneva, ILO, 2017); I. Nübler: *New technologies: A jobless future or golden age of job creation?*, Research Department Working Paper No. 13 (Geneva, ILO, 2016).
- ⁶⁵ M. Arntz, T. Gregory and U. Zierahn: *The risk of automation for jobs in OECD countries*, Social, Employment and Migration Working Paper No. 189 (Paris, OECD, 2016).
- ⁶⁶ D. Autor: “Why are there still so many jobs? The history and future of workplace automation”, in *Journal of Economic Perspectives* (2015, Vol. 29, No. 3), pp. 3–30.
- ⁶⁷ D. Acemoglu and P. Restrepo: *The race between machine and man: Implications of technology for growth, factor shares and employment*, Working Paper No. 22252 (Cambridge, MA, NBER, 2016); idem: *Robots and jobs: Evidence from US labor markets*, Working Paper No. 23285 (Cambridge, MA, NBER, 2017).
- ⁶⁸ ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).
- ⁶⁹ This is mostly related to the particular cost structure of the digital economy, with large fixed costs for software development but almost no costs in distributing it (“zero marginal costs”); see J. Rifkin: *The zero marginal cost society: The internet of things, the collaborative commons, and the eclipse of capitalism* (New York, NY, Macmillan, 2014).
- ⁷⁰ D. Andrews, C. Criscuolo and P.N. Gal: *The best versus the rest: The global productivity slowdown, divergence across firms and the role of public policy*, Productivity Working Papers No. 5 (Paris, OECD, 2016).
- ⁷¹ E. Moretti: *The new geography of jobs* (New York, NY, Houghton Mifflin Harcourt, 2012).
- ⁷² D. Kucera: *New automation technologies and job creation and destruction dynamics*, Employment Policy Brief (Geneva, ILO, 2017).
- ⁷³ See <http://reports.weforum.org/future-of-jobs-2016/skills-stability/>.
- ⁷⁴ See ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).

- ⁷⁵ L. Fontagne and A. Harrison: *The factory-free economy. Outsourcing, servitization, and the future of industry* (Oxford, Oxford University Press, 2017).
- ⁷⁶ D. Rodrik: “Premature deindustrialization”, in *Journal of Economic Growth* (2016, Vol. 21, pp. 1–33; ILO: *World Employment and Social Outlook: Trends 2015* (Geneva, 2015); see also “Arrested development”, in *The Economist*, 4 October 2014, available at: <http://www.economist.com/news/special-report/21621158-model-development-through-industrialisation-its-way-out-arrested-development>.
- ⁷⁷ ILO: *Working towards sustainable development: Opportunities for decent work and social inclusion in a green economy* (Geneva, 2012).

Chapter 4

- ⁷⁸ ILO: *World Employment and Social Outlook 2016: Transforming jobs to end poverty* (Geneva, 2016).
- ⁷⁹ International Labour Conference. 2016. Reports of the Committee on Decent Work in Global Supply Chains: Resolution and conclusions submitted for adoption by the Conference, 105th Session, Geneva, May–June 2016, Provisional Record 14-1/1, paragraph 1.
- ⁸⁰ ILO: *World Employment and Social Outlook 2015: The changing nature of jobs* (Geneva, 2015).
- ⁸¹ International Labour Conference. 2016. Reports of the Committee on Decent Work in Global Supply Chains: Resolution and conclusions submitted for adoption by the Conference. 105th Session, Geneva, May–June 2016, Provisional Record 14-1/1, paragraph 2.
- ⁸² For more information, see the conclusions concerning decent work in global supply chains: ILO: Reports of the Committee on Decent Work in Global Supply Chains: Resolution and conclusions submitted for adoption by the Conference, 105th Session, Geneva, May–June 2016, Provisional Record 14-1/1. Available at: http://www.ilo.ch/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_489115.pdf.
- ⁸³ The UNGPs adopt a “Protect, Respect and Remedy Framework” recognizing, in the General Principles, existing obligations of States “to respect, protect and fulfil human rights and fundamental freedoms” and “the need for rights and obligations to be matched to appropriate and effective remedies when breached” (A. Mermod and S. Idowu: *Corporate social responsibility in the global business world* (Heidelberg, Springer, 2014). The General Principles of this framework recognize the role of business enterprises as “specialized organs of society performing specialized functions, required to comply with all applicable laws and to respect human rights”. In this regard, businesses should respect human rights, including those set out in the ILO Declaration on Fundamental Principles and Rights at Work. Business enterprises should avoid “infringing on the human rights of others and should address adverse human rights impacts with which they are involved”, and should seek “to prevent or mitigate” those impacts “directly linked to their operations, products or services by their business relationships”, even if they have not contributed to them (see http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf).
- ⁸⁴ ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).
- ⁸⁵ Based on data from the Office for National Statistics, United Kingdom.
- ⁸⁶ Royal Society: *Good gigs: A fairer future for the UK’s gig economy*, April 2017.
- ⁸⁷ ILO: *Non-standard employment around the world: Understanding challenges, shaping prospects* (Geneva, 2016).
- ⁸⁸ Ibid.

Chapter 5

- ⁸⁹ This was most pronounced, and controversial, with the World Bank’s Doing Business project (see S. Lee and D. McCann: “New direction in labour regulation research”, in S. Lee and D. McCann (eds): *Regulating for decent work: New directions in labour market regulations* (ILO and Palgrave Macmillan, 2011), pp. 1–27, at p. 2.
- ⁹⁰ ILO: *Decent work in global supply chains*. Report IV, International Labour Conference, 105th Session, Geneva, 2016.
- ⁹¹ J. Visser, S. Hayter and R. Gammarano: *Trends in collective bargaining coverage: Stability, erosion or decline?*, Labour Relations and Collective Bargaining, Issue Brief No. 1 (Geneva, ILO, 2015).
- ⁹² See <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN05125> (accessed 12 May 2017); and <https://newint.org/issues/2016/09/01/trade-unions/> (accessed 12 May 2017).

- ⁹³ For example, P. Holland, A. Pyman, B.K. Cooper and J. Teicher: “The development of alternative voice mechanisms in Australia: The case of joint consultation”, in *Economic and Industrial Democracy* (2009, Vol. 30, No. 1), pp. 67–92; R.B. Freeman and J. Rogers: *What workers want* (updated ed.) (Ithaca, NY, ILR Press; Russell Sage Foundation, 2006).
- ⁹⁴ B. Brandl and A. Lehr: “The strange non-death of employer and business associations: An analysis of their representativeness and activities in Western European countries”, in *Economic and Industrial Democracy* (2016), 22 pp., available at: <https://doi.org/10.1177/0143831X16669842>; Y. Zhu, J. Benson and H. Gospel: “A comparative perspective on employer collective action and employers’ associations in Asia”, in J. Benson, Y. Zhu and H. Gospel (eds): *Employers’ Associations in Asia: Employer Collective Action* (London, Routledge, 2017), Chapter 12.
- ⁹⁵ Ibid.
- ⁹⁶ F. Traxler: “Economic internationalization and the organizational dilemma of employer associations”, in W. Streeck, J.R. Grote, V. Schneider and J. Visser (eds): *Governing interests: Business associations facing internationalization* (London, Routledge, 2006), pp. 93–114.
- ⁹⁷ B. Brandl and A. Lehr: “The strange non-death of employer and business associations: An analysis of their representativeness and activities in Western European countries”, in *Economic and Industrial Democracy* (2016), 22 pp., available at: <https://doi.org/10.1177/0143831X16669842>; Y. Zhu, J. Benson and H. Gospel: “A comparative perspective on employer collective action and employers’ associations in Asia”, in J. Benson, Y. Zhu and H. Gospel (eds): *Employers’ Associations in Asia: Employer Collective Action* (London, Routledge, 2017), Chapter 12; K. Ronit and V. Schneider: *Employer and business associations: The state of a rare art and its current challenges* (forthcoming).
- ⁹⁸ J. Visser, S. Hayter and R. Gammarano: *Trends in collective bargaining coverage: Stability, erosion or decline?*, Labour Relations and Collective Bargaining, Issue Brief No. 1 (Geneva, ILO, 2015).
- ⁹⁹ Where the world of work is concerned, participation and experimentation might be considered fundamental: arguably, “the successful implementation of human rights in a market setting *will depend upon* processes of collective learning between social and economic actors” (emphasis added) (O. De Schutter and S. Deakin: “Introduction: Reflexive governance and the dilemmas of social regulation”, in O. De Schutter and S. Deakin (eds): *Social rights and market forces: Is the open coordination of employment and social policies the future of social Europe?* (Brussels, Bruylant, 2005), pp. 1–17).
- ¹⁰⁰ J. Habermas: *Between facts and norms: Contributions to a discourse theory of law and democracy* (reprint edition) (Cambridge, MA, The MIT Press, 1998); C.S. Nino: *The constitution of deliberative democracy* (Newhaven, CT, Yale University Press, 1996).
- ¹⁰¹ World Bank Group: *World Development Report 2017: Governance and the law* (Washington, DC, World Bank, 2017); A. Sen: *Rationality and freedom* (1st ed.) (Cambridge, MA, Belknap Press, 2004).
- ¹⁰² ABVTEX runs a Supplier Qualification Programme (SQP) aimed at both suppliers and subcontractors in the value chain. Private audits conducted under the SQP are carried out in parallel with labour inspections. At the same time, inspections have often led to issuance of a legally binding Commitment to Conduct Adjustment (or compliance commitment), which reinforces the SQP obligation. This interconnection has strengthened and supported the SQP, and enhanced the influence of the labour public inspectorate beyond the first tier suppliers which are normally the subject of its proactive visits.
- ¹⁰³ The theoretical insights of Hirschman (1970) in respect of the central role of organizations in channeling “voice” and eliciting “loyalty” rather than “exit” remain valid in explaining desired organizational, workplace and labour market outcomes. See A. Hirschman: *Exit, voice and loyalty: Responses to decline in firms, organizations and States* (Harvard University Press, Cambridge, MA, and London, 1970).
- ¹⁰⁴ ILO: *The future of work centenary initiative*, Report of the Director-General, Report I, International Labour Conference, 104th Session, 2015.
- ¹⁰⁵ E. Webster: “The shifting boundaries of industrial relations: Insights from South Africa”, in *International Labour Review* (2015, Vol. 154, No. 1), pp. 27–36.
- ¹⁰⁶ R. Agarwala: *Informal labor, formal politics, and dignified discontent in India* (Cambridge and New York, NY, Cambridge University Press, 2013).
- ¹⁰⁷ R. Supriya: “Informal workers’ aggregation and law”, in *Theoretical Inquiries in Law* (2016, Vol. 17, No. 1), pp. 283–320.
- ¹⁰⁸ H. Johnston and C. Land-Kazlauskas: *Organizing on demand: representation, voice and collective bargaining in the “gig” economy*, Conditions of Work and Employment Series Working Paper No. 94 (Geneva, ILO, forthcoming).
- ¹⁰⁹ R. Gumbrell-McCormick and R. Hyman: *Trade unions in Western Europe: Hard times, hard choices* (Oxford, Oxford University Press, 2013).

- ¹¹⁰ B. Brandl and A. Lehr: "The strange non-death of employer and business associations: An analysis of their representativeness and activities in Western European countries", in *Economic and Industrial Democracy*, 4 October 2016, doi:10.1177/0143831X16669842.
- ¹¹¹ W. Streeck, J.R. Grote, V. Schneider and J. Visser: *Governing interests: Business associations facing internationalization* (London, Routledge, 2006).
- ¹¹² L. Fraile (ed.): *Blunting neoliberalism: Tripartism and economic reforms in the developing world* (Basingstoke, UK, New York, Palgrave Macmillan, Geneva, ILO, 2010); D. Rodrik: *The new global economy and developing countries: Making openness work* (Washington, DC, Overseas Development Council, 1999); E. Lee: *The Asian financial crisis: The challenge for social policy* (Geneva, ILO, 1998).
- ¹¹³ Examples include the Indigenous and Tribal Peoples Convention, 1989 (No. 169), the Home Work Convention, 1996 (No. 177), and, most recently, the Domestic Workers Convention, 2011 (No. 189), in which the ILO engaged with the International Domestic Workers Network in the preparation of the Convention.