

Chapter 7 – The Future of Work: Good Jobs for All?

- Coordinating Lead Authors: Werner Eichhorst[2] and André Portela de Souza[3]
- Lead Authors: Pierre Cahuc[4], Didier Demazière[5], Colette Fagan[6], Nadya Araujo Guimarães [7], Huiyan Fu[8], Arne Kalleberg[9], Alan Manning[10], Frances McGinnity[11], Hillel Rapoport[12], Phil Scranton[13], Johannes Siegrist[14], Kathleen Thelen[15], Marie-Anne Valfort[16] and Jelle Visser[17]
- 3 Contents
- 4 1. Introduction
- 2. New technologies, globalization and the future of work-shifts in demand for labor and skill types
- 6 2.1 Introduction
- 7 2.2 The Impact of New Technology on Labour Markets
- 8 2.3 The Impact of Globalization on Labour Markets
- 9 2.4 An Overview of the impact of new technology and globalization on labour markets
- 2.5 Innovation and Globalization for Social Progress
- 3. Changes and prospects on employment relations

3.1 Introduction 3.2 From Standard to Nonstandard Employment Relationships 3.3 Part-Time Work 3.4 Temporary Agency Work 3.5 The "Gig" Economy 3.6 The Informal Economy 18 3.7 Public Policies 4. More flexible workplaces and working time? 4.1 Working-time quality and the impact on work-life balance 4.2 Developments in working time arrangements 4.3 Inequalities in working time and work life balance 4.4 Working-time quality: a social progress assessment and recommendations 5. Exploring the boundaries of the labor market: Unemployment, inactivity, exclusion 5.1 Measuring the Level of Unemployment around the World 5.2 Heterogeneities and Boundaries of Unemployment 5.3 Exploring Boundaries under Strong Codification of Social **Statuses** 5.4 Exploring Boundaries under Weak Social Protection 29 5.5 Recommendations 6. Diversity and discrimination in the labour market 31 6.1 Introduction 6.2 Changing patterns of diversity in the labour market 6.3 Diversity and economic outcomes 6.4 Discrimination in the labour market

6.5 Policies to counter discrimination and promote diversity

- 6.6 Conclusion and Recommendations
 7. The impact of work and employment on health and wellbeing
- 39 7.2 Work, employment and health: summarizing the evidence
- 40 7.3 Work and health: two causal directions
- 7.4 Policy implications

38 7.1 Background

- 8. Collective bargaining
- 8.1 Introduction: what collective bargaining does
- 44 8.2 Bargaining coverage
- 45 8.3 Decentralisation
- 46 8.4 Conclusion
- 9. Human Capital Formation
- 9.1 General human capital
- 9.2 Vocational education and training
- 9.3 Tertiary education
- 9.4 On the Job Training
- 9.5 Concluding Remarks
- 10. Labor market regulation and social protection
- 10.1 Where do we stand and what are the trends in employment protection?
- 10.2 What do principles of justice suggest?
- 10.3 Unemployment Benefits and Active Labor Market Policies
- 57 10.4 Flexicurity
- 11. Conclusion and policy recommendations
- 59 12. References
- 60 Executive Summary

- Work is a core activity for individuals and society. Participation in the labour market determines a wide range of life chances. Work and employment confer social status by placing people's position in the hierarchical arrangements of society. Moreover, paid work contributes to the realization of important human needs of performance, agency, skill development and personal control, of reward, recognition and related self-esteem, and of participating in wider social networks providing support and a sense of belonging.
- The world of work is constantly changing. Demographic shifts, technological innovations, institutional reforms and global economic integration affect the way people work. Both the demand and the supply of labor are fundamentally different from earlier times. This chapter aims at summarizing and assessing the global evidence on major factors influencing the future of work. It is evident that there is a large variation in national developments, yet, there are shared issues of general relevance that make it possible to tell a global story. The following aspects are given special emphasis: technology and globalization; employment types; working time and mobile working; unemployment and exclusion; diversity and discrimination; health; collective bargaining, education and, finally, employment and unemployment protection.
- 63 Technology and globalization are intimately related forces driving structural change in employment and affecting the global distribution of economic activities and jobs. While there has been permanent technological change, its implications differ with respect to levels of development and speed of adjustment around the globe. Over time, global integration has become stronger, not least facilitated by modern IT and other technological innovation, leading to declining costs of international transactions, but also by political decisions to remove barriers. This all points at the importance of political decisions in shaping the impact globalization can have on the further development of employment patterns. Winners and losers of change can be identified, with a certain tendency towards employment polarization in many developed countries, creating societal and political challenges in compensating for losses while not foregoing the potential wins - and by preparing societies to reap the benefits of technological advancements and global integration through forward-looking, preventive strategies.
- When looking at different types of employment we can identify a large variety of contracts, deviating more or less from a permanent, full-time dependent employment status in the formal sector, the standard employment relationship, which is often taken as a benchmark to assess the quality of a job. Part-time work, fixed-term contracts, temporary agency work, but also different forms of self-employment or own-account and crowd work as well as informal

employment differ regarding core parameters such as employment stability, earnings and inclusion into social protection from standard employment. Institutional changes, but also changes in the structure of demand and supply for certain skills have opened up this broad diversity of contractual relationships in the world of work around the globe, not least the creation of highly flexible demand patterns and complex value chains in today's economies.

- While there is a fragmentation of labour markets characterized by different forms of 'external' flexibility, firms have also become more flexible 'internally', i.e. as regards their internal processes of working, but in particular regarding working time and mobile working. In general, patterns of working time and work place flexibility can be in the interest of employers, of workers or both. Over time we have seen many new and diverse arrangements emerging, potentially reconciling productivity and flexibility interests of employers and work/life preferences of workers. There has been an improvement in many cases. Still, there are many issues that can be perceived as problematic from a social progress point of view, in particular very short, very long and unpredictable working time requirements or illdesigned shift work arrangements which have negative effects on workers' health and families. This is also observed in poorly regulated informal employment or in segments of formal labour markets where working time standards have eroded due to a lack of collective bargaining and appropriate legislation and enforcement.
- Moving to the margins of the labour market, different forms of under-, non- or unemployment continue to exist, pointing at a full or partial exclusion of some groups from paid work. Patterns of exclusion and boundaries of the labour market are structured by institutional rules defining certain status forms, and in particular only the existence of a welfare state and social policies make unemployment a useful category and indicator in some regions of the world. This creates measurement issues on the one hand, calling for a multitude of indicators to assess and compare the extent of lack of work, and effective policies to combat unemployment and exclusion on the other hand.
- Diversity in the labour market is on the increase, with rising employment of women, older workers and migration, although significant gaps regarding the labour market integration of women, older workers as well as migrants, continue to exist in some regions of the world. Empirical studies into the effects of diversity create a nuanced picture, pointing at the many dimensions of diversity and its consequences. There is also empirical evidence on discrimination in the labour market based on ethnicity, gender, age, disability, sexual or

religious orientation – this is not only creating barriers for individual careers but also implying a loss of productive potentials in the economy.

- Work is also intimately related to individual health and well-being. While unemployment is definitively harmful in terms of well-being and health, being employed can help raise individual well-being and health. However, there are also some health risks attached to work. Industrial work was particularly at risk of physically hazardous working conditions as regards occupational injuries or work-related diseases caused by chemical substances, but as a matter of fact, in many low and medium income countries these risks are still very much a present phenomenon. However, in many developed countries recent changes in the modern world of work have created new mental and psychological demands on individuals, creating stressful psychosocial work environments and working-time related stress. While this has clear implications for work practices within firms so that employers have to meet their responsibilities, there is a role for public policies as regards the prevention of health risks at the workplace, in particular with respect to regulation, monitoring and support services.
- 69 Collective bargaining is an important institutional mechanism to establish negotiated standards regarding pay, working time and other working conditions. It also has a role in settling distributional conflicts. Compared to legislation, collective agreements can be more flexible as they take into account sectoral or firm-specific issues. Empirical research can show that multi-employer collective bargaining can lead to lower earnings inequality and that coordinated or centralized bargaining is beneficial to a positive economic development. Yet, bargaining systems are quite diverse around the globe, with huge differences in bargaining coverage, union density and employer organisation, as well as a tendency to decline in collective bargaining coverage and increased decentralisation; similar differences can also be observed inside individual countries. While collective bargaining is a voluntary system, public policies such as extension clauses can also contribute to high coverage in systems with low organizational density.
- Human capital is a core element of individual life chances and employment potentials. It is also crucial for economic productivity and societal wealth. Empirical research points at the fact that skill formation has a peculiar pattern over the life course with educational investments at different stages building upon each other. Education in early childhood has the strongest returns and a clear potential of reducing ability gaps across children from different backgrounds. Schooling enrolment is far from complete, in particular in medium and low income countries, but is essential in securing individual

chances of independent living outside of poverty. Comparative research also gives hints at the specific contribution of vocational education and training for a smooth transition from school to work, in particular if combined with structured learning in firms. Higher education is important for societal progress and innovation. As with schooling also higher education tends to operate under credit constraints so that support through public subsidies is an important measure to mitigate inequality in access to higher education. Finally, continuous training on the job is needed to update skills in a changing economic environment.

- 71 Policies regarding employment protection, unemployment protection and reemployment have direct influence on stability and mobility on the labour market. In many countries, institutional rules governing permanent contracts in the formal sector stabilize openended employment relationships, but may hamper entry into the core labour market for some groups in the labour force as they tend to reinforce a segmentation of employment. Furthermore, in many countries both formal and effective coverage by unemployment benefits is very limited, leading to a double disadvantage of those in more temporary or informal employment as their access to unemployment protection is also limited. Hence, employment and unemployment protection often privilege certain groups over others, creating gaps in protection for the most vulnerable people. Active labour market policies can help promote the reentry into employment after phases of unemployment, and in fact, there are many options of effective reemployment measures - however, taking a global perspective, the delivery of such policies is quite unequal given institutional, administrative and fiscal constraints.
- Based on our assessment of the global evidence on core employment issues, some conclusions for supranational, national and sub-national policy making can be derived.
- First, and going much beyond employment policies, opportunities for economic growth should be provided in accordance with ecological sustainability without such sustainable dynamism good jobs for all can hardly be realized.
- Second, in our understanding, full and fair employment in the formal sector should be made a central aim of international institutions and national developmental strategies.
- 75 Third, while there is much variation between countries and sectors in terms of development, resources available and institutional capacities, we think that good jobs can be characterized by a couple of essential features.

- are free of major characteristics of precariousness, such as a lack of stability and a high risk of job loss, a lack of safety measures and an absence of minimal standards of employment protection enable working persons to exert some control on matters such as the place and the timing of work and the tasks to be accomplished, and these jobs place appropriately high demands on the working person, without overtaxing their resources and capabilities and without harming their health
 - provide fair employment in terms of earnings and of employers' commitment towards guaranteeing job security
 - offer opportunities for skill training, learning and promotion prospects within a life course perspective, thereby sustaining work ability and stimulating individual development
 - prevent social isolation and any form of discrimination and violence
 - aim at reconciling work and extra-work demands by implementing appropriate rules in day-to-day practices
- Global employment goals embedded in the SDG with a focus on the different aspects of decent work, but also regional political strategies such as Europe 2020 have not fully met their ambitions. However, having such global or regional benchmarks is helpful as an ultimate policy orientation, but change is still mainly driven by national if not subnational actors. Here, both economic crises as well as political and fiscal constraints hamper easy progress. Hence, policies towards strengthening full and fair employment and good work for all may vary according to the level of economic and cultural development in different regions of the world as well as according to institutional arrangements at national level. However, we see a core set of policies that are essential:
- 79
- 1. rules regarding employment protection, allowing for flexibility while avoiding a deeper segmentation of the labour market
- 2. unemployment protection through social insurance and basic income support coupled with appropriate active labour market policies to both replace income losses in phases of unemployment and accelerate reintegration into employment
- skill formation at different stages of the life course, with ensuring the acquisition of skills that can be used in the labour market as well as access to education also for vulnerable groups
- 4. effective policies to make the most out of diversity and ensure non-discrimination

- 5. legislative and collectively agreed standards regarding working conditions such as remuneration, working time and health-related aspects of work, ensuring a fair distribution of economic gains as well as working conditions that are compatible with health and extra-work demands
- All in all, while supranational and national legal rules can establish a broad, but binding framework, particular emphasis lies on collective bargaining between employers and trade unions in establishing suitable arrangements regarding working conditions in certain sectors or regions. Hence, capacities to bargain collectively are seen as a major complement to legislation.

81 1.Introduction

- Work is a core activity for individuals and society. Participation in the labour market determines a wide range of life chances that are mediated through regular wages and salaries. Work and employment confer social status by placing people's position in the hierarchical arrangements of society. Moreover, paid work contributes to the realization of important human needs of performance, agency, skill development and personal control, of reward, recognition and related self-esteem, and of participating in wider social networks providing support and a sense of belonging. Under favourable conditions these experiences contribute to working people's health and wellbeing, strengthening their sense of social identity and their motivation towards striving for purpose in life. Yet, exclusion from paid work and exposure to hazards and poor quality of work act as powerful threats to human health and wellbeing. These opportunities and threats are unequally distributed across the globe, between and within societies, leaving poor people, those with less education, skills and capabilities in more disadvantaged conditions.
- The world of work is constantly changing. Demographic shifts, technological innovations, institutional reforms and global economic integration affect the way people work. Both the demand and the supply of labor are fundamentally different from earlier times. Over the last decades, the global labor force has increased, and it has become more diverse in terms of age, gender and ethnicity.

 Technological innovations have a major impact on occupations and

industries, changing the ways economies in different world regions, in both developed and developing countries, work along with new division of labor that are facilitated by global economic integration.

- Taking a global perspective we can also see growing diversity in terms of job types ranging along the whole continuum from permanent formal employment to different forms of non-standard work, in particular part-time work, fixed-term contracts and temporary agency work, to on-call work, different forms of self-employment and the large segment of informality. Increasing flexibility and diversity can (also) be observed with respect to working time and mobile working patterns. While today's labor markets can probably create more jobs than in earlier decades, the issues of unemployment, inactivity, long-term unemployment and broader issues of worklessness, exclusion and discrimination are far from being solved, neither is this the case for the potential physical and mental health hazards involved in some work environments.
- Against this backdrop, policy choices at the global, national, regional or sectoral level are essential, taking into account the different context conditions. Therefore, core policy areas such as education and training at different stages in life, collective bargaining and wage setting, but also the role of labor market regulation, social protection and active labor market policies need to be addressed, trying to strike a new balance between flexibility and security in order to stimulate the creation of more good jobs for all. This chapter addresses all these issues, focusing first on main driving forces and challenges of the world of work before discussing core policy areas that have direct influence on the quality and quantity of jobs under different conditions.
- In our understanding and with respect to the sphere of employment, social progress means a fair chance of inclusion and productive activity as well as good or better jobs for all, taking into account the potentials and restrictions of global employment dynamics and national paths of institutional adaptation and economic development.
- In many respects, this report refers to global initiatives such as the employment aspects in Goal 8 of the UN's 2030 Sustainable Development Goals (SDG) and the related ILO Decent Work agenda, pointing at the goal of decent work for all, aiming at full and productive employment for all women and men, ensuring equal pay for work of equal value and an improved labour market access for young people and the disabled, furthermore creating safe and secure work environments, social protection as well as ensuring proper labour rights and social dialogue, issues that are also addressed by this chapter.

Based on a comprehensive assessment of the existing evidence, our report tries to give some hints at concrete policy options that might further those objectives, not ignoring some tensions that might exist between flexibility and security in the different labour markets. The ultimate direction of reforms in line with an idea of social progress, however, lies in institutional arrangements that facilitate the reconciliation of flexibility and productivity with access to decent jobs and social protection. We argue that distinct productive policy options are available that can be implemented more globally in order to achieve these goals simultaneously. Furthermore, we can also see from a comparative perspective that institutions, i.e. public policy decisions, make a difference with respect to the functioning of labour markets and the quality of jobs that can be created.

2. New technology and globalization[18]

90 2.1 Introduction

- This chapter is about the impact of new technology and globalization on labour markets and what, if anything, can be done to ensure that the potential benefits are widely and equitably shared.
- New technology allows people to accomplish some task in a new way or to do something that was previously impossible. Globalization, broadly defined, means that interactions between people become easier. Both types of developments offer opportunities for progress. Across the broad sweep of history, it is new technology and increasing interactions between ever larger numbers of people that have been important drivers of what is commonly thought of as progress.
- But just because new technology and globalization offer the potential for progress does not guarantee they will have these features as simple examples can illustrate. Scientific advances can be used to invent new, more powerful weapons to harm others more effectively than before. And even where new technology does not have the intention of harm, it can sometimes benefit some groups at the expense of others. And more interactions between people as produced by globalization can be used by some to harm others just as they offer opportunities for people to help each other more effectively than before. Channelling new technology and globalization into policies for progress is important.

- And both new technology and globalization are the products of human action so they do not have the inevitability that is sometimes claimed for them. Innovation does not fall from the sky but is the result of conscious attempts to push back the frontier of human knowledge. Priority areas of research are chosen by people in industry, universities and government although desired progress cannot always be guaranteed. The role of human action in globalization is even clearer. Although part of increased globalization is driven by new technology that reduces communication costs, it is also the result of declining barriers to interaction whether that be reductions in tariffs through trade agreements or the political decision of China to be more integrated into the world economy. Different periods of history have been associated with falling or rising barriers to interaction - recent decades have seen a trend towards more interaction but there is now a backlash in many parts of the world. So both new technology and globalization represent choices and the scope and nature of social progress may be affected by those choices.
- It is sometimes claimed that the new technology and globalization constrain the policies that firms and nations can pursue and thus act potentially as a limit to social progress. For example, it is sometimes argued that increased competition leaves no choice but to cut social welfare provisions and taxes. It is important to address these arguments.
- In this section we aim to address the following questions:
- How is technical progress and globalization affecting labour markets throughout the world. In what regards are they fostering or hindering progress?
 - How can the forces driving innovation and globalization be influenced so that the possibilities for progress that they offer are turned into realities?
 - How do innovation and globalization affect the policies that can be used to pursue social progress?
- Before proceeding we should acknowledge that there are other factors apart from new technology and globalization that have important influences on labour markets demographic changes, natural disasters and migration patterns. Migration patterns might also be seen as influenced by new technology and globalization but the impact of migration is considered elsewhere.

- New technology has always had the feature that it reduces the demand for some types of labour and increases the demand for other types. Most current discussion is about the impact of ICT but machines have been displacing human labour for a very long time. There have typically been winners and losers from this process.
- The losers have typically been workers with specific skills where those jobs can now be more cheaply done by machines. The losers are often very visible as their skills may be made worthless by mechanisation and the affected workers may be reduced to destitution. As a result, there have been periodic predictions and serious concerns that new technology leads not just to adverse impacts for some groups of workers but to a large-scale decline in the demand for labour, e.g. the 'automation anxiety' of the 1960s (Autor, 2015) and the renewed 'automation anxiety' of today (Ford, 2015).
- Who seem to be the winners and losers from current new technology? Changes in the structure of employment point to job polarization, rapid growth in the employment share of high-wage occupations (e.g. managers and professionals), more modest but still positive growth in the employment share of low-wage occupations (e.g. shop assistants and care assistants) and falls in the employment share of jobs in the middle of the distribution (e.g. clerical jobs and many manufacturing jobs). The most compelling explanation for these trends is the routinization hypothesis (Autor, Levy and Murnane, 2003): machines come to replace people on tasks that are easily routinized, for which a program of manageable length can be written to perform the task well. The job of a skilled craft worker in manufacturing often involves precise but repetitive work and it is relatively easy to design a machine to do this job. Similarly, being a bank clerk used to require the ability to do arithmetic fast and accurately (so these were not low-skilled jobs) but computers can do the sums both faster and without error. The demand for both of these types of jobs has been falling. But it is not – as yet – easy to design a computer that will manage people, telling them what to do and motivating them. So management remains something in which people have a comparative advantage over machines. And, a job like cleaning that we think of as being unskilled because the ability to do it requires no special aptitude is currently quite beyond the capability of computers. Humans have evolved to be able to do tasks like cleaning without any seeming effort but the amount of information processing going on is actually huge.
- What about the impact of new technology on the overall demand for labour? Past concerns about the 'end of work' have been proved wrong the average worker has gained from new technology, not suffered from it real wages have risen and unemployment rates show no clear long-term trend. Why have so many commentators

got things so wrong? One explanation is that the workers who benefit from new technology are often diffuse and invisible. New technology results in prices for affected goods falling so that consumers can buy what they did before and have money left over to spend on other things. As they buy more haircuts, to give one example, the employment of hairdressers will rise and, absurd though it sounds, these newly employed hairdressers owe their jobs to new technology in some distant part of the economy. Many past and present accounts of the impact of technology completely overlook these effects but they have been the most important.

- But there is no guarantee that the current impact of new technology will be as it has been in the past and there are a wide variety of views without the evidence being clear-cut. There are those who argue that we are living through a 'second machine age' based on developments in ICT (Brynjolfsson and MAcAfee, 2014) of very rapid technical progress leading to a fall in the demand for labour while others argue that progress has slowed to a crawl (Gordon, 2016).
- All of this discussion has been about the impact of new technology at the frontier. But it is important to recognise that in many countries of the world, technological change is mostly the new application of 'old' technology (Edgerton, 2006), only adopted now because the diffusion of knowledge through the world is far from perfect or because economic incentives have changed. And those changing incentives are often because of globalization.

2.3 The Impact of Globalization on Labour Markets

- The most dramatic factors behind globalization in recent decades has been the shift from inward- to outward-looking of China and, to a lesser extent, India and some other developing countries. This has been aided by reductions in man-made barriers to trade. The main advantage that developing countries have over developed countries is in access to cheaper labour so they tend to specialize in labour-intensive production. The export-oriented, often autocratic, path of industrial development followed by countries like Japan in the 1950s, South Korea from the 1960s, and, more recently China, requires countries to upskill as the economy grows and incomes rise. Sectors like apparel are forever moving from one country to another as labour costs alter. So, globalization, like technology involves constant change.
- And, like new technology, constant change leads to winners and losers. In the developed world we have accumulating evidence that industrial sectors where competition with China has been fiercest have seen the largest reductions in employment (Autor, Dorn and Hanson, 2016). Areas that historically specialized in these sectors

have seen worse labour market outcomes than other areas – most advanced economies have their version of the Rust Belt. As in the case of new technology the losers are often very visible and increasingly vocal, expressing the view that the changes are the result of unfair competition with China. But, the switch of consumers to Chinese manufactured goods is largely because they are cheaper, leading to lower prices for consumers. And the consumers who benefit from these lower prices have more money to spend on other goods and services. The workers who produce these are the gainers from globalization though they are often hard to identify.

In the developing world, globalization is often a mixed blessing. Globalization has surely created millions of jobs in the Global South, though innovation and technological change have mostly been involved indirectly. Advances in jet propulsion, aircraft design, and international communications underlie the expansion of tourism globally, but the vast majority of jobs created at Southern destinations are low- or no-tech positions – cleaning and personal services in lodgings, local food supply/preparation, or visitors transport. Rapid, reliable air linkages are the foundation for reverse flows as well, with millions of (chiefly) women relocating long distances for low-paid service jobs (especially from Southeast Asia to the Middle East) which fund family-supporting remittances through electronic fund transfers. (Bahramitash, 2005; Odama, 2004) As well, sex tourism has swelled the number of sex workers across the Global South from Costa Rica to Kenya to Cambodia. (Hoefinger, 2014; Kibicho, 2009) Another innovation, containerization, when paired with the economic advantages of export processing zones, generates large-scale employment in assembly, packing, and shipping, drawing workforces from rural districts whose traditional farm and craft livelihoods are crumbling. (George, 2012; Kundra, 2000; Lee, 1984; Meng, 2003). Heath and Robarak (2015) argue that clothing factories in Bangladesh have increased women's education, delayed marriage and reduced fertility, all positive otucomes. But, at the same time, we know that this has also led to factory collapses and the continued exploitation of children. Such outcomes illustrate a combination of opportunity and hazard noted above, the unevenness of which some have termed "the asymmetries of globalization." (Yotopoulos, 2007; Porter, 2016).

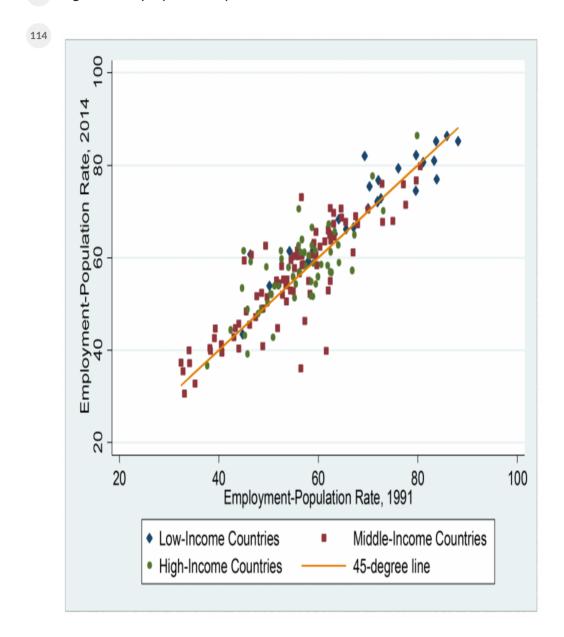
2.4 An Overview of the impact of new technology and globalization on labour markets

111

112 It is hard to see clear evidence of the 'end of work' in the official statistics as yet. Figure 1 plots the employment-population rate for those aged 15-74 in 2014 against that in 1991 using World Bank Data. These figures

may not accurately capture all forms of employment, and are also influenced by changing demographic patterns, educational enrolments for younger workers and retirement for older workers. While there is very large variation in employment-population ratios across countries, there is no clear trend over time. This is the case for countries at all stages of economic development.

Figure 1: Employment-Population Rates in 2014 and 1991



But what about the quality of jobs on offer? One way to consider this is to look at the occupational structure of employment. Table 1 presents estimates of the decadal changes in the shares of employment in 1-digit occupations, for the world as a whole and low-, middle- and high-income countries.

116 Table 1:

Estimated Decadal Changes in Employment Shares of Major Occupation Groups, 1998-2014

	ISCO Major Groups	All Countries	Low- Income Countries	Middle- Income Countries	High- Income Countries
1	Managers	0.3	-1.9	0.1	0.5
2	Professionals	2.6	-0.1	3.2	2.1
3	Technicians and Associate Professionals	1.2	5.3	-2.0	2.1
4	Clerical Support Workers	-1.3	-8.7	0.5	-1.8
5	Services and Sales Workers	1.9	6.7	4.1	1.3
6	Skilled Agricultural, Forestry and Fishery Workers	-0.6	-0.6	-1.7	-0.2
7	Craft and Related Trades Workers	-3.3	-5.5	-3.7	-3.2
8	Plant and Machine Operators and Assemblers	-0.8	-2.1	0.0	-1.0
9	Elementary Occupations	0.1	7.0	-0.4	0.2

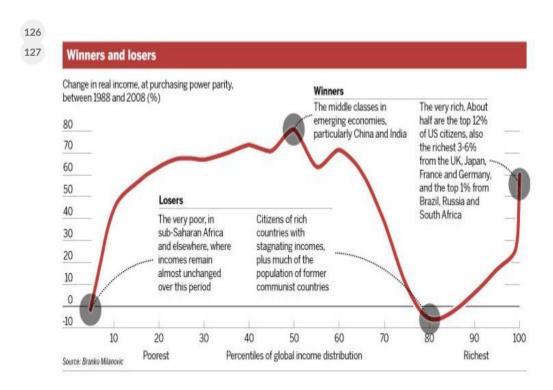
- Notes: these are estimated changes in percentage points over a decade from an unbalanced panel for 1998-2014 in which the weights designed to add to total employment in the world and correct for the probability of data on the occupational structure of employment being observed.
- For the world as a whole one can see the decline in the employment shares of clerical workers and skilled workers in agriculture and manufacturing. But professionals, associate professionals and

service/sales workers have seen rising shares. These trends are not exactly the same in countries at different levels of development but all have a fall in craft workers, most have a fall in clerical workers, and a rise in service/sales workers[19]. There is some element of polarization here but the overall trend seems to be towards better iobs.

- But statistics on the stable fraction of people in work and the types of work that they do may not do justice to a growing sense of insecurity in work felt by many workers. The changes produced by new technology and globalization have consequences for individuals. However, statistics on labour turnover rates do not always support the perception of growing instability e.g. Davis, Faberman and Haltiwanger (2012) document a downward drift over time in labour turnover in the US.
- But progress is not just measured in employment rates- incomes are also important. New technology and globalization may have large effects on the distribution of output. There are a number of aspects to these concerns.
- First, there are concerns that new technology and globalization primarily benefit the owners of capital relative to labour - that machines are increasingly competitive with labour, and that globalization is more to the advantage of footloose capital and increased financialisation than to labour which remains less mobile. Some studies argue for a fall in labour's share in income in most countries at all stages of development (Karabarbounis and Neiman, 2014). Others argue that the impact is much less dramatic once one takes one includes things like health insurance costs and pension contributions in total labour costs (Pessoa and van Reenen, 2014). First, there are concerns that new technology and globalization primarily benefit the owners of capital relative to labour - that machines are increasingly competitive with labour, and that globalization is more to the advantage of footloose capital and increased financialization than to labour which remains less mobile. Some studies argue for a fall in labour's share in income in most countries at all stages of development (Karabarbounis and Neiman, 2013). Others argue that the impact is much less dramatic once one takes one includes things like health insurance costs and pension contributions in total labour costs (Van Reenen and Pessoa, 2013).
- And then there is the distribution of income among workers. There are many aspects of this the evolution of wage inequality within countries both at the bottom and the top of the wage distribution, and the evolution of between-country inequality. The overall consensus (Bourguignon, 2015, Milanovic, 2016) is that the recent period has seen has been associated with rising inequality within

many countries, with especially large gains for the top 1% (Piketty, 2014). But at the same time there may have been the largest fall in inequality between countries since the Industrial Revolution so that the impact of new technology and globalization cannot be accurately summarized by simple statements like 'rising (or falling) inequality'. Milanovic (2016) estimates how people at different points in the world income distribution have fared over the period 1988-2008, reproduced in Figure 2. He finds gains a 65% increase in real incomes for the top 1% but - perhaps surprisingly - those at the world median have done better [20]. This is primarily the result of rapid real income growth in China and other large developing countries. In contrast the groups that have fared worst are those at the 80th percentile of the world income distribution, a position that corresponds to the average citizen in the richest countries. Many of the richest countries have experienced stagnation or even falls in real living standards for the average worker (McKinsey, 2016, estimate that 65-70% of households in advanced economies have had flat or faling incomes in the period 2005-2014, compared to only 2% in 1993-2005. Whether this is the result of globalization, new technology, institutions or the financial crisis remains subject to debate but these trends are posing serious challenges for countries that have been the richest and most stable politically.

Figure 2: Winners and Losers Globally, 1988-2008 (Milanovic, 2016)



2.5 Innovation and Globalization for Social Progress

Both innovation and globalization are the result of decisions by people. As such, there are choices to be made about the forms of innovation and globalization that are most conducive to social

progress. There is no reason to think that market-based economies will deliver efficient levels of innovation or even the right type of innovation – knowledge is a public good so that leaving it up to self-interested individuals to produce it will not be conducive to efficiency.

- Influence is possible here because there are large actors like states who play a big role in influencing decisions. For example, although it is often argued that innovation largely flows from companies and individuals pursuing self-interest, Mazzucato (2015) shows that states have been vital in pursuing high-risk investments. Resources can be directed towards activities deemed more important for social progress for example, Atkinson (2015) argues for more research about new and efficient ways to deliver care services.
- There are dangers that countries retreat into "beggar thy neighbour" policies in an attempt to protect their citizens, even though these attempts come largely at the expense of other countries. The rise in tariffs in many countries the 1930s only served to intensify the Great Depression with world trade falling more than total output. Cooperation at the global level is needed to prevent a repeat. But there is also a real danger that the terms of new free trade deals are unduly influenced by special interest groups capable of mobilising large resources for lobbying. In this case, further globalization leads not to creating benefits for the world as a whole but extracting rents for powerful interest groups.
- But there always likely to be both winners and losers within countries and there is a need to have policies that deliver economic growth that is widely shared. However, one often hears the argument that technology and globalization act as constraints on progressive policies.
- 2.6 Innovation and Globalization as Constraints on Policies for Progress
- 134 If change produces losers, then there are a number of policies one might use to compensate those affected. One might seek to hold up or even prevent change e.g. through preventing job loss or protectionist trade policies. However, such policies do have a cost as change is slowed, there may be fewer losers but also fewer winners. And change, like it or not, may not be so easy to contain. Better to have policies that compensate the losers.
- Although it is sometime argued that new technology and globalization act as obstacles to policies to compensate losers this is not the case. Labour market institutions like those embodied in the Danish 'flexicurity' model which aims to make people comfortable

with change by supporting them when their jobs disappear by providing relatively generous welfare benefits and helping them to find new opportunities through active labour market policies is a model that is not threatened by innovation or globalization.

And redistribution through taxation remains viable and important. So large has been the increase in the share of income going to the top 1% that taxing them more heavily only takes them back to the level of earnings they had a few short years ago – it is simply not credible that slightly higher taxes will drastically reduce work effort among high-earners as is being claimed. More wealth taxation is needed to break down concentrations of wealth. This will be all the more important if 'robots' mean that the share of income accruing to capital rises. New technology can be an ally here - it can be used to record ownership of wealth and to fight tax evasion – international cooperation is important here.

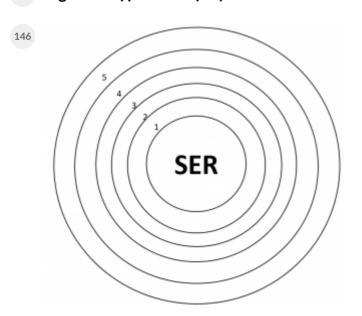
2.7 Policies

- 138 What can be done:
- 1. There needs to be recognition that new technology and 139 globalization have losers as well as winners. And an insistence that change must mean inclusive growth- if losers cannot be compensated and winners still think there is a benefit, then there is no benefit to the change.
 - 2. But it is better to enable the losers from change to adapt to it than simply to compensate them.
 - 3. There needs to be more focus on what new technology would be most desirable socially and using public funds to encourage that.
 - 4. In global trade deals there needs to be robust resistance to lobbying seeking gains for the few at the expense of the many, essentially the point made in Stiglitz (2003). And there needs to be an insistence that globalization does not mean a 'race to the bottom', but is conditional on minimum standards.

3. Changes and prospects on employment relations[21]

- Employment relations provide the link between individuals and their employing organizations. They specify the reciprocal expectations and obligations connecting employers and employees and can be either implicit or explicit contractual arrangements that describe how work is organized, governed, evaluated and rewarded. Employment relations differ in their scope, ranging from broadly defined relational exchanges that are often open-ended in duration and provide training and welfare supports for employees, to narrowly defined transactional ones that are more instrumental, entailing little commitment and often for work performed within a fixed time frame (see Kalleberg and Marsden 2015).
- Employment relations differ in more developed, industrialized countries from those in developing countries. Relatively rich countries are characterized by a formal economy in which employment relations are regulated in varying degrees, depending on a country's political and labor market institutions. Developing countries, by contrast, are dominated by an "informal" economy (also referred to as the "black," "grey," "underground" or "shadow" economy) in which enterprises, employment relationships and work are partially or fully outside of government regulation and taxation and are not covered by labor laws or other social protections. While developed countries also have informal economies to some degree, in developing countries the informal economy is the economy.
- Figure 3 depicts the relations among the different types of employment relations that we discuss in this section. The center of the set of concentric circles represents the most regulated and relational employment arrangement, the *standard employment relationship* (SER). Circles that are further from the center are increasingly informal, with child labor the least regulated and most precarious.

145 Figure 3: Types of Employment Relations



1: Part-time; 2: Temporary; 3: Self- Employed; 4: Informal Economy; 5: Child Labor

3.2 From Standard to Nonstandard Employment Relationships

- A useful starting point for assessing changes in employment relations is the SER, which involves relational exchanges between employers and employees. The SER was the norm in industrial nations for much of the twentieth century and played a central role in the post-World War II years as part of the social contract that accompanied the spread of Fordist mass production and the ascendancy of large organizations. Nevertheless, the SER was far from universal and characterized only a minority of employment relations; it was found mainly in larger organizations and was concentrated among white-collar employees (usually men) in managerial occupations and blue-collar workers in certain highly organized industries.
- The SER was generally typified by the performance of work on a preset schedule at the employer's place of business and under the employer's control and direction. It often, but not always, involved full-time employment and a shared expectation of continued employment assuming satisfactory employee performance. SERs were associated with a psychological contract in which employees exchanged their commitment to employers in exchange for earnings and often the possibility of careers within internal labor markets that were within-firm employment systems having job ladders, with entry restricted to the bottom rungs and upward movements associated with the progressive development of skills and knowledge.
- SERs were the normative foundation in industrial countries of a variety of labor laws and regulations such as protections against unsafe working conditions and the right to bargain collectively, as well as welfare benefits such as social insurance and pensions (Stone and Arthurs 2013). The SER highlights the importance of labor market and other institutions for the nature and consequences of employment relations. The institutions supporting the SER presumed models of employment relations and the family having a full-time, primary-breadwinner husband, and a wife who cared for children and the home.
- 152 Changing political, social, technological and economic conditions in the last quarter of the twentieth century in all industrial countries prompted governments and employers to seek greater flexibility in their employment systems than was available through the SER (Cappelli 1999; Kalleberg 2011). Growing price competition and more fluid capital markets put greater pressure on firms to maximize profitability and respond to rapidly changing consumer tastes and preferences. Slow economic growth triggered high unemployment

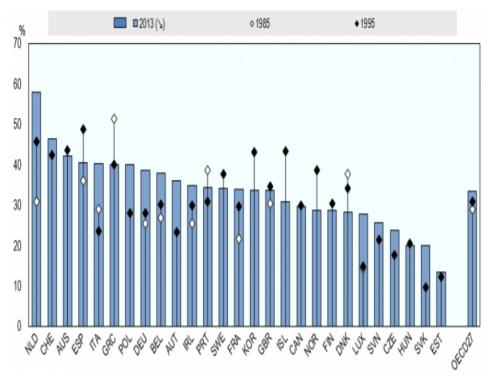
and made it difficult for economies to generate enough jobs to assure all workers of full-time wage employment. Rapidly proliferating computer-based technologies and communication and information systems made quick adaptation to changing market opportunities both possible and necessary. Corporations outsourced many of their functions, leading to the "fissuring" of organizations and the proliferation of subcontracting relationships (Kalleberg, Reynolds and Marsden 2003; Weil 2014). The expansion of the service sector made it necessary for some employers to staff their organizations on a 24/7 basis. New legal regimes contributed to the growth in nonstandard work by allowing employers to avoid the mandates and costs associated with labor laws that provide protection for permanent employees. So too did demographic shifts in labor force composition involving growth in worker groups—such as married women and older people—who sometimes prefer the flexibility that nonstandard arrangements offer, though not necessarily the associated insecurity.

- Together, these changes made the fixed costs and overhead obligations associated with the SER less viable for employers and led to the rise of a new normative form of employment relations often referred to as nonstandard employment relations (Kalleberg 2000); other labels include alternative work arrangements, marketmediated arrangements, nontraditional employment relations, flexible staffing arrangements, atypical employment, precarious employment, disposable work, and contingent work.
- While nonstandard employment relations take several distinct forms, they generally differ from the SER in one or more ways. In particular, they tend to involve more transactional exchanges and provide less employment security than the SER, as they do not assume continued employment. Some nonstandard work arrangements, including self-employment and independent contracting, collapse the employer-employee distinction. In these situations, workers administer and direct their own activities and are paid by clients for services performed or goods provided, not as employees providing labor power. By hiring independent contractors, employers avoid many of the regulations (such as the requirement to pay taxes and benefits of various kinds) associated with the employment and so the issue of misclassifying employees as independent contractors has become a matter of considerable dispute.
- Nonstandard employment relations are not new in developed countries. Unstable jobs, temporary work and peripheral labor force attachment, and many employment relations that do not involve full-time work accompanied by open-ended employer-employee commitments have dominated industrial societies historically (see Jacoby 1985). For instance, under the "inside contracting" system in

nineteenth-century United States manufacturing, management engaged contractors, provided them with machinery and factory space, supplied raw material and capital, and sold products, while the contractors were responsible for organizing production and for hiring, paying, and directing the actual workers. Indeed, the historical anomaly is the efficiencies associated with SERs and internal labor markets in the post-World War II period, not the use of nonstandard employment relations. Nonetheless, the latest incarnation of nonstandard employment relations does have novel features that distinguish it from earlier ones: for example, contemporary nonstandard employment relations increasingly involve labor market intermediaries; and advances in technology and communication enable employees to be spatially very distant from their employers.

By contrast, in developing countries, employment relations may be coming more standard now than before. Workers in these countries are moving from the agricultural sector to the industrial and service sectors, which is taking place in a context of international competition in global production chains and the enormous expansion of service sectors, both requiring flexible employment. There are small groups of workers in the so-called modern or formal sector in these countries that receive some benefits, relative security and even access to collective bargaining. However, the extensive use of nonstandard forms of employment in the formal sector is not all that different from the uncertain, unstable and insecure employment practices previously experienced in the informal economies of these countries. Moreover, this small formal sector is undergoing rapid informalisation at the same time that the informal sector is persisting and expanding (see Hewison and Kalleberg 2013).

The ILO (2015a) reports that 75% of all workers in countries for which data are available (covering 84% of the global workforce) are employed on temporary or short-term contracts, in informal jobs often without any contract, under own-account arrangements or in unpaid family jobs. Since 1985, a large proportion of all employment across OECD countries was in nonstandard employment relations (i.e., self-employed, full-time temporaries, part-time temporaries, part-time permanent) (OECD 2015a). Figure 4 shows the share of non-standard work in 27 OECD countries, a convenient way of summarizing changes in SERs. The percent of nonstandard work arrangements across these 27 countries in 2013 varies from a low of 13.5% in Estonia to 57.9% in the Netherlands. In over half the countries, the percent of nonstandard employment was greater in 2013 than in previous years.



160 Source: OECD, 2015a: Figure 4.6, page 144

It is important to recognize that the types of nonstandard arrangements are not homogenous: for example, permanent parttime workers are different from temporary workers. Moreover, the characteristics of particular nonstandard arrangements—such as part-time work—also differ among countries: in the Netherlands, for example, part-time work is regulated and relatively well rewarded, as compared to the more precarious position of part-timers in the U.S. and U.K. This underscores that the relative attractiveness of nonstandard work depends on how such employment relations are protected, regulated and rewarded in different countries. In some countries, working in temporary or part-time work (or even being unemployed) may constitute an appealing alternative to regular, full-time employment. Therefore, we discuss the various types of nonstandard work arrangements in more detail.

162 3.3 Part-Time Work

163

The ILO (2015a) estimates that about 17% of the global workforce work less than 30 hours per week (the generally accepted cut-off for defining part-time work) and that in most countries, the number of part-time jobs has grown faster than full-time jobs since the recent economic crisis. Women are far more likely to work part-time globally than men (24% vs. 12.4%; ILO 2015a).

- The quality and nature of part-time work varies considerably among countries (see Fagan et al. 2014 and the subsequent section of this chapter). Indeed, there is some controversy as to whether all part-time work should be considered nonstandard work at all, because many less-than-full-time jobs incorporate all other features of the SER (such as part-time work in the Netherlands, for example). In addition, some part-time arrangements represent employer accommodations to employee preferences for reduced hours and more flexible schedules. Other part-time jobs, however, are highly insecure, lacking enhancements such as benefits, training opportunities, and the expectation of continuity. Countries differ considerably in their regulation of part-time work, though the ILO (2015a) reports increases in protections regarding equal treatment and equal dismissal rights in both OECD and emerging countries (but not in developing countries) since the early 1990s.
- Workers' preferences and needs must also be taken into account when considering the desirability of part-time work. Part-time work does not mean the same thing for breadwinners as opposed to women or children or those using them as an extra job to supplement income. Much of the part-time work in developing and transition countries is involuntary part-time, in which workers would prefer full-time work in order to obtain an adequate income. The proportion of involuntary part-time workers is less in developed countries, though these percentages have increased since the recent economic crisis due to the relative scarcity of full-time jobs (Fagan et al. 2014).

3.4 Temporary Agency Work

168

- Temporary work includes both persons hired on a fixed-term temporary basis and workers procured via labor intermediary organizations such as contract companies and temporary help agencies. Fixed-term contracts have become particularly important in countries where legal provisions make it difficult for employers to terminate open-ended contracts, such as France, Germany, Italy and Spain.
- 170 Temporary agency work (TAW), in particular, illustrates a major shift in employment relations, which is here mediated via a third party rather than being a bilateral relation. TAW is characterized by a distinct triangular employment structure where workers are typically employed and dispatched by a private employment agencies while working at the facilities, and under the authority, of user firms on limited-term contracts, normally ranging from one day to a few months. The shift from a bilateral to trilateral arrangement has fundamentally changed the nature of the employment relationship:

the worker's *de jure* employer is an intermediary organization rather than the *de facto* employer that pays for and directs the use of the worker's labor.

Over the past two decades, TAW has not only registered exponential growth but also become a globalizing service industry with considerable geographic expansion and industrial diversification; leading agencies have taken up some functions of human resource management and extended their services to a number of new areas including search and placement, recruitment process outsourcing, outplacement and online recruitment. According to the latest report produced by CIETT (2015), the global trade body of private employment services, in 2013, approximately 61 million people gained access to the labor market through a private employment agency and 40 million people worked as an agency worker at some point; the biggest market for TAW was the US with 11 million people, with China close behind with 10.8 million people (though some scholars suggest even higher figures, for example, 75 million according to Kuruvilla, Gallagher and Lee 2011) and Japan the third with 2.4 million people (CIETT 2015: 10); a few big markets across developed and developing countries such as the US, China, Japan, the UK and Brazil account for the majority of global annual sales for all services, with TAW delivering by far the largest part (CIETT 2015: 18).

While temporal and geographical variations merit close examination, the growth and expansion of TAW speaks to the fact that the industry has gained considerable political acceptability among all of the social partners — governments, businesses and labor union that create new regulatory conditions favorable for employment agencies and businesses. Much has been said about how public policies are geared towards a re-regulation, rather than a deregulation, of employment relations in the interests of capital, which results in an increased commodification of labor. The corollary is that many of the protective coverings that post-war 'embedded liberalism' allowed and occasionally nurtured are stripped away; as Harvey (2005:168) avers, 'the individualised and relatively powerless worker then confronts a labour market in which only short-term contracts are offered on a customized basis." A large body of empirical research shows that agency workers are subject to precarious work and unequal treatment (e.g., Kalleberg 2000). Except for a handful of high-status and affluent knowledge workers, a great many are excluded from — or differentially included in — the same array of pay and benefits that are available to full-time workers, including job security, bonus payments, social security and protection, childcare, sick leave and paid holiday. It is noteworthy that TAW's tangled hiring-using relations are prone to legal ambiguities, making it difficult for the law to tackle exploitation and

manipulation on the part of agencies and user firms. The situation is especially grave in emerging TAW markets that generally lack broad regulatory support and effective enforcement measures. For example, in China, in addition to tens of millions of migrants from rural villages who account for the vast majority of agency workers, vocational student interns have also become constrained labor, being subject to double control of teachers and schools, who act as labordispatching agencies, and factory managers (Smith and Chan 2015).

To a great extent, the contemporary 'temp revolution' reflects a shift towards labor precarity and inequality. Although often characterized by promises of flexibility, individuality and freedom, TAW constitutes an important element of social division, intersecting with other axes of inequality such as gender, age, region, ethnicity and race. If employment flexibility is indeed an inevitable trend contributing to empowerment, productivity and creativity, then inclusive institutions—ranging from legal and regulatory framework, state welfare provision, collective bargaining coverage and corporate management to cultural environment—are needed at global and national levels to provide equitable opportunities for a broad cross-section of society and to enhance human development.

3.5 The "Gig" Economy

The so-called "gig" economy—consisting of self-employed persons such as independent contractors or freelancers who often work on discrete projects that are managed by online platforms that broker work between employers and workers—is another important nonstandard work arrangement. The term originated in the United States to refer to short-term, "on demand" work arrangements between persons or between a person and an organization and has since been used to describe the situation in industrial countries more generally. The rise of the gig economy recalls the small-scale entrepreneurship of the 18th century. The gig economy also takes a number of forms, including transportation platforms such as Uber and Lyft that connect drivers with riders, "crowdsourcing" arrangements in which people group their efforts to achieve particular outcomes, and freelance platforms (such as Upwork.com) that match skilled workers to jobs. Technological advances in communication and information systems have made it easier for organizations to specialize their production, assemble temporary workers quickly for projects, and rely more on outside suppliers (see Kalleberg and Dunn 2016). "Gigs" are also becoming more common offline, as in short-term engagements in which persons contract with other persons or organizations for specific activities.

While there has been growing interest in the "gig" economy, estimates of its size vary widely, ranging from 600,000 workers (or .4 percent of total U.S. employment) who work with an online intermediary in the gig economy to one-third of the U.S. workforce according to a study by the Freelancers Union (Harris and Krueger 2015). Statistics on the size of the gig economy in other industrial countries are equally scarce. Part of the reason for the lack of information on this group is the difficulty in distinguishing independent contractors, for example, from employees. Employers receive financial advantages from hiring independent contractors (such as not needing to pay them benefits or assume liability for their actions) and so are often motivated to misclassify them as employees, thus creating a form of "hidden employment" (e.g., De Stefano 2016) that circumvents labor laws and other obligations. In the United States, there is a lively and still unsettled legal battle over whether Uber drivers should be considered employees of the company—since Uber exerts considerable control over their actions and remuneration—or as independent contractors.

Work in the gig economy is heterogeneous, with considerable differences in the quality of jobs. Certain high-skilled workers can garner higher economic rewards as independent contractors or consultants than they might as employees in standard employment relations, for example. In these instances, nonstandard arrangements allow workers to capitalize on abundant market opportunities and demands for their skills, despite the insecurity and instability associated with any particular "gig." Workers with fewer marketable skills, on the other hand, do not benefit as much from the flexibility afforded by the gig economy.

The informal sector is an enterprise-based concept that refers to

3.6 The Informal Economy

organizations that are not regulated, don't register their employees, have informal bookkeeping practices, and so on. By contrast, informal employment denotes jobs that do not provide basic social or legal protections or employment benefits; these may be found in both informal enterprises and in informal arrangements in the formal sector (e.g., undocumented workers working in restaurants) (see ILO 2012). Hence, the forms of nonstandard work discussed above (such as part-time work or temporary jobs) may be regarded as informal in countries where such nonstandard work arrangements are not

regulated or receive social protections. Informal workers comprise both wage employment and "own account" workers who are technically self-employed but do not have any employees. Informal economy work and represent extreme forms of precarious work: it is unregulated and hence more likely to be uncertain and insecure.

- The notion of an informal economy emerged in the 1970s as a way of describing unregulated and unprotected work activities in the developing world. It received little scholarly attention for many years, as it was widely believed that processes of modernization would replace informal work activities with formal ones. However, recent trends toward the casualization of work and nonstandard work arrangements has seen the informal economy expand as the formal industrial and service sector jobs have been accompanied by extensive uncertain, unstable and insecure employment practices.
- Sixty percent of the global workforce is in the informal sector (Williams 2014). An ILO (2012) study of 47 countries found that six countries (India, Brazil, Mexico, Vietnam, Pakistan and the Philippines) accounted for three-quarters of informal employment in 2011. Informal employment made up at least 2/3 of non-agricultural employment in fifteen other countries. The lowest percentages were found in central and eastern European countries.
- While the informal sector is less widespread in developed countries, the rise of nonstandard work arrangements has produced greater informality in these countries as the pressures toward flexibility described above have led to removal of social and legal protections in the formal sector. Williams (2014) classifies the 27 member states of the European Union by the degree of informality of their workforces and finds that countries on the eastern and southern side of the EU-27 have more informal, wage-based employment, while those on the western and Nordic side are less likely to be have informal wage employment and more apt to include own-account informal sectors. He suggests that these patterns of informality are related to western and Nordic countries being wealthier, more equal, and exhibiting greater labor market intervention, social protection and social transfers.
- An extreme form of informal economy is *child labor*, which refers to work done by young people, especially hazardous work (such as those in many manufacturing, mining and construction as well as agricultural jobs). The ILO (2015b) estimates that in 2012, there were 47.5 million adolescents aged 15 to 17 years working in hazardous jobs, accounting for 40 percent of all those employed in this age group and over a quarter of all those in child labor. The proportion of child laborers is greatest in Africa, followed by Asia and Latin America. Child labor is outside the regulations of the formal economy for those countries that have laws defining legal working ages and protecting young workers who meet these criteria. This is especially a problem in newly developing countries, as the growing opportunities provided for working in manufacturing industries encourage the use of young workers. Girls are particularly vulnerable to child labor given prevailing social norms about marriage and

children and are likely to be exposed to the vilest forms of child labor such as sexual trafficking and exploitation and working as domestics in homes. While still pervasive, the ILO reports that there has been declines in the number of child laborers in recent years.

184 3.7 Public Policies

In summary, our theme in this chapter is about providing good jobs for all. Our discussion in this chapter indicates that the definitions of what constitutes a "good" job differ among countries, depending on national differences in economic opportunities for workers and cultural conceptions of what is important in a job. We thus avoid a normative definition of good jobs. We have less hesitation about pointing out what characterizes a bad job, namely one that pays relatively low wages (compared to national standards) and especially low social wages (which depend on the welfare benefits available in the country) and exposes the worker to dangerous working conditions.

 Public policies to address concerns raised by changes in employment relations should be sensitive to workers' preferences and needs. It is important to consider workers' choice, and the kinds of jobs they want; for example, many people might not desire to work in SERs, preferring instead to work part-time or temporarily.

 Social protections and labor laws should not provide incentives to employers for choosing a particular employment relationship.
 Protections should cover all types of work, yielding no particular hidden advantage of choosing one or another type of work. This would expedite the use of different types of employment relations with no mandates prescribing one type of work or another.

• Institutions to protect workers from insecurity and uncertainty, as well as to facilitate the creation of good jobs, must be created by political forces. In the past, unions played a major role in advocating for workers and establishing labor laws and protections. They still need to play that role, but their decline suggests that it is unlikely that institutions will be created in flexible societies without unions. Hence, these institutions need to be created outside the labor market.

189

4. More flexible workplaces and working time?[22]

- This section identifies the characteristics of working-time arrangements (volume, schedule, predictability and flexibility) which enhance the quality of working-time for workers' well-being and the fit between employment and personal life, including family responsibilities ('work-life balance'). It reviews developments in working-time arrangements and persistent inequalities within and between countries, and the opportunities and challenges involved in improving the quality of working time.
- Across the world many workplaces operate on the basis of long fulltime working hours. If part-time employment exists it involves short, fragmented or irregular schedules in a narrow set of low status and low paid jobs. In this type of workplace workers have little scope to reduce or adjust their schedules because of their low wages, limited job security and weak bargaining power. In contrast, workplaces exist which offer better quality working time arrangements: full-time hours are shorter; part-time hours are more substantial and available in a wider range of occupations; schedules are regular and largely predictable; and workers have some discretionary control over worktime (such as the ability to refuse to work overtime, flexibility in when or where they do their work, or entitlements to take time off for certain personal or domestic reasons). The latter type of workplaces is more prevalent in countries with a social democratic tradition of working-time standards set by legislation and collective bargaining (Berg et al. 2014).
- When considering working-time standards it is important to remember the segmented structure of labour markets. Those with human capital (education, training, experience) and social capital (networks) are the most likely to gain the better paid, more secure jobs in the primary sector and to avoid low-paid precarious employment in the secondary labour market. On this point the informal sector and informal employment continue to be a substantial source of employment in many countries. The informal sector is made up of small enterprises or own-account workers, and casual employment. It produces services for, and trades with, the formal sector. Informal employment exists in both the formal and informal sector and encompasses those who "by law or in practice, are not covered by national legislation, taxation or social protection" (ILO 2013a:4). Informal employment is the only alternative to unemployment in countries without social protection schemes. In

most developing countries the majority of employment is informal, and so is a sizeable proportion of employment in many developed countries.

- The formal sector is being reshaped and undermined in developing and developed countries by global integration and economic policies which are facilitating the informalisation of employment. Informal (casual, precarious and irregular) employment is expanding in some parts of the formal sector and some production is moving from large, registered enterprises in the formal sector into smaller units in the informal sector via subcontracting, including relocation to regions where labour or other production costs are cheaper. Both processes are challenging the 'standard employment relationship (SER)' which was secured from the 1950s onwards in some developed and developing economies with varying degrees of worker coverage through the creation of labour standards and rights.
- A second consideration is the gender division of labour. Women do the majority of the unpaid household work across the world, including the time involved in looking after children, elderly parents and other relatives (European Commission 2016, OECD 2016; Miranda 2011; ILO 2016). In many parts of the world women's total working time is much higher than that of men, even if they work shorter hours in employment. The gender inequality in unpaid work is smallest in those countries where government policy has established high standards of labour rights and gender equality, exemplified by the Nordic countries, followed by France and Belgium (Eurofound 2013b, European Commission 2016).

4.1 Working-time quality and the impact on work-life balance

- The volume of hours worked, when they are scheduled and the workers' control over their working-time arrangements impact on work-life balance, by which we mean the quality of the fit between employment, family life and other activities.
- The volume of hours worked is the main working-time dimension which impacts on work-life balance. Long working hours have a pronounced negative impact on men and women's self-assessment of the quality of their working-time and their 'work-life balance' and on health outcomes (Tucker and Folkard 2012, Fagan et al. 2012; 2014). Long working hours are associated with above average levels of work intensity (Eurofound 2012). Work intensity due to heavy workloads, tight deadlines and pressurised work environments can create a strain between the demands of employment and personal life, compounding the fatigue caused by long working hours.

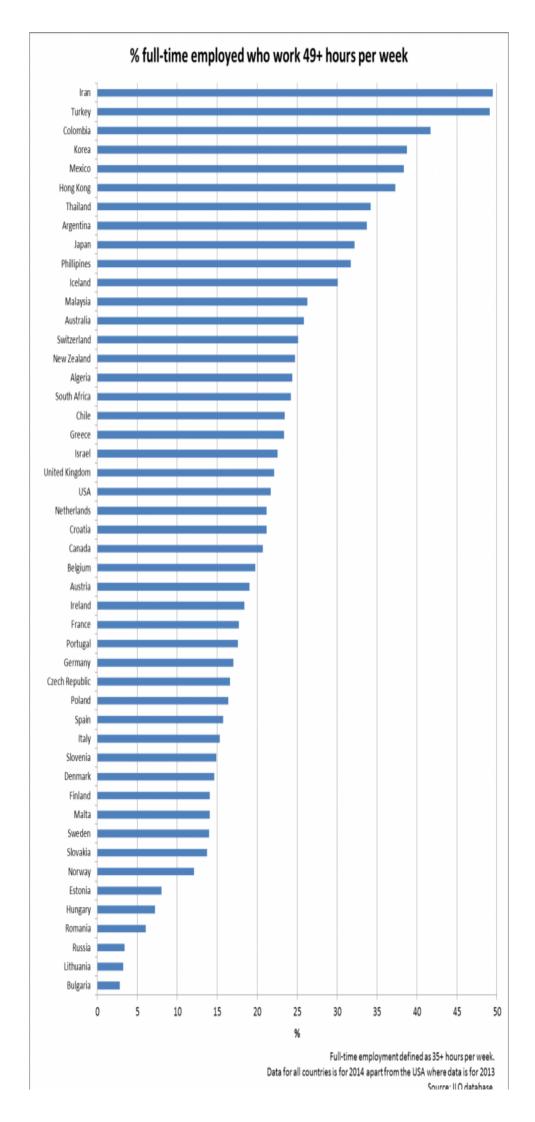
- Regular schedules during daytime weekday hours generally make it easier for workers to plan and coordinate their employment and private lives. So do work practices which give workers some autonomy, by which we mean discretion and control, to decide when and where they do their work. Such autonomy reduces the negative effects of long hours but it does not eradicate them (Fagan and Burchell 2002, Burchell et al 2007).
- Employed men and women are more likely to report a good work-life balance if they work daytime, weekday and predictable schedules (Fagan et al. 2012; Eurofound 2012, Nijp et al 2012, Ingre et al 2012). Part-timers are more likely than full-timers to report that they have a good work-life balance but they are less likely to consider they have good career prospects (Eurofound 2012). Men and women employed full-time are less likely to report a good work-life balance if they have the additional time demands of caring for children or other relatives. When parents have variable and unpredictable schedules there is a negative impact on their child(s) educational development (e.g. Economic Policy Institute 2015).

4.2 Developments in working time arrangements

- Since the late 1970s working-time has been restructured, particularly in developed economies, where more diverse working-time arrangements have emerged (Messenger 2004). This restructuring of working-time was driven largely by employers' operational requirements for more flexible work practices and extended operating hours in an increasingly connected global economy. This includes increased use of the internet and related technological developments which enable remote working, instantaneous communication and handover across different time zones, and so forth, and has eroded previous boundaries to the working day.
- 203 Working-time developments have also been shaped by personnel strategies to accommodate workers' preferences for some forms of flexibility, such as flexitime, some types of part-time work and some full-time schedules (e.g. nine day fortnights). This included adjusting to the working-time availability of women with young children who constituted a growing proportion of the labour force.
- The combined effect of these economic and political forces and technological developments has been a stall in the negotiated reduction of full-time hours, an expansion of part-time employment, some improvements in reconciliation measures in some countries, work schedules which are more diverse and often less predictable, and persistent social inequalities in working-time conditions.

205 Full-time and part-time hours

- Full-time hours, calculated on a weekly or annual basis, declined during the twentieth century, particularly in the developed economies of North America, Australia and Europe (Bosch et al. 1993, Messenger 2004) and in some developing economies (Lee et al. 2007). This was produced through the introduction of regulatory limits in some countries and sectors through a combination of international agreements (ILO Conventions, EU Directives), national legislation and collective agreements between employers and trade unions. However, long full-time working hours remain widespread, particularly in developing economies but also some affluent economies such as Japan, the USA and the UK (Figure 5).
- 207 Figure 5: The proportion of the full-time employed who work long hours for countries across the world, 2014

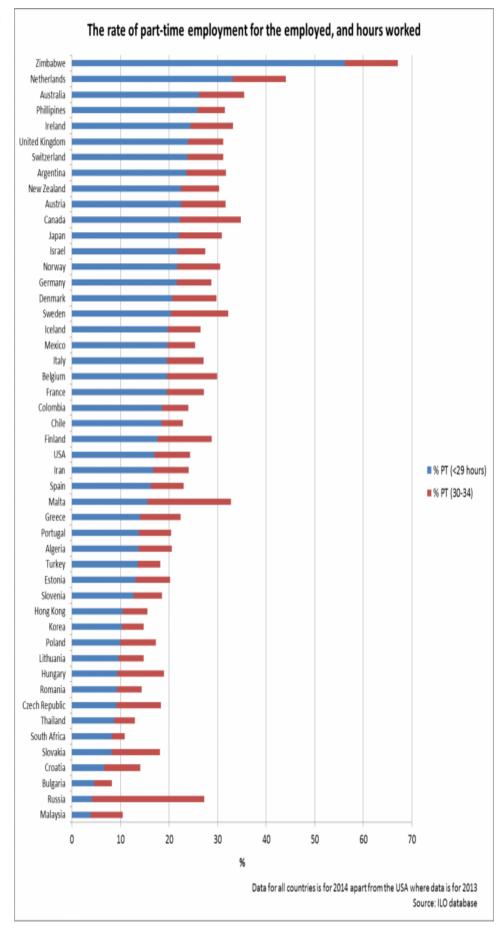


209

The lowest incidence of long full-time working hours is generally found in the European countries with a history of effective workingtime regulation and innovation established through the collective bargaining and legislation which is characteristic of the 'European Social Model'; notably the Nordic countries, France, Germany, the Netherlands and Belgium (Berg et al. 2014; Eurofound 2016). However, where progress has been made it has also stalled or been eroded in the current era; with laws repealed, diluted or ineffectively implemented in some countries and the decline in union coverage and bargaining power in many parts of the world. The comparatively low incidence of long full-time hours in some Central-Eastern European countries shown in Figure 5, such as Bulgaria and Romania, reflects regulated hours in the formal economy but may underestimate actual hours worked once multiple jobs in the formal and informal economy are aggregated. Other surveys focused on the European Union reveal that the longest full-time hours are worked in the Member States in Central and Eastern Europe (Eurofound 2016).

Part-time employment is also extensive, and has increased in many countries from the 1970s onwards (Fagan et al 2014). Figure 6 shows that one fifth or more of the employed are part-time in most of the countries shown. In most countries the majority of part-timers are women, often women who are combining employment with raising young children or looking after elder relatives. The part-time workforce includes involuntary part-timers who have been unable to secure full-time employment and those who want part-time employment because of constraints on their working-time (raising young children, in education, approaching retirement, chronic illhealth). Involuntary part-time work is an explicit signal of underemployment, associated with high levels of unemployment. For example, in Europe the rate of involuntary work rose sharply during the recession which followed the 2008 financial crisis. By 2014 40% of male part-time employment and 26% of female part-time employment was involuntary in the EU27. In addition to involuntary part-time work, in countries where mothers are faced with the prospect of full-time hours and limited childcare services then parttime employment may be the only viable option, which is a form of under-employment. In developing economies much of the casual part-time employment in the informal economy is underemployment due to an inability to secure full-time employment, to generate full-time business as an own account work, or to work fulltime due to family care responsibilities.

Figure 6: The rate of part-time employment for the employed for countries across the world, 2014



Much of part-time employment is concentrated in a narrow range of low-paid occupations, often in precarious employment or with inferior employment conditions and prospects for advancement compared to full-timers. However, it is important to differentiate between the quality of marginal and integrated forms of part-time

employment (O'Reilly and Fagan 1998). Integrated part-time employment refers to those part-time jobs where principles of equal treatment have been implemented, part-time employment is available at a wide range of occupational levels, and the primary distinction is that the job involves reduced hours. Integrated parttime employment is thus better quality than marginal part-time employment (and some precarious and low paid forms of full-time employment). To illustrate this with a stylized contrast: in most countries part-time employment in clerical or professional occupations in large formal enterprises offers a fundamentally different living standard and career prospect than casual part-time employment in a manual job in the informal sector. Country comparisons consistently reveal that the Netherlands has gone furthest in developing a part-time employment model which is good quality and accounts for a large proportion of the economy; but more broadly opportunities for good quality part-time employment are more widespread in developed economies where legislation and other initiatives initiated by governments, unions and/or employers have sought to promote better quality part-time employment to improve women's employment opportunities and more recently to enable older workers to defer retirement. Other countries, in which part-time employment in the formal economy is rare, such as South Korea and China, or signals a lower employment status rather than reduced working hours, notably Japan, have introduced governmentled initiatives to promote the expansion of better quality part-time employment, primarily as a reconciliation measure to make it easier for women to combine employment with child raising (Fagan et al 2014).

European, North American and Australian surveys reveal that a large proportion of full-time and part-time employed workers report a mismatch between their actual and preferred working hours (Fagan 2004). In general those who work long full-time hours in jobs with high or medium level earnings are the most likely to prefer shorter working hours in exchange for a pay cut, and those working short part-time hours are the most likely to want to increase their hours. For example, the 2010 European Working Conditions Survey found than more than half of those who worked more than 40 hours a week would prefer shorter hours in exchange for reduced earnings and over one third of part-timers, rising to 45% of part-timers in short hour jobs, would like to increase their working time, compared to just 10% of those working more than 34 hours a week.

215 Work schedules

Non-standard work schedules – which involve shiftwork and other work in the evening, at night, at week-ends have always been prevalent in developing economies and have gone hand in hand with

long full-time hours or casual part-time jobs. Non-standard work schedules expanded in Europe and other developed economies during the 1990s. The expansion slowed and stabilized between 2000 – 2015, despite the spread of the global 24-hour economy (Evans et al 2001; Eurofound 2007; 2012; 2015b). While night work and many forms of shiftwork have negative effects on health and do not fit well with the day-to-day rhythms of family life; it is primarily the volume of hours worked and the workers' control over their schedule which impacts on their self-assessment of work-life balance (see 4.1 above).

- Fixed schedules offer the advantage of predictability, and this is still a common work arrangement in many countries. For example, in 2010 in the EU27 43% of employed men and 49% of employed women worked a fixed schedule (the same daily start and finish times and the same number of days per week). In contrast another third had unpredictable schedules, including 19% of employed men and 13% of employed women whose schedules changed regularly with no more than 24 hours' notice (Eurofound 2012). Unpredictable schedules include short-notice overtime or schedule changes, some forms of annualized hours agreements, and extreme forms of on-call work such as the 'zero hours' contracts. The latter are a stark form of casualisation which has, for example, expanded in the UK in retail, hospitality and home care services. Such unpredictability and short notice changes in work schedule requirements is unconducive to work-life balance.
- When workers have some flexibility to adapt their working hours this provides the means to secure a better fit between employment, domestic responsibilities and other activities. Access to such flexibility remains uneven. For example, in 2011-12 in the EU around six out of ten of the employed had no flexibility in their working hours (Eurofound 2012b).
- 219 Workers' flexibility through reconciliation entitlements and negotiated flexibility
- Statutory family-related leave entitlements (maternity, paternity, parental, domestic emergencies etc.) have improved in many countries. However, there are pronounced national differences in the amount and flexibility of the leave, and the amount of earnings or benefits provided during the leave period, and the proportion of the workforce who meet the eligibility conditions (Plantenga and Remery 2005; ILO 2014; Ray 2008). Furthermore, the implementation of leave entitlements remains uneven. Workers may lose their jobs, or encounter discrimination if they take leave, revealed, for example, in a recent UK survey of maternity leave (Equality and Human Rights Commission 2016). Men remain less

likely to use parental leave entitlements, although their take-up increases in national systems which provide an individual entitlement to paid and flexible parental leave options (Moss 2015).

Since the late 1970s there has been some expansion in the coverage of working-time options in developed economies which provide workers with some discretion and flexibility in their schedule, such as flexitime and other types of working time accounts, and teleworking options (Riedman et al 2006, Chung et al 2007, Golden and Figart 2001). Likewise some part-time schedules are designed to make it easier for workers to better combine employment with family or other commitments (Anxo et al. 2007, Fagan 2004, Fagan et al 2012; 2014). A number of countries have introduced a statutory 'right to request' an individual adjustment to working-time; usually to switch to part-time hours but some also make provision for other adjustments to when or where hours are worked (Fagan et al 2014).

222 Flexible and mobile working

- The proportion of paid work which is completed at a site other than the formal workplace has probably increased. The home has always been the primary workplace for homeworkers and many own-account workers, as has the street for many vendors in the informal sector. To this we must add the increase in remote working which has been facilitated by advances in information technologies and the spread of the internet. For example, in the EU27 the proportion of the employed that use the internet and email in their jobs rose from 14% in 1991 to 40% in 2010 in the EU27, including 30% who use it for most or all of their work (Eurofound 2012).
- Eurofound (2012) estimates that a quarter of European workers are 'e-nomads' who use ICT for their work and who do part of their work at sites other than their employer's or their own work premises. E-Nomads are mainly highly educated professionals and knowledge workers. Digital working makes it more difficult for workers or employers to estimate actual work time; which may undermine the accuracy of trends in working time recorded in standard survey questions.
- Setting up and running a workspace at home comes at a cost, many of which are borne by the worker. For a low-income home-based worker this can place a burden on housing conditions and living arrangements which may already be cramped, and where work has to be completed under conditions of inadequate heating, lighting, storage space or equipment.

226

For other workers the opportunities for telework and mobile work patterns provide some flexibility in principle to enhance work-life balance. This working arrangement also provides an opportunity for employers to save costs by reducing office space. However, there are risks and downsides to this trend as well. Firstly, the reduction in office space may impact negatively on the workforce's working conditions (Lewis et al. 2016). Secondly, the costs incurred from remote working may be less burdensome than those faced by homeworkers but they are rarely covered in full by the employer, or by tax relief. Thirdly, it can become more difficult to create boundaries between work and personal time, whether it is a homeworker compelled to work to a tight deadline in order to be paid (Felstead and Jewson 2000; Felstead et al. 2002) or a professional who operates under an explicit or normative expectation that remote working means constant 'on line' availability to respond to clients, co-workers and their line manager. This can be exacerbated when workloads are unmanageable and work is 'taken home' in order to keep up. For example, in 2010 in the EU27 one in three employed persons worked in their free time to meet work demands once or twice a month and 15% did it once or twice a week, with little difference by gender. Many of these are professional and clerical workers working remotely on paperwork and project deadlines.

4.3 Inequalities in working time and work life balance

228

229

We have already alluded to the pronounced national and occupational differences in working time arrangements: in the incidence of long full-time hours, the amount and quality of part-time employment, the schedules worked and the amount of discretion and flexibility which workers have over their working time (Chung et al 2007, Fagan and Burchell 2002, Burchell et al 2007, Fagnani and Letablier 2004, Hegewisch 2009, Riedman et al 2006, 2010; Messenger 2004). The national differences arise from a combination of economic, political and historical conditions. These include the industrial structure of the economy; state policies and collective bargaining concerning working time; and the size and composition of the labour supply. The latter is shaped by welfare programmes for the unemployed, the adequacy of the grants and allowances made to young people in training and post-compulsory education, welfare arrangements for the unemployed, retirement systems and pensions for older workers, and the quality of the reconciliation measures to enable family care responsibilities to be combined with employment.

These national institutional factors shape the working time culture and practices at the workplace and the extent to which workers have opportunities to obtain flexibility through arrangements such as flexitime, working-time accounts, individual rights to request reduced or flexible hours, flexible retirement schemes and so forth. Furthermore, men and women's working-time expectations and capabilities to secure their desired working-time arrangements are shaped by the extent to which gender egalitarian employment and family roles are promoted by the 'gender regime' that is constructed by government policies, institutional arrangements and cultural values (Hobson 2014, Fagan and Walthery 2011, Lee and McCann 2006).

In Europe at least, the research evidence shows that flexible working options for employees (such as flexitime, opportunities to switch to part-time hours, to work from home etc.) are more developed and used in affluent economies, in the public sector and in large private sector workplaces, where a union is recognised or where more than half of the workforce is female (Anxo et al. 2006, Riedmann et al 2010). The available evidence suggests this pattern of inequalities has persisted during the recession (Präg and Mills 2014).

Occupational inequalities in the quality of working-time arrangements can be illustrated by a comparison of the working-time arrangements of managers and professionals on one hand, and manual occupations on the other. Typically managers and professionals work long hours and have heavy workloads; but they are better paid and usually have more autonomy over their work schedules than do other occupational groups (Fagan 2001, Fagan et al 2008, 2012; Warren 2003; 2015). They are more prone to their work spilling into evenings and week-ends, particularly if they are 'enomads' who do much of their work using lap tops and smart phones (Eurofound 2012). In contrast, manual workers are more likely to have work schedules which involve shifts, nights and week-end work, to have their hours changed at short notice by their employer, and to be compelled by low pay and financial pressures to work long hours when opportunities for overtime or multiple job holding arise. They have higher levels of work intensity and less working-time autonomy than managers and professionals (Burchell et al 2007, Fagan et al 2008, 2012; Eurofound 2012).

233 Part-time work also varies by occupational group. Among managerial and professional occupations this option is more developed in female-dominated professions and in countries where there have been explicit measures introduced to facilitate part-time employment, such as through introducing an individual right to request reduced working hours. Part-time employment is often confined to the lower career rungs and at the cost of reduced

prospects for career development and promotion (Fagan et al 2014). Nonetheless, the earnings and quality of part-time jobs in this part of the occupational hierarchy are vastly superior to manual part-time jobs. The growth in involuntary part-time work during the recession has been concentrated in manual service jobs.

- 4.4 Working-time quality: a social progress assessment and recommendations
- Working time arrangements impact on workers' health and well-being, and their ability to fulfil family care responsibilities and participate in other civic, voluntary and leisure activities. Long working hours, poorly designed shift work, and working time requirements which are variable or unpredictable all have negative effects on the worker. The impact extends beyond their personal health and well-being; it can impact on their children's development, the care they are able to provide for elder and other family members, the time and energy they have left to contribute to their community.
- Working time conditions have improved in many countries; but if we take a bird's eye view across the globe the poor quality of working time for many men and women is evident. This is particularly acute for those employed in poorly regulated parts of the economy. Long full-time working hours remain widespread. For low wage workers this is often a stark economic necessity. Many well-paid managers and professionals jobs also require long working hours due to heavy workloads and to compete for career progression. Much part-time employment is in poor quality marginalised and insecure jobs and is undertaken involuntarily because full-time employment is not available or by women with care responsibilities in the context of a lack of childcare and eldercare services. Where better quality parttime employment exists the opportunities for career progression are, on average, curtailed compared to those for full-time workers. Workers generally prefer jobs where the schedules are predictable or where they have some scope to vary when and where they work, but many have little control over their hours of work.
- The dominance of the informal economy in many developing countries, combined with the erosion of working-time standards which had been introduced in the formal sector in some developed countries (e.g. the roll back of the French legislation for a 35 hour week) and the decline in coverage by collective agreements presents challenges for progressing working-time standards, as for any employment condition. Historically the primary drivers for progress in working-time standards have been regulations and innovations introduced by collective bargaining and legislation, secured by powerful unions in the context of industrial growth and productivity gains (Bosch et al. 1994). Additional policy

instruments are needed to secure progress in working-time standards in the political and economic conditions of the current global era.

Given the segmented structure of labour markets, employment inequalities and the gender inequalities in paid and unpaid work, and following Sen's (1992) capability framework applied to working-time (Lee and McCann 2004) four policy priorities are identified to increase men and women's capabilities to improve the quality of their working time and personal time (Box 1). These priorities are compatible with, and informed by, the ILO's Declaration on Social Justice for Fair Globalization which summarises the Decent Work Agenda as four strategic objectives: promoting employment, social protection, social dialogue and tripartism, and fundamental principles and rights at work; with gender equality and non-discrimination as cross-cutting issues (ILO 2008).

Box 1. Four priorities for securing social progress in working-time.

- Effective regulation to reduce the incidence of long full-time hours
 - Build reconciliation measures to make it easier for workers to combine employment with the time demands of care responsibilities
 - Improve the quality of part-time employment through the application of equal treatment and working-time innovations
 - Extend options for negotiated flexibility at the workplace

241

- 1. The first objective is to reduce the incidence of long full-time hours by establishing a legally enforced maximum daily and weekly limit on hours of work in conjunction with adequate minimum hourly wage rates. This requires legal rights and social protection to be built which reach beyond the formal workforce to include the most vulnerable workers in the informal economy.
- 2. The second priority policy area is building reconciliation measures to make it easier for workers to combine employment with the time demands of care responsibilities. This requires investment in maternity and other family-related leave (paternity, parental, leave to care for sick relatives) and an infrastructure of childcare and eldercare services. In some countries the starting point is to implement the ILO Convention on basic maternity rights and extend coverage; for others it is to build on and extend reconciliation measures.
- 3. The third priority area is to improve the quality of part-time work through equal treatment and other measures. This

requires effective implementation of the principle of equal treatment in labour law and social protection, combined with measures to promote the creation of good quality part-time employment opportunities in a wider range of occupations and at higher occupational grades.

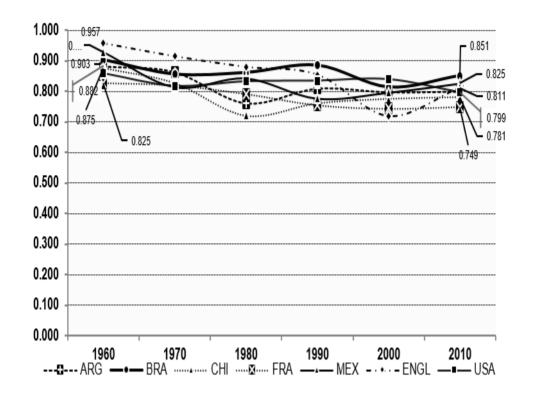
- 4. The fourth priority is to build and effectively implement options for negotiated flexibility at the workplace, such as flexitime arrangements and the statutory individual 'right to request' reduced or rescheduled hours which has been introduced in some countries.
- 242 These four priorities for working-time policy are ambitious, longstanding and a road map on which countries have different starting points. Progress requires legal provisions that are easily understood and communicated, effective and adequately resourced labour inspectorates, standard setting by the government as public sector employer, and dynamic collective organization and bargaining. To help regulations gain traction and to promote innovations other complementary measures to stimulate enterprises to reorganize and reduce working time, including devising work processes and workloads which reduce work spillover into domestic time and space for e-nomads and others working remotely. These complementary measures might include government-funded training schemes, funding and advice to support enterprises to try working time innovations, and transitional payroll tax exemptions or wage subsidies to support working time restructuring. The probability of success will increase if more multinational and large local companies in production and supply chain networks are persuaded to commit to corporate social responsibility in wages and working time as a condition of subcontracting arrangements.
- There are efficiency gains to be made from working-time innovations, including 'business case' benefits for employers. Empirical studies show that well-designed reductions in working hours are accompanied by productivity gains (Golden 2012). Some workers are willing to trade a wage reduction for shorter hours (Fagan 2004), which is more feasible to countenance for those on middle and higher earnings or when real wages are rising.
- Likewise reconciliation measures and other working time options bring economic benefits to firms through improved workforce recruitment and retention, enhanced staff morale and loyalty, and other productivity gains from innovation in work schedules (Smeaton et al. 2014; Cranfield University School of Management and Working Families 2008, Eurofound 2006). Cost benefit analysis of such interventions has been a powerful tool in campaigns for the introduction of family leave at the federal state level in the USA

(Sarna et al 2013) and in enterprise-level innovations (Kossek 2005; Kelly et al. 2008, Bailyn 2006; Rapoport et al. 2002). At the macroeconomic level a well-designed and coherent set of reconciliation measures are a social investment which improves the well-being and quality of life of workers and their families. When such measures are widely available they temper social class inequalities between households and help to progress gender equality by supporting women's employment options.

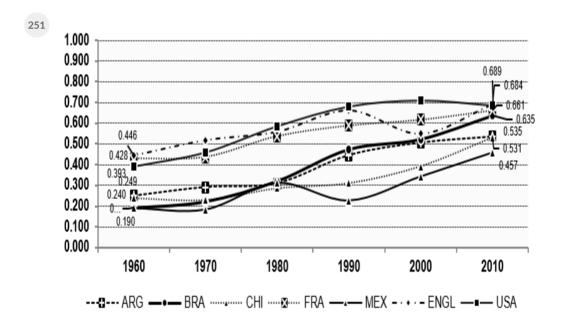
5. Exploring the boundaries of the labor market: Unemployment, inactivity, exclusion[23]

- Social integration and economic well-being entail increasingly more participation in productive activities, in other words, working. In fact, a remarkable movement based on the systematic expansion of women's participation has been occurring during the last decades, increasing similarity on participation rates between men and women as well as among less and more developed countries (Figure 7). Labor market integration became a strategic way to get access to income and to achieve social inclusion.
- Figure 7: Participation rates in selected countries, 1960-2010
- 248 Males

249



250 Females



Source: ILOSTAT. Labor force

Nevertheless, economic participation takes different forms according to the degrees of individual protection, from formal jobs (be it wage-earning or self-employed) to the most brutal forms of exploitation (slavery, illegal activities). Historically unemployment is a corollary of wage labor (Lefresne, 2008). It is relevant to pay attention to the boundaries of unemployment and its connections with employment, work and inactivity. These boundaries are increasingly blurred, since employment deprivation can take a variety of forms, at times codified at times imprecise: that of officially

recognized unemployment, sometimes with benefits; that of an aspiration to work more; that of a combination of job search and more or less informal activities; that of non-employment characterized by discouragement and giving up the job search; that of a more or less pronounced withdrawal towards professional inactivity; that of a resourcefulness marked by the flow of heterogeneous activities; that of an exclusion from the sphere of production and economic exchanges, etc. As a result two main aspects deserve close attention: on one hand, the measurement of unemployment levels; on the other hand, the varying nature of unemployment given its blurred and changing frontiers under different contexts of social statuses codification.

5.1 Measuring the Level of Unemployment around the World

- Researchers in economics and sociology have proposed multiple concepts in order to characterize the margins of unemployment: they evoke a disguised or hidden or latent unemployment; they identify discouraged unemployed, or passive, or permanent; and they describe underemployment, precariousness, and exclusion (Boland, Griffin, 2015). Unemployment is nevertheless measured by a standard method, convenient to compare national macroeconomic performances.
- The ILO concept of unemployment is used in national labor force surveys. It combines three criteria that draw clear boundaries for unemployment: having not performed any paid work even one hour during the previous week; willing to start immediately if offered a suitable job; searching actively for work. This concept is restrictive since the individual who has worked for a very short period, or has not truly and concretely sought for a job, or has a constraint that makes him or her temporarily unavailable (illness, child care, etc.) is excluded from the scope of unemployment. Nevertheless this definition has become a worldwide standard. According to the ILO, the number of unemployed worldwide in 2014 is estimated at 201,300,000 people, that is a rate of 5.9% (ILO, 2015c). Unemployment levels are highly diverse across the world (Table 1). According to these data, it appears firstly as an evil specific to Europe (10.2% in 2014), North Africa (12.5%) and the Middle East (11%), whereas other regions in the world are relatively spared such as Asia (3.9% to 4.6% depending on sub-regions) and to a lesser extent the G20 countries, more precisely the emerging economies within the G20 (5%).

Table 1: Unemployment Rates

Regions of the World	Unemployment Rate in 2007	Unemployment Rate in 2014
World Average	5.5	5.9
G20 Economies	5.0	5.6
European Union	7.2	10.2
Central and Eastern Europe	8.2	7.7
Middle East	10.2	11.0
North Africa	11.4	12.5
Sub-Saharan Africa	7.8	7.7
Latin America and the Caribbean	6.9	6.6
East Asia	3.8	4.6
Southeast Asia and the Pacific	5.5	4.3
South Asia	4.0	3.9

259 Source: ILO 2015c

At the country level, the differences between the unemployment rates are further accentuated. Even within relatively integrated regions such as the euro zone, these differences are strong since, in 2014, the unemployment rate stood at 5% in Germany and 26.6% in Greece (OECD, 2015b). Based on a modeling of unemployment rates, the World Bank identifies countries where the situation is most severe from those where it is the best. The first group (where unemployment rates exceed 22%) is mostly composed of African countries and Central or Western Europe, while the second (where unemployment rates are below 2.5%) encompasses some countries from Asia and Oceania, Africa or the Middle East.

261 This impressive range of variation claims for explanation. Firstly one wonders whether the unemployment rate is a precise indicator of labor market operation for most countries (Bescond et al., 2003). For example, in socialist and centrally planned economies the unemployment was certainly underestimated in the 1980s (less than 1% or even 0.5%). This full employment situation was just an appearance since unemployment was hidden within companies, where a relevant fraction of the labor force remained almost unoccupied, while the productivity was very low (Linotte, 1994). Thus, a low level of unemployment can mean anything other than the scarcity of unoccupied labor force. This is the case in countries characterized by low levels of income, of unemployment insurance or of social protection and where the informal sector is large. In fact, the ILO definition has never captured precisely labor market dynamics in less developed countries where a large part of employment has remained informal and unofficial. In those cases, it would be more accurate to register people who are unable to obtain any paid work or who have a job that pays less than a living wage (MacInnes et al., 2013). Even for developed countries, the ILO concept now appears insufficient. It was most fit-for-purpose during the period that began after the Second World War and ended when the current definition was adopted in 1982, that is before the diversification of the employment forms (Roberts, 2015). Additional or alternative methods have also been proposed for measuring and comparing unemployment levels from national labor force surveys (Box 2).

Box 2: Alternative measures of unemployment:

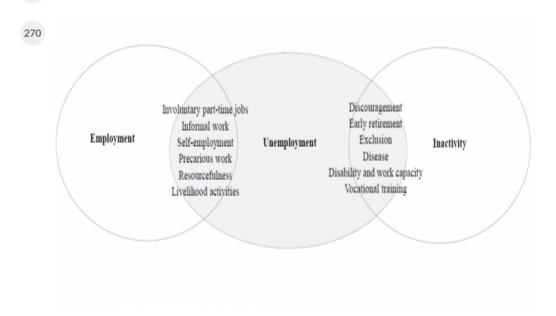
- Indicators from the Bureau of Labor Statistics, in United States (Bregger, Haugen, 1995).
- Six unemployment definitions are proposed. From the most restrictive to the widest, the unemployment rates vary in a proportion of 1 to 5:
- U-1 Persons unemployed fifteen weeks or longer, as a percent of the civilian labor force.
 - U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force.
 - U-3 Total unemployed persons, as a percent of the civilian labor force (the official unemployment rate).
 - U-4 Total unemployed persons plus discouraged workers, as a percent of the civilian labor force plus discouraged workers.
 - U-5 Total unemployed persons plus discouraged workers, plus all other 'marginally attached' workers, as a percent of the civilian labor force plus all 'marginally attached' workers.

- U-6 Total unemployed persons, plus all 'marginally attached' workers, plus all persons employed part time for economic reasons, as a percent of the civilian labor force plus all 'marginally attached' workers.
- This approach aims to better reflect the blurring of unemployment boundaries and to integrate in its measure different forms of labor market participation.

5.2 Heterogeneities and Boundaries of Unemployment

The boundaries between unemployment, employment and inactivity are defined differently across societies. Employment may be (more or less) codified or informal, stable or precarious, salaried or self. Inactivity can be organized by (more or less inclusive) public policies in the domains of schooling, retirement, social security, disability, support to family, to women's work, etc. In this way, unemployment is modified, as it is more or less framed by policies, protected by specific benefits, recognized by people and institutions. As a result, its boundaries are vague and fluctuating, as shown in Figure 8.

Figure 8: The Boundaries of Unemployment



271

The intermediate situations between unemployment on the one hand and employment or inactivity on the other hand are multiple and concern different socio-economic groups to a varying extent. The diversity of employment relations and labor market regimes across the globe has to be taken into account to characterize unemployment. Although this variety is large and made up of multiple shades, two typical and polar configurations can be proposed so as to organize this range of possibilities:

• Firstly, the social configurations characterized by a strong codification of the statuses concerning work and non-work: work

is a formal wage employment, unemployment is a job deprivation compensated and framed by public policies, inactivity is a set of situations potentially supported by social protection. In this case, despite the heterogeneity of welfare regimes, societies at least aim to protect the unemployed against social marginalization and poverty (Ganssmann, 2000).

 Secondly, the social configuration characterized by a weak regulation of statuses encompassing all situations, in and out the labor market: work is informal and unofficial, unemployment means a lack of paid work and is weakly differentiated, and inactivity means the absence of social protection. In such contexts the individuals have the responsibility to mobilize their available social resources to deal with the lack of work and to avoid the more exacerbated forms of exclusion (Demazière et al., 2013).

274 These two configurations do not exactly differentiate developed and less developed countries. They are transversal to these categories of countries. Thus, despite codification being the reference standard in developed countries, weak regulation persists for significant segments of workers and even tends to grow up during the jobs crisis assuming various forms (like moonlighting, freelancing with little protection, etc.). The configuration where the social statuses are poorly regulated is dominant, at varying degrees, in many less developed countries where the rules governing the labor market are weak and redistributive systems have only recently been established or continue to be absent. However, workers' rights have improved in some of those countries either through union action or by government strategies; besides there have been places where expansion of formal jobs occurred under new flexible employment relations. In sum, each country combines these two configurations in different ways.

5.3 Exploring Boundaries under Strong Codification of Social Statuses

Unemployment reached its highest level since World War II in the countries where formal employment prevails. In 2010 the unemployment rate was 8.4% in OECD countries, and still 7.1% in 2015. The unemployment rise has varied according to countries, but it has reached unknown levels overall. Besides, the contemporary unemployment is heterogeneous and is not reduced to its official definition.

277 Unemployment and Risks of Exclusion

278 In order to better understand the heterogeneity of contemporary unemployment we must consider recent employment alterations.

Part-time work has expanded, reaching 16.7% of total employment in

2014 within OECD, and 38.5% in the Netherlands or 26.9% in Switzerland. Likewise, temporary employment (fixed-term contracts) represents 11.1% of total employment, with 28.4% in Poland and 24% in Spain. Despite the lack of accurate statistics, we know that self-employment, autonomous and yet subordinated to a decision-maker or a client, also increased. These atypical employment statuses often coincide with phases of unemployment. In addition, some people are underemployed in the sense that they have a job and they want to work more. While this phenomenon has not been systematically estimated, we do have strong data for involuntary part-time employment (part-time workers who wish to work full-time): it accounted for 4.1% of total employment within OECD in 2014, and 21% of total part-time employment. Getting such kinds of jobs does not mean leaving unemployment.

279 In 2014, long-term unemployment (a period of twelve months or more) represented 50% of unemployment in the European Union against 38.5% five years earlier (ILO, 2015). Within the OECD this level reaches 35.2%. This long-term unemployment is an exacerbated form of unemployment, as it is associated with a decline of the employability, defined as the probability of obtaining a job (Koen et al., 2013). In this sense, the unemployment queue operates through an inverted model: newcomers are the first outgoing. Moreover, long-term unemployment often leads to exclusion and marginalization (Gallie, 2004). Indeed, when the duration of unemployment lengthens, job search weakens, becomes more faltering and more erratic. This discouragement process may result in a complete renunciation of job search. This phenomenon is particularly worrisome in countries where long-term unemployment is high, such as Greece (73% of the unemployed), Portugal and Italy (over 60%), Spain and Poland (over 53%), as well as France and Germany (over 43%). For these discouraged unemployed, those who wish to work but have given up looking for a job, the risk to be stricken from the unemployed register, thus to become inactive, is high. The weight within the labor force of these discouraged people and classified as inactive, oscillates in 2013 between 2.9% in Hungary and 0.1% in Germany, according to OECD.

In broader terms, unemployment is associated with a high risk of poverty and social exclusion (because of lack or exhaustion of unemployment benefits). According to Eurostat, the risk of poverty in the EU was 16.6% for adults (15 or older) in 2013 and 46.6% for those in unemployment. In addition, almost a quarter of these are exposed to risks of poverty and social exclusion (ILO, 2015c: 36). Moreover, unemployment has long-term effects on poverty. Some analyses produced by the OECD based on simulations taking a 10-year period as reference, indicate that unemployment is concentrated in the lower tercile of the wage distribution: within this

tercile, 14 of 120 observed months have been spent in unemployment, while this period drops to 2 or 1 month for the two upper terciles (OECD, 2015b: 204s). Insofar as unemployment concentrates itself at the lower end of the income distribution, benefits for the unemployed have a direct effect on reducing poverty risks. However, they have little effect in reducing inequality because their values tend to be modest: such benefits differ by country but the general tendency is turned toward the conditionality of benefits and reinforcement of control of job search efforts (Clasen & Clegg, 2006).

281 Inequalities regarding labor precariousness

- The risks of unemployment, long-term unemployment, economic precariousness, and social exclusion are very unevenly distributed. Some population groups are more vulnerable to unemployment, poor quality jobs, and labor market difficulties. Despite variations between countries, these groups tend to be women, immigrants and their descendants, unskilled or low-skilled individuals and some age groups. If international statistics on the matter are still scarce, some findings seem already well established.
- Youth unemployment is even worse among the non-qualified, and further intensified by higher job insecurity among the young workers. Such a situation, equally heterogeneous between countries, destabilizes career paths in the long term. This becomes clear with the increase of the NEET category Not in Education, Employment or Training (Eurofound, 2012c), noticed in OECD countries during the past decade: the percentage of youth aged 15-29 who have left school, are jobless and are not in a training course reached circa 13% of their age category in 2014. The employability of these youngsters is very weak, but more broadly their social integration is jeopardized.
- Unemployment is also concentrated among people with no diploma or the less qualified. This correlation is strong, albeit with variations between countries. Thus, according to OECD, in 2013 the ratio between the unemployment rates of people with at most a complete secondary education and the higher education graduates was 2 to 1 for Spain, 3 to 1 in the United States, and 5 to 1 in Germany. Furthermore, if education level alters the risk of unemployment it also has long-term consequences on professional paths: weak cognitive skills (measured by low scores in literacy and numeracy) are strongly correlated with low incomes in the long-term perspective (Hanushek et al., 2015), thus exposing individuals to high risks of economic and social exclusion.

- In contrast, older workers within most OECD countries are in a special situation: less exposed to unemployment, they do have a higher risk of falling into long-term unemployment. For older workers unemployment often signifies a trap from which it is very difficult to escape (Chan, Stevens, 2001). For them, leaving unemployment implies rarely get a job, given that the age is, in recruitment process, generally considered as a sign of low productivity, low adaptive capacity, or demotivation. It becomes a negative sign, a stigma hard to overcome. Therefore, getting out of unemployment often means taking the path of inactivity, through different forms according to countries (pensions, specific preretirement devices, guidance toward a disability status, etc.).
- As regards female unemployment rates (and long-term unemployment shares), which were usually higher than men's, they are now at equivalent levels. However, gender hierarchy continues to persist within the labor market. Women occupy significantly more depreciated positions: involuntary part-time (6.1% of active women against 2.5% of active men in 2014 in OECD), more precarious employment statuses, lower wages, slower professional careers, etc. (Maruani, 2013). Their participation in the labor market is more vulnerable to the extent that women's employment has failed to achieve the same social legitimacy as men's. This may lead unemployed women (particularly the less skilled) to reducing their job search and withdrawing from the labor market, despite their willingness to work and due to the constraints imposed by the unequal responsibility regarding domestic work (Vosko et al., 2009).

5.4 Exploring Boundaries under Weak Social Protection

The boundaries of unemployment appear particularly fuzzy when informal work is widespread. The low official unemployment rates (in ILO sense) mainly result from the weight of informal work, which represents over 70% of total employment in India, 40% in Turkey, 30% in Brazil, 15% in urban China (OECD, 2015b: 256).

289 Unemployment and Livelihood Activities

When employment is informal, when it does not provide any contractual protection and any compensation for job loss, yet work and unemployment and inactivity are more undifferentiated (Williams, Schneider, 2016). These are subsumed in a permanent survival requirement. Then unemployment tends to merge, both in terms of statistical counts as individual experiences, with precariousness, resourcefulness, economic insecurity, idleness, combination of subsistence activities and a lack of social protection. In such a context, unemployment is underestimated because individuals have to survive so that they are forced to accept poor

quality activities: one of the most striking examples is India where the unemployment rate is much lower than in OECD (3.6% in 2014) but where more than one third of the active population receives extremely low wages (OECD, 2015b: 249). Generally speaking, when informality is high, labor market insecurity tends to be also high as a consequence of the risk of low wage and low income and not only as a result of the unemployment risk. Besides, social transfers, unemployment benefits or wider social aids do not correct the weakness of labor income. Then the boundaries of unemployment are particularly fuzzy and imprecise. But this is not immutable because the development of public transfers and active labor market policies may reduce the number of working poor and the share of informal work, as this has been observed in some countries in Latin America during the 2000s (Lustig et al., 2013).

Unemployment then becomes a mix, which often looks like a vicious circle, combining self-help activities, employment - more or less informal -, unregulated self-employment, joblessness, etc. It is particularly hard to distinguish these situations analytically as they are often fragile or unstable, constantly forcing people to adjust their lifestyles to survive (de Soto, 1989). Thus, the lower quality of informal employment with regard to formal employment, which is statistically measured in national surveys (for the cases of South Africa, Argentina, Brazil, Chile, urban China, Colombia, Costa Rica, Russia, India, Indonesia, Mexico, Turkey see: OECD, 2015b), is accentuated by the low quality of unemployment (however, a replacement benefit and opportunity to look actively for a job could break this vicious circle).

292 Longitudinal data are lacking to measure these containment effects precisely. In countries where such data exist, we notice variable levels of transition between informal and formal sectors (7% in Turkey, 17% in South Africa, 34% in urban China). But these moves often take the form of circulations between informal activities, precarious formal jobs and poorly paid work, unemployment and inactivity (OECD, 2015b: 258). These data support the idea of a vicious circle that keeps people on the margins of the labor market. Furthermore, transitions from informality to inactivity are even more frequent as toward unemployment, be it in South Africa (40% against 11%), urban China (20% against 8%), Colombia (17 % against 10%) or Turkey (10% against 3%). This illustrates indeed the blurred frontier between unemployment and inactivity in the informal labor market, and shows an exclusion process from formal jobs providing social protection and a decent pay.

294

Informal work situations may be considered and experienced as unemployment, inactivity or employment. They are also focused on some groups which face severe difficulties to get a formal job. This job insecurity can be described with indicators such as the exposure to informal work, the risk of unemployment, the exposure to extremely low wages, or even the chance to get a formal job (Table 2). Then the individuals with the lowest levels of education are in an unfavorable position compared to the better skilled. Younger workers, but also older workers to a somewhat lesser extent, tend to be in a worse position than the prime-age group. This shows that both ends of working life are particularly vulnerable to unemployment in all its forms. Finally, women are disadvantaged compared with men.

Table 2: Indicators of Job Insecurity by Socio-Demographic Categories

296 Insecurity due Insecurity Access to Informality of due to Low **Employment Employment** Unemployment Wages Low Level 11% 13% 57% 54% of Education Medium 10% 7% 59% 34% Level of Education High Level 6% 1% 78% 16% of Education 17% 12% 47% 42% Age group 15-29 6% 7% 73% 36% Age group 30-49 5% 8% 61% 41% Age group 50-64 Men 9% 8% 76% 38% Women 8% 11% 42% 41%

Averages of twelve emerging countries (South Africa, Argentina, Brazil, Chile, urban China, Colombia, Costa Rica, Russia, India, Indonesia, Mexico, and Turkey). Statistics from OECD based on national surveys. Source: *OECD*, 2015b

298 In places where women's work is less legitimate as in South or Southeast Asia, inequalities between men and women are stronger, regarding access to professional activity and qualities (informality and low wages) of jobs (ILO, 2015c: 46s). Also, unemployment is just an additional indicator that cannot be considered separately to characterize the poor situation of women within the labor market. In North Africa and the Middle East the difference between the activity rates for men and women is really high (more than 53 points: ILO, 2015c: 52): women have little access to formal and visible jobs and they are assigned to unpaid work or to informal activities, situations that are located on the margins of unemployment. Similar imbalances are also observable between generations in countries where the young age classes are numerous, such as in Sub-Saharan Africa in particular. In this case, the situations of out-of-school youth (from 10 years in many cases) are particularly difficult to be characterized because they mix various forms of marginalization (unemployment, informality, poverty, etc.). Such inequalities also concern ethnic minorities, especially in areas where migrations are important (Western Europe, Latin America, United States, etc.).

299 5.5 Recommendations

- Public policies against unemployment cannot be focused exclusively on officially recognized job seekers. Indeed, unemployment is a larger and more composite phenomenon: it is characterized by a lack (or inadequacy) of work paid at a decent level and providing social protection. Also, to reduce unemployment policies need to address degraded forms of work which vary between countries and regions: informal work, poorly paid work, self-employment without protection, and all forms of occupational dependency not codified by legal rules.
- To improve the knowledge and the awareness of the various forms of unemployment, including the less visible ones, it would be useful to enhance and enrich the statistics. The most interesting perspective should be to publish several measures of unemployment, while maintaining the current official indicator.
- It is also urgent to reduce inequalities concerning unemployment. In most countries young people, less educated or less qualified members of the labor force, women, older workers, but also migrants and racial minorities are more vulnerable to multiple risks in the

labor market. The causes of these inequalities are diverse. They are cultural, legal, institutional, political, and economic. They call for ambitious policies, adjusted to national contexts.

6. Diversity and discrimination in the labour market [24]

304 6.1 Introduction

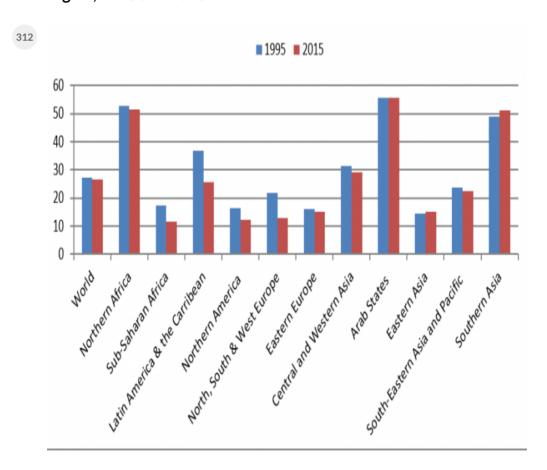
- While diversity in the labour market is not new, increasing rates of paid employment by women, migration, an ageing workforce and a focus on disability have led to a growing research interest for labour market diversity. One issue is whether diversity in the labour market is good or bad for economic and social outcomes. Another important question relates to individual outcomes and how individuals from different groups - women, men, immigrants, natives, ethnic minorities, old, young, those with a disability, or a different sexual orientation - fare in the labour market. Do modern labour markets offer 'good jobs for all'- or just for those with the 'right' skin colour, gender or age? Having access to a paid job is crucial for financial security of the individual and their family. Of course, there will always be differences in access to good jobs due to differences in individual's skills. Yet some groups experience discrimination: they are treated differently in access to jobs and in their working conditions not because of their productivity, that is 'what they can do', but because of their group membership, that is 'who they are'. To the extent that some groups are discriminated against, this is inimical to social progress. Having individuals assigned jobs below their potential is also economically inefficient (OECD 2008).
- This section reviews the evidence on diversity and discrimination. It is divided into four sub-sections. The first will present some international statistics on changing patterns of labour market diversity, focusing particularly on gender, age and birthplace. The second section will review the literature on the costs and benefits of diversity. The third section will focus on discrimination in the labour market, discuss the challenges of measuring discrimination and examine different dimensions of discrimination. The fourth section will consider some policy responses to discrimination and their effectiveness.

This section aims to give a flavour of world variation and change over time in three key elements of labour market diversity: participation rates of men and women; migrants and non-migrants and the proportion of older workers. They are based on data from the International Labour Organization (ILO) and cover 11 world regions (see OECD 2016 for regional groupings).

309 Labour market participation of men and women

Figure 9 presents gender gaps in labour force participation rates by region, 1995 and 2015. In all regions, women's participation is lower than men's, though the gap in participation varies considerably across regions. There are very high gender gaps in Northern Africa, the Arab States and Southern Asia. The reasons for women's lower participation are myriad, and include their role in unpaid labour and childrearing, policies around parental leave, childcare and working-time flexibility, taxation, gender differences in education in some countries and also cultural norms and attitudes to women's employment and women's roles (Jaumotte 2003).

Figure 9: Gender gaps in labour force participation rates by world region, 1995 and 2015



Note: The gender gap is measured as the male participation rate minus the female participation rate. The data cover 178 countries.

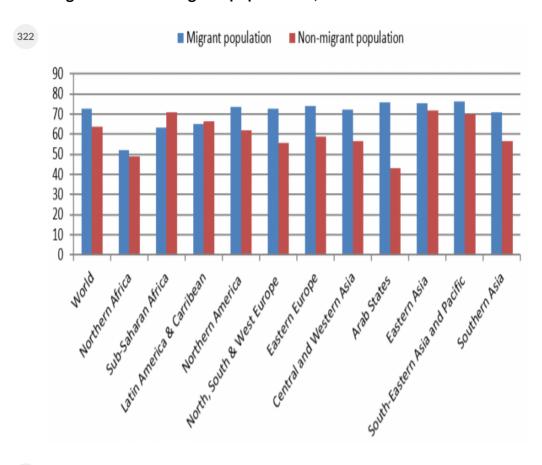
- Source: ILO Key Labour Market Indicators, derived from Trends Econometric Models, November 2015
- In North America and Northern, Southern and Western Europe, the gender gaps have fallen somewhat in the past twenty years. In these countries women's participation rose steadily over the twentieth century, particularly in the United States (Blau et al. 2006). But in the past 20 years the gap has narrowed because men's participation has fallen in the recession more than women's participation (see Karamessini and Rubery 2014).
- In general the gender gap is lowest in higher income countries, though with some notable exceptions: the Arab States, where income is higher but the gap very large, and also in Sub-Saharan Africa, where the gap is among the lowest of the world regions. ILO (2016) attributes this low gap in the Sub-Saharan Africa to the lack of social protection income and persistent poverty, leaving women with no alternative but to work. And of course the nature of employment is important: in sub-Saharan Africa and Southern Asia, most working women are self-employed and a large proportion of them work as contributing family workers (34.9 per cent in sub-Saharan Africa and 31.8 per cent in Southern Asia) (ILO 2016).
- Sectoral and occupational segregation the type of jobs men and women do contribute considerably to gender gaps in job quality and the gender wage gap (Blau and Kahn 2007; Burchell et al. 2014).

 Agriculture employs most women in low to middle income countries; in high income countries women are concentrated in health and education, wholesale and retail trade sectors. To the extent that women are disproportionately concentrated in lower quality jobs, this may be additional source of inequality in the workplace.
- An important reason for differences in paid work is that women do much more unpaid work, in the form of childcare, eldercare, housework, collecting fuel and water. Globally women spend two and a half times as much as men on unpaid labour (UN 2015, from timeuse data); in India and Pakistan women spend ten times as much as men on unpaid work (McKinsey Global Institute 2015).

319 Migrant Workers

According to recent ILO estimates, there were around 232 million migrants in the world, of which 150 million were migrant workers (ILO 2015d). Estimating the number of migrants is challenging, particularly when there are large population fluctuations or difficulties carrying out large-scale surveys (ILO 2015d).

Figure 10: Labour force participation rates by world region for migrant and non-migrant populations, 2013



324 Source: ILO Global Estimates on Migrant Workers, 2015d, Table 2.8

Figure 10 presents labour market participation rates for migrant and non-migrant populations in world regions. In most regions of the world, migrants' labour market participation is higher than that of non-migrants, partly because of the younger age profile of migrants but also because many migrants migrate in order to work. Of course the proportion of migrant workers in the workforce also varies across countries – from less than three per cent in much of Africa, Latin America and South and East Asia, to around 20 per cent in Northern America, 16 per cent in Northern, Southern and Western Europe and 35 per cent in the Arab states (ILO 2015d). The definition used here is migrants, that is those born abroad, some of whom may be from ethnic minorities, but does not capture second-generation ethnic minorities. Ethnic minorities typically show lower labour market participation in European countries (Heath and Cheung 2007).

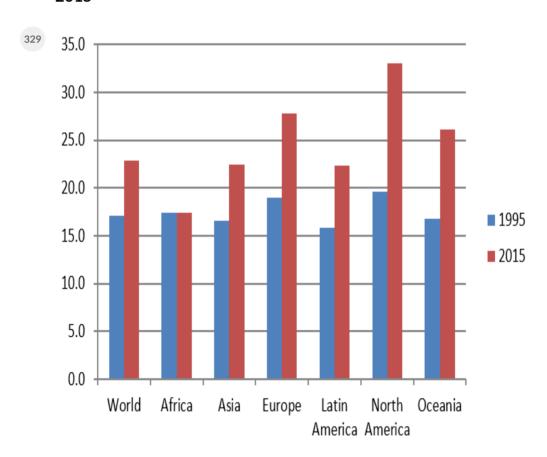
326 Older Workers

323

There has been much recent concern about youth unemployment, particularly in Europe (Bell and Blanchflower 2011), and indeed some suggestion that early retirement of older workers might reduce youth unemployment in some European countries (Zimmermann et

al. 2013).[25] In fact there is an increasing trend towards an ageing workforce. Figure 6.3 presents the proportion of the labour force aged 50 or over by continent in 1995 and 2015, and shows a rise in the proportion of over 50 year olds in almost all regions. The increase between 1995 and 2015 is particularly marked in North America, Latin America and Oceania (see Figure 11). By contrast in Africa the proportion of the labour force aged 50 and more has remained low. A number of factors underlie this general trend towards an older workforce. In some countries, particularly in Europe and the US, the population itself is ageing, so there is a lower proportion of younger workers. There has also been an increase in education participation among under 25s in many countries, reducing this age group's labour market participation. It does raise issues about the treatment of older workers in the labour market in terms of age discrimination, and health issues, which are more prevalent among older workers, also come to the fore (see also the subsequent section of this chapter).

Figure 11: Proportion of the labour force aged 50 or over, 1995 and 2015



Source: Own calculations from the ILO dataset EAPEP World Regions 1990-2020. These data cover 191 countries

330

In this section we refer to diversity as to a characteristic of a population, which can be diverse along a number of dimensions: age, gender, ethnicity, place of birth, genetic makeup, religion, or any other physical or cultural trait. The main dimensions of diversity that have been considered in the literature on diversity and growth are ethno-linguistic diversity and, more recently, genetic and birthplace diversity. While the first two are quite persistent (i.e., evolve very slowly over time) at the level of countries, the last one can be changing more rapidly in a context of sustained immigration. And indeed, population heterogeneity in terms of birthplaces is increasing in virtually all advanced economies due to immigration. Foreign-born individuals now represent about 10 % of the workforce in OECD countries, a threefold increase since 1960 and a twofold increase since 1990. This is even more pronounced for the part of the workforce which is highly-skilled (i.e., workers with college education).

334 What are the economic implications of higher diversity? Theory suggests that diversity has both positive and negative economic effects. The former are due to complementarities in production, diversity of skills, experiences and ideas. The latter arise from disagreements about public policies, animosity between different groups and conflict.

While most of the economic and sociological literature have pointed to generally negative effects of ethno-linguistic or racial diversity at different levels of observation (countries or subnational entities such as US States or counties), the literature on genetic and birthplace diversity show a different picture. Similarly, the micro-level analyses investigating the role of diversity in the context of firms/plants/teams are also more balanced.

336 Measuring diversity

Diversity is usually measured through fractionalization indices such as the Herfindahl index, computed as one minus the sum of the square shares of each sub-group in the population. The index ranges between zero (in case there is only one homogenous group) and one (in case the population at hand consists of a myriad of small sub-groups) and in effect gives the likelihood that two randomly drawn individuals from the population belong to different sub-groups. Such Herfindahl indices have been proposed for ethnic fractionalization (Easterly and Levine 1997; Alesina et al. 2003; Fearon 2003), linguistic diversity (Desmet et al. 2012), or birthplace diversity (Alesina, Harnoss and Rapoport 2016). Another common indicator is the polarization index, the product of all group shares, which reaches

maximum value when there are only two groups of equal size (see Esteban and Ray 1994, Reynal-Querol 2002, and Montalvo and Reynal-Querol 2005 for ethnic polarization indices).

338 A macro view on diversity

- Equipped with these indicators, economists and political scientists have introduced them in cross-country regressions of economic performance and found mixed results, depending mostly on the dimension ethnic, genetic or birthplace -- of diversity that is investigated.
- 340 A. Ethnic fractionalization and racial diversity
- The literature on ethnic diversity and economic performance generally found a negative relationship between ethno-linguistic fractionalization and growth/development. For example, Easterly and Levine (1997), show that ethnic fragmentation is associated with lower economic growth, especially in Africa. Collier (1999, 2001) adds that ethnic fractionalization is less detrimental in the presence of democratic institutions, which enable different groups to mediate conflicts on the provision of public goods and create social cohesion. It is, however, unclear if this observation is not a corollary of higher income, as shown in Alesina and La Ferrara (2005). Fearon and Laitin (2003) add that ethnic diversity alone is not sufficient to explain the outbreak of civil war.
- Alesina and Zhuravskaya (2011) stress the negative effect of ethnic segregation on the quality of government, while Alesina et al. (Forthcoming) highlight the detrimental effects of "ethnic inequality" (i.e., when economic inequality and ethnic diversity go hand-in-hand). Esteban et al. (2012) distinguish conflicts over public and private goods and find polarization to correlate positively with conflict on the former, and fractionalization to correlate positively with the latter (see also Esteban and Ray 2011).
- At lower levels of aggregation, Putnam (1995), and Alesina and La Ferrara (2000, 2002) stress the role of trust, showing that individuals in racially diverse cities in the US participate less frequently in social activities and trust their neighbors to a lesser degree. The authors also find evidence that preferences for redistribution are lower in racially diverse communities. This also extends to the provision of productive public goods (Alesina et al. 1999).

Ashraf and Galor (2013) introduce a new dimension of diversity, namely, intrapopulation genetic heterozygosity. Genetic diversity is found to have a long-lasting effect on population density in the precolonial era as well as on contemporary levels of development. More specifically, the authors find an inverted u-shaped relationship between genetic diversity and income/productivity.

346 C. Birthplace diversity

Most recently, Alesina, Harnoss and Rapoport (2016) propose a new index of diversity based on people's birthplaces. People born in different countries are likely to have different productive skills because they have been exposed to different life experiences, different school and value systems, and thus have developed different perspectives that allow them to interpret and solve problems differently. If early pre-working age years are formative for one's own values, perspectives and problem solving skills, these differences are more likely to be complementary and lead to higher overall productivity gains than for other dimensions of diversity. Indeed, ethno-linguistic, genetic and birthplace diversity differ conceptually because people born in different countries are likely to have been educated in different school systems, learned different skills, and developed different cognitive abilities. Intuitively, this may not be the case for people of different ethnic or genetic origins who were born, raised and educated in the same country. The authors find that, empirically, ethno-linguistic, genetic and birthplace diversity are almost completely uncorrelated. Most importantly, they differ economically in that ethno-linguistic fractionalization turns out either negative or non-significant while birthplace diversity remains robustly positively related to long-run income even after controlling for many covariates. This positive relationship is stronger for skilled migrants in richer countries and is economically, not just statistically significant. Increasing the diversity of skilled immigrants by 1 percentage-point is shown to raise long-run output by about two percentage points Moreover, Alesina et al. (2016) address endogeneity issues by specifying a gravity model to predict the size and diversity of a country's immigration; finally, they allow the effect of diversity to vary with bilateral cultural distance between immigrants and natives, the results being suggestive of optimal diversity at intermediate levels of cultural distance.

348 A micro view on diversity

This mostly macro literature is completed by a series of studies especially in the field of management at the "team" level and, more recently, in the field of the economics of firms and productivity. Most management studies found diversity to be a double-edged sword, with diversity being often beneficial for performance but also

decreasing team cohesion and increasing coordination costs (e.g., O'Reilly et al. 1989, Milliken and Martins 1996). A study on productivity in the airline industry, by Hambrick et al. (1996), found that management teams which are more heterogeneous in terms of education, tenure and functional background react more slowly to a competitor's actions, but also obtain higher market shares and profits than their more homogeneous competitors. In a recent experimental study, Hoogendoorn and van Praag (2012) set up a randomized experiment in which business school students are assigned to manage a fictitious business and increase outcome metrics like market share, sales and profits of their business. The authors find that more diverse teams (defined by parents' countries of birth) consistently outperform more homogeneous ones, but only if the majority of team members is foreign. Finally, Kahane et al. (2013) use data on team composition of NHL teams in the U.S. and find that teams with higher share of foreign (European) players tend to perform better. They attribute this finding both to skill effects (better access to foreign talent) and to skill complementarities among the group of foreign players; however, when players come from too large a pool of European countries, team performance starts decreasing.

350

Turning to economic analyses of diversity at the firm or plant level, it is fascinating to see that their results tend to support the conclusions from the cross-country studies on ethnic v. birthplace diversity, with generally negative outcomes for the former and positive ones for the latter. For example, Hjort (2014) analyzes productivity at a flower production plant in Kenya and uses quasi-random variation in ethnic team composition as well as natural experiments in this setting to identify productivity effects from ethnic diversity in joint production. He finds evidence for taste-based discrimination between ethnic groups, suggesting that ethnic diversity, in the context of a poor society with deep ethnic cleavages, affects productivity negatively. Brunow et al. (2015) analyze the impact of birthplace diversity on firm productivity in Germany. They find that the share of immigrants has no effect on firm productivity while the diversity of foreign workers does impact firm performance positively (as does workers' diversity at the regional level). These effects appear to be stronger for manufacturing and high-tech industries, suggesting the presence of skill complementarities at the firm level as well as regional spillovers from workforce diversity. Parrotta et al. (2014) use a firm level dataset of matched employee-employer records in Denmark to analyze the effects of diversity in terms of skills, age and ethnicity on firm productivity. They find that while diversity in skills increases productivity, diversity in ethnicity and age decreases it. They interpret this as showing that the costs of ethnic diversity outweigh its benefits. Interestingly, they also find suggestive evidence that diversity is more valuable in problem-solving oriented tasks and in

innovative industries. Ozgen *et al.* (2013) match Dutch firm level innovation survey data with employer/employee records and find that the diversity of immigrant workers increases the likelihood of product and process innovations. Boeheim *et al.* (2012) find further micro level evidence for the presence of production function complementarities using a linked dataset of Austrian firms and their workers during the period 1994–2005. Workers' wages increase with diversity and the effect is stronger for white-collar workers and workers with recent tenure.

351 6.4 Discrimination in the labour market

- Discrimination in the labour market is defined as a situation in which equally productive individuals are rewarded differently due to their membership to different groups[26]. It can be "taste-based", to the extent that the taste or distaste of economic agents (consumers, workers, employers) toward various groups influence recruiters' hiring decision (Becker 1957). It can also be "statistical": in the absence of precise information about candidates' productivity, recruiters rely on their group membership as soon as it correlates with not easy-to-observe productive characteristics (Arrow 1973; Phelps 1972). In this context, atypical individuals from the disadvantaged groups are discriminated against, which can lead to a self-reinforcing vicious circle if such discrimination discourages them from acquiring productive skills and or maintaining them.
- This section reviews the methods used to measure discrimination in the labour market and the extent to which such discrimination occurs. It mainly focuses on modern labour markets due to the scarcity of evidence in more traditional ones.
- 154 It is important to bear in mind that how important group membership is in the labour market is not constant over time or across space. What it means to be Black or Muslim or female or an older worker can be very important in some countries and irrelevant in others. Why is this the case? Recent studies have highlighted the importance of symbolic boundaries to distinguish between 'us' and 'them' (Bail 2008). Wimmer (2008) argues that boundary making is not fixed, but a result of a struggle between social actors, influenced by institutions, the distribution of power and political networks. Past practices, legal rules, social attitudes, the media portrayal of certain groups and the actions of political elites can all contribute to this 'boundary making'. Yet even when group boundaries and group identity are very important, whether this translates into labour market discrimination is not given. Actors operate in social settings: strong norms of equality, profit motivation, diversity training may mean that employers do not discriminate (McGinnity and Lunn 2011). Country-level policies and practices may contribute to the

systematic disadvantage of certain groups, or alternatively to 'levelling the playing field' (Pager and Shepherd 2008). These policies and practices are discussed in more detail in section 6.5.

355 Measuring discrimination

- Discrimination in the labour market can be proxied by examining legal cases and/or individual self-reports. But it is more accurately measured by relying on observational or, even better, experimental data.
- 357 A. Legal Cases and self-reports of discrimination
- There is a growing spread of anti-discrimination legislation across countries, and one potential way of measuring discrimination is to count the number of successful complaints within a given jurisdiction and measure trends over time. However, this is far from an accurate measure of the incidence or prevalence of discrimination, as taking such a case is very costly for individuals and many people never take a case to court or a tribunal. The number of successful cases are often very low and represent the 'tip of the iceberg' (OECD 2013). An alternative method of measuring discrimination is to ask individuals themselves whether they have experienced discrimination, typically over a specified period of time, for example in job applications or in the workplace, on the grounds of race, ethnicity, gender, age, disability, sexual orientation (Pager and Shepherd 2008). If conducted as a large population survey, the strength of this method is the breadth of groups and situations covered, and the representative nature of responses. Follow-up questions can be asked about the impact of discrimination, minority responses can be compared with majority responses and the method can be used to track change over time (Kingston et al. 2015). However, self-reports rely on the assessment of the individual, which may vary depending on their perspective, their expectations and the information available to them about, for example, why they did not get the job.

359 B. Observational data

Relying on observational data entails decomposing participation or wage differentials across groups into an "explained" gap (driven by differences in observable characteristics of the groups, like education or experience, holding their return constant) and an "unexplained gap" (driven by group differences in returns, holding their observables constant). This latter component is meant to capture discrimination (Oaxaca (1973) and Blinder (1973)). Yet, this method suffers from two main drawbacks. First, however rich they might be, observational data do not allow researchers to control for all the determinants of a worker's productivity: the unexplained gap

therefore encompasses unobserved differences between the groups, for example motivation, which generates an upward or a downward bias in the estimation of discrimination (depending on the sign of differences in unobservables across groups). Second, if the expectation of discrimination deters investment in human capital, such as education or training, part of the impact of discrimination is captured by the explained gap, meaning that its unexplained counterpart underestimates the true value of discrimination.

- 361 C. Experimental data
- Three experimental approaches have been used to more convincingly test for the extent of discrimination in the labour market: audit, blind and correspondence studies.
- 363 C.1. Audit studies
- Introduced in the early 1990s, labour market audit studies consist of having actors, endowed with identical fictitious resumes and coached to act alike, apply for job postings over the telephone or in person, and/or attend job interviews. Because these auditors are supposed to differ on only one dimension, viz. their group membership, discrimination is measured by comparing the callback and/or offer rates across groups. Although audit studies provide more compelling evidence on discrimination than do regressions from observational data, they are not devoid of weaknesses. First, despite efforts to match auditors on several characteristics, differences that are potentially critical for employers inevitably remain. Second, auditors obviously know the purpose of the study. This can lead them to consciously or subconsciously behave in a way consistent or inconsistent with their beliefs about how employers treat different groups.
- 365 C.2. Blind studies
- Shortcomings of audit studies can theoretically be overcome by "blind" studies. These studies entail analysing the behaviour of recruiters, depending on whether they observe the group membership of the applicants or not. For instance, Goldin and Rouse (2000) estimate the impact of the gradual adoption of blind auditioning by US orchestras during the 1970s and 1980s. Yet, recruitment practices that allow observing a candidate's productivity while his/her group membership is concealed hardly exist. The anonymous CV constitutes an exception. Although no government has enforced it, this procedure has recently been evaluated in various European countries (Rinne 2014). However, these experiments show substantial shortcomings that make their results at best impossible to generalize, at worst questionable. More

precisely, in the experiments conducted in the Netherlands (Bog and Kranendonk 2011) and in Sweden (Aslund and Skans 2012), recruiters' assignment to the treatment was not random. By contrast, randomization did occur in the experiment conducted in France by Behagel, Crépon and Le Barbanchon (2015). Yet, participating firms are those that agreed to receive anonymous résumés and, consequently, stand for a very specific sample: compared to those that refused to participate, they treat minority candidates more favourably than majority candidates with the regular, name-bearing résumés. Consequently, the authors obtain the surprising result that anonymization widens the gap in callback rates instead of reducing it: the callback rate of minority candidates decreases, while that of majority candidates increases. As for Krause, Rinne and Zimmermann (2014), they randomly anonymize applications of PhD economists for a post-doctoral position at a European-based economic research institution. Here again, despite the random assignment of the treatment, it is impossible to generalize the results given the lack of representativeness of the participating institution.

367 C.3. Correspondence studies

In the absence of easily implementable blind studies, correspondence studies have imposed themselves as the most promising approach. Introduced by Jowell and Prescott-Clarke (1970), this method consists of comparing the callback rates of fictitious applicants who are identical in every respect save their group membership. In comparison to their audit counterparts, correspondence studies permit greater comparability across groups of applicants together with lower room to conscious or subconscious deviations from the experimental setup. Yet, they show some limitations (Rooth 2014). First, by construction, correspondence studies measure discrimination in access to a job interview, not to a job offer. While the results from audit studies suggest that lower callback rates translate into lower offer rates, correspondence studies remain unable to quantify the full extent of discrimination at the hiring stage. That said, evidence from studies conducted by the ILO suggests that most discrimination occurs at the initial stage (i.e. selection for interview), not at the stage 'interview to job offer' (Bovenkerk 1992). Second, correspondence studies do not provide a general picture of discrimination in the labour market (but this critique applies to other experimental approaches as well): (i) they measure discrimination at one point in time and space; (ii) they focus on firms that rely on special channels (want ads in the newspaper or on the internet) to fill specific positions; (iii) they involve fictitious candidates who apply with CV of peculiar quality. Third, like many other experiments, correspondence studies raise ethical issues. They indeed amount to deceiving employers and wasting their time by sending them fictitious applications they perceive as genuine (Riach and Rich 2004).

The extent of discrimination in the labour market: evidence from correspondence tests

This section summarises the findings from what is now a large number of correspondence tests in labour markets throughout the world, though most of them have been conducted in developed countries. There are many steps at which employers can discriminate – recruitment, pay, promotion – but recruitment is the most critical: as McGinnity and Lunn (2011) note, if people do not get the jobs in the first place, they will never get paid or promoted.

Correspondences studies focus on this very step.

371 A. Gender

- Two regularities can be drawn from correspondence studies designed to identify gender-based discrimination (Riach and Rich 2002, Azmat and Petrongolo 2012 and Rich 2014). First, both sexes are discriminated against when they apply for an occupation that is "stereotyped" for the other sex. As Riach and Rich (2002) emphasize, "this is consistent with the hypothesis that many in society still identify appropriate roles for men and women (...): the supportive and decorative role of secretary being deemed inappropriate for men, whilst the dirty and physical-demanding nature of motor mechanics being deemed unsuitable for women." More precisely, Rich (2014) notes that studies typically find higher rates of discrimination against men applying for female jobs than women applying for male jobs: this is true in many Western countries and also in a recent test conducted in China (Zhou et al., 2013). As for "mixed" occupations (in fact, occupations with a majority of male workers but nevertheless a significant representation of women), women are favoured over men (Riach and Rich 2006a). This result might translate employers' attempt to balance the sex ratio in occupations that are not biased in favour of men anymore but that yet remain male-dominated. Testing whether the reverse occurs in "mixed" occupations with a majority of female workers but nevertheless a significant representation of men constitutes an obvious avenue for future research.
- Second, women are discriminated against for high status jobs, particularly when they are at "risk" of pregnancy or when they face family constraints. As an illustration, Petit (2007) compares the callback rates of single and childless male and female applicants. She finds that women are discriminated against in their access to high-skilled jobs when they are 25, but not when they are 37. By contrast,

they are treated similarly to men when they apply for low-skilled jobs, irrespective of their age. The penalty directed at young single and childless women applying for high-skilled jobs could be due to taste for discrimination (Becker 1957): workers may dislike being supervised by a young woman rather than by a young man or an older, more experienced woman. This penalty could also derive from statistical discrimination (Arrow 1973; Phelps 1972) if young women are considered as being less effective supervisors. But it may also reflect that young women are at a greater risk of career interruptions due to maternity. Such interruptions are indeed particularly costly at high-skilled positions. As an illustration, US study by Correll *et al.* (2007) found that childless women received twice as many callbacks to interview as mothers with equivalent CVs. Fathers were not penalized.

374 B. Age

Ocrrespondence studies point to substantial discrimination against older applicants, where "old" can range from late thirties to late fifties. This result does not only prevail in studies that tend to overestimate age-based discrimination by endowing younger and older applicants with similar work experiences (Bendick, Jackson and Romero 1997; Lahey 2008). It is also robust to experimental setups that rely on work experiences commensurate with age (Riach and Rich 2006b; Baert et al. 2015; Neumark, Burn and Button 2015). Based on an unprecedented number of job applications (more than 40,000), the study by Neumark, Burn and Button offers the richer set of results. Notably, older women are found to be more discriminated against than older men. This finding, the authors surmise, could reflect that "physical appearance matters more for women" and that "age detracts more from physical appearance for women than for men."

376 C. Race or ethnicity

Studies of labour market discrimination by race or ethnicity have been by far the most common application of correspondence testing to date, and present overwhelming evidence of discrimination on the basis of race/ethnicity in the countries and occupations tested. As Bertrand and Duflo (2016) note, evidence has been accumulated from nearly all continents: Latin America (e.g. Galarza and Yamada (2014) compare Whites to indigenous applicants in Peru), Asia (e.g. Maurer-Fazio (2012) compares Han, Mongolian and Tibetan applicants in China), Australia (e.g. where Booth, Leigh, and Varganova (2011) compare Whites to Chinese applicants), the United States and Canada, and in many European countries, including the UK, Ireland, France, Spain, Belgium, Italy, Sweden, Norway, Denmark, Germany, Austria and many others.

378

Zschirnt and Ruedin (2016) perform a meta-analysis based on 43 correspondence studies conducted in OECD countries between 1990 and 2015 to measure unequal treatment of racial and ethnic minorities. Their results indicate that, on average, minority applicants have to send 50% more applications to be invited for an interview than majority applicants. They also reveal that discrimination is typically highest for people of North African and Middle Eastern origin in European correspondence tests, though ethnic differences in discrimination are sensitive to time and place (Zschirnt and Ruedin 2016). Although there appears to be no systematic differences between the discrimination of minority men and minority women, a gender gap emerges among minority applicants with Arabic-sounding names: Arabic men face stronger discrimination in the labour market than do Arabic women, and higher qualifications do not help them (Bursell (2014) and Arai, Bursell and Nekby (2016)). Higher qualifications did not lead either to a significant improvement in the callback rate to African-Americans compared to White applicants in the USA (Bertrand and Mullainathan 2004). In terms of cross-sectoral variation, Zschirnt and Ruedin (2016) report lower discrimination in the public than in the private sectors, though this issue remains underexplored.

D. Religion or belief

The particularly strong discrimination directed at people of North African and Middle Eastern origin in OECD countries suggests that the penalty they experience is not only due to their extra-European origin but also to their perceived religious affiliation, Islam. This surmise raises a more general question: are religious minorities discriminated against in Christian-heritage societies? Three correspondence studies, all conducted in France, have sought to address this question. They consist of comparing the callback rates of applicants who are identical in every respect save their perceived religion. Notably, for only the latter to be at play, the national origin of the applicants is held constant. Adida, Laitin and Valfort (2010) focus on female Catholic and Muslim candidates of Senegalese origin, while Pierné (2013) concentrates on male Catholic and Muslim candidates, either of French or of North African origin. Both studies reveal strong religious discrimination: the probability for candidates to be called back is much lower when they are perceived as Muslim rather than Catholic. Valfort (2016) provides a broader picture: she includes both female and male applicants (of Lebanese origin), as well as a second minority religion, Judaism. Based on more than 6,200 job postings, the results confirm that Muslims are discriminated against and reveal that Jews are treated unfairly as well: the probability for Catholics to be invited to an interview is

higher by 30% than it is for Jews and by 100% than it is for Muslims, hence twice as high. But, in line with Bursell (2014) and Arai, Bursell

and Nekby (2016), discrimination against Muslims hides a strong gender-based disparity. While the callback rate for Catholic women is "only" 40% higher than that for Muslim women, the callback rate for Catholic men is 4 times higher than that for Muslim men. For the sake of comparison, the intensity of the discrimination faced by male Muslim applicants in France is equal to the penalty that French men of North African experience (relative to French men of French origin), as measured by Duguet et al. (2010). It is six times as high as the discrimination directed at male African-American applicants (relative to their White counterparts) in the US (Bertrand and Mullainathan 2004).

While there are generally much fewer correspondence tests in developing countries, Banerjee et al. (2009) examined religious discrimination in India. They found no differences in call back rates between Hindu and Muslim applicants.

382 E. Sexual orientation

- 383 Correspondence studies that aim to test sexual orientation discrimination usually indicate homosexuality through the volunteer engagement of the applicant in a gay/lesbian organization. (For the "heterosexual" applicant a control organization is chosen that does not give any evidence of being gay or lesbian.) Overall, they reveal a significant penalty experienced by homosexual men and women in the labour market.
- To be sure, this way of signalling same-sex sexual orientation is not without flaws. It may indeed confound homosexuality with political activism and left-wing political orientation. To circumvent this problem, one can emphasize the managerial or financial tasks the homosexual applicant performs in the gay/lesbian organization (Weichselbaumer 2003; Tilcsik 2011). One can also choose a gay/lesbian organization with no affinities to any political party (Weichselbaumer 2003) or juxtapose a left-wing gay/lesbian organization in the homosexual application with a left-leaning political organization in the heterosexual application (Tilcsik 2011). Studies that have implemented these adjustments leave the previous conclusion unaffected: gays and lesbians are discriminated against in their access to employment. This conclusion remains also unchanged following a recent trend in the literature on anti-gay/lesbian discrimination that entails signalling sexual orientation by stressing the sex of the candidate's partner, as shown by Weichselbaumer (2015).

The design of tests to detect disability discrimination is challenging, as some disabilities are related to the applicants capacity to do the job, and there are only a limited number of correspondence tests (Riach and Rich 2002). A recent study by Baert (2016) compares the callback rates of male applicants without and with disability (blindness, deafness or autism). The results reveal that the disabled candidate is twice less likely to be invited to a job interview than his non-disabled counterpart. Yet, given the seriousness of some of the featured disabilities, this gap might not only reflect discrimination but also differences in observed productive characteristics.

This concern leads Amari et al. (2015) to focus on two disabilities that should not limit productivity in the accounting positions their fictitious male candidates apply for. The first disability is spinal cord injury, which requires a wheelchair but is compatible with computer work. The second disability is Asperger's Syndrome, which impairs the ability to develop peer relationships but heightens skills in mathematics. According to the authors, this syndrome should not hinder accountants' performance who "find themselves focused on spreadsheets more often than on interacting with clients." Their findings point to a moderate level of discrimination against the disabled applicants: their probability to be called back is 26% lower than that of the non-disabled applicants. Such discrimination is concentrated among the experienced candidates (those with CPA certification and 6 years of work experience): their risk of lower productivity might be considered as more costly for the firm due to their higher pay and greater job responsibilities.

388 6.5 Policies to counter discrimination and promote diversity

There are a large variety of policies and actions that can potentially contribute to tackling discrimination against disadvantaged groups in the labour market. These range from anti-discrimination legislation, to equal employment policies, affirmative action and other strategies to promote diversity. Actors involved can include the state and legal representatives, but many OECD countries also have equality and human rights bodies.

At an international level, the Universal Declaration of Human Rights provides the most fundamental framework for anti-discrimination (OECD 2013). Its principles have been applied in more detailed conventions such as convention 111 of the ILO on discrimination in employment and occupation, which was ratified by 171 countries. All OECD countries have integrated anti-discrimination provisions into their national legal framework (OECD 2008). An important impetus for EU countries has come from EU directives, initially in the 1970s regarding gender discrimination and equal pay; by 2000 the EU adopted two new Equality Directives prohibiting discrimination in

employment on the basis of sex, racial or ethnic origin, religion or belief, disability age or sexual origin. Similar legislation was implemented in other OECD countries such as Australia, Canada and the United States at much earlier dates.

Each anti-discrimination or equal opportunity law provides for the creation of agencies responsible for monitoring its application and implementing its programmes. The powers of these equality bodies vary across countries but can be far-reaching - typically activities range from awareness-raising of public authorities, employers and the general public, co-ordinating equality policies, receiving complaints and in some countries equality bodies may conduct legal actions, investigations and impose sanctions where appropriate.

A key problem with anti-discrimination law in all countries is that legal rules are not self-enforcing: they rely on the actions of individuals who feel discriminated against (OECD 2008). And taking a legal action can be costly, complex, time-consuming and is often an adversarial process in the workplace, even with financial support and advice from equality bodies. The outcomes vary considerably across countries depending the legal framework and efficiency of the legal system. In many OECD countries equality bodies offer 'mediation' at an early stage, which is often quicker and cheaper (see OECD 2008).

The legal framework is complemented by more pro-active or positive strategies to influence practice and processes in the labour market, these include affirmative action and equal employment policies. Affirmative action is typically defined as a set of policies that make specific efforts to advance the economic status of minority groups and women (Holzer 2010). Affirmative action, which originated in the United States, and positive action, as in the European action plan against racism, have similar goals (OECD 2013). Typically the policies monitor the representation of minority groups using statistical tools and take active steps to address underrepresentation. Whereas in affirmative action a fixed quota generally implies preferential treatment of the group concerned (that is positive discrimination), in equal opportunities programmes targets are typically used, which do not imply preferential treatment. The legitimacy and efficiency of quotas have been debated in the United States for many years: this instrument has often been criticized (Stryker 2001). As a policy tool, hard affirmative action and quotas by race have generally been discontinued in the United States (OECD 2013).[27] Equal opportunities programmes with targets continue.

Alternative strategies to promote equality may derive from the business community itself. The latter, known as 'diversity management' include 'diversity audits' to identify biases in organisational processes, mentoring programmes, diversity training

etc. The strategy stresses the benefits of diversity: the main idea is that by recruiting and retaining diverse employees companies will have a market advantage (see Section 6.3).

Evaluating the effectiveness of such policies has proven to be difficult. For the United States, there is some evidence that laws barring discrimination helped to improve the labour market situation for ethnic minorities and women, though often these effects materialized over time and are difficult to quantify (Altonji and Blank 1999). The impact of affirmative action quotas has not been uniformly positive: one negative by-product of quotas is they may increase stereotypes if such measures are associated with lower standards for the groups concerned (Holzer 2010). In terms of recruitment and personnel practices, there is an urgent need to assess initiatives to see if they do indeed have the desired effect (Bertrand and Duflo 2016).

6.6 Conclusion and Recommendations

- 397 As we have seen, the balance between the costs and benefits of diversity largely depend on the type of diversity considered. While ethnic diversity is mostly associated with negative economic outcomes, the opposite holds true for birthplace diversity. In terms of policy implications, better integration of minority groups and lower segregation and ethnic inequality have been shown to mitigate the conflictual and costly side of ethnic fragmentation. As to birthplace diversity, the results from both cross-country and firm-level studies point to the positive effects of such diversity in the context of advanced economies and industrial sectors. Hence, policies to increase the diversity within immigration, not just its quantity or quality, should also be considered. This is for example the case of the United States and its well-known "Green Card Lottery", in fact a diversity lottery (its official name) in the sense that the odds of winning are manipulated so as to favour immigration of citizens from countries with low levels of past migration to the US.
- Discrimination in the labour market represents a challenge to equality, social justice and the notion of 'good jobs for all'. Its pervasiveness has been clearly demonstrated by a wide range of experimental studies reviewed in this chapter. Discrimination is costly to individuals and for an economy as a whole (OECD 2008). A single solution to combating discrimination is not on offer: at best a range of measures operating at societal, firm and individual level are required. The following are three broad recommendations:
- Firstly, a key message from the review of policies is that antidiscrimination legislation is an important basic action for countries, but it is not enough to combat discrimination as it is not 'self-

enforcing'. A combination of pro-active policies to promote equal opportunities in employment, and sanctions for non-compliance or discriminatory behavior by companies would increase employer incentives to comply with the legislation. Public sector practices and policies here can provide an important 'role model' function, but such policies and practices also need to be in private companies, particularly smaller private companies, where some evidence suggests that discrimination may be more pronounced (OECD 2013).

- Secondly, there is also the goal of informing both employees, job applicants and employers about both the benefits of diversity and equality, and also the downsides and costs of discrimination. This could include challenging employers: Why would they want to turn down the best candidate because of their skin colour, age or gender? This awareness raising can also be at a more general level of increasing support for equality and reducing negative stereotypes of particular groups in society more generally. A balanced and fact-based public discourse can help counter negative stereotypes of particular groups, for example immigrants (OECD 2013).
- Thirdly, despite a plethora of correspondence studies, little is known about the sources of such discrimination (Bertrand and Duflo (2016), while pinpointing them would constitute a critical prerequisite toward devising efficient anti-discrimination policies. In addition, very few experiments have evaluated the effectiveness of anti-discrimination policies. Perhaps not a policy goal but a recommendation nonetheless is that there should be increased research on these issues. As Bertrand and Duflo (2016) argue, researchers could play as large a role in isolating effective policies to combat discrimination as in documenting it. Evaluations are important tools for policymakers and researchers need to supply the evidence.

7. The impact of work and employment on health and wellbeing[28]

7.1 Background

Work is a core activity for individuals and society. Participation in the labour market determines a wide range of life chances that are mediated through regular wages and salaries. Work and employment confer social status by placing people's position in the hierarchical arrangements of society. Moreover, paid work contributes to the

realization of important human needs of performance, agency, skill development and personal control, of reward, recognition and related self-esteem, and of participating in wider social networks providing support and a sense of belonging. Under favourable conditions these experiences contribute to working people's health and wellbeing, strengthening their sense of social identity and their motivation towards striving for purpose in life. Yet, exclusion from paid work and exposure to hazards and poor quality of work act as powerful threats to human health and wellbeing. These opportunities and threats are unequally distributed across the globe, between and within societies, leaving poor people, those with less education, skills and capabilities in more disadvantaged conditions.

Although any estimate is imprecise, some 200 million people of the world's population of employment age are unemployed. In low and middle income countries, a majority of those working are employed in the *informal economy*, often lacking any statutory regulation, protection against occupational hazards, and social security benefits. Large parts of those working in the informal sector do not earn enough to lift themselves and their families above the poverty line, with more women than men affected. Even worse, despite international proscription, several millions of children are still exposed to *child labor*, and more than 10 millions of adults are suffering from *forced or bonded labor*, specifically in Africa, South America, and the Pacific region (Benach et al. 2007).

In high income and rapidly developing countries, the nature of work and employment underwent significant changes in recent decades. With the advent of new technologies and new social demands employment sectors shifted from industrial mass and lean production towards service delivery and information/communication technology-driven jobs. Moreover, mainstream employment relations with long-standing continuity were increasingly replaced by more flexible non-standard employment contracts. In part these changes were – and are – influenced by economic globalization, i.e. by large flows of trans-national capital, trade, and workforce. Importantly, a trans-national labour market results from the 'spacialization' of production and of a globally growing workforce (Kalleberg 2009). With a growth in economic competition and augmented pressure for cost-containment, workload and work intensity increase in large parts of the workforce, often in combination with job instability and job insecurity (Gallie 2013). Although the expansion of non-standard employment resulting from these developments can contribute to some improvements in the quality of work (e.g. more flexible work arrangements, increased mobility),[29] adverse effects on health and wellbeing are likely to

override these advantages, given a high prevalence of precarious employment relationships, of exposure to pressing work demands, and of threats to job loss (Benach et al. 2014, Kalleberg 2009).

- Progress in economic, socio-political and technological development as well as in the provision of social security has markedly improved overall working conditions during the past century in many Western and some rapidly developing countries where physically strenuous work and exposure to main occupational hazards of industrial production were reduced. Although large differences in the quality of work and employment still persist even in advanced regions such as Europe (WHO 2014, Siegrist et al. 2015), a growing burden of work-related diseases is now attributable to the threats of stressful psychosocial work environments. These threats are becoming more widespread with the global changes mentioned, and are exacerbated by major economic downturns, financial crises, and related fiscal austerity measures (Labonté 2015).
- As a fact, in almost all societies, irrespective of their stage of economic development, we observe steep social gradients in the prevalence of exposure to health-adverse work and employment. With each step one moves up on the social latter within a country, the lower this prevalence. Therefore, related policy efforts are not confined to most disadvantaged occupational groups, but concern the improvement of health-conducive work and employment across the whole of each society (Marmot 2015).
- The current worldwide situation of work and employment with its far-reaching afflictions of people's health and wellbeing contrasts sharply with an important goal of the United Nation's recently endorsed SDG agenda: "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (United Nations 2015). It is therefore important to demonstrate the best scientific evidence on associations of working conditions with health in order to motivate responsible stakeholders and the wider public to develop evidence-based policies to reduce adversity and to promote healthy work.

7.2 Work, employment and health: summarizing the evidence

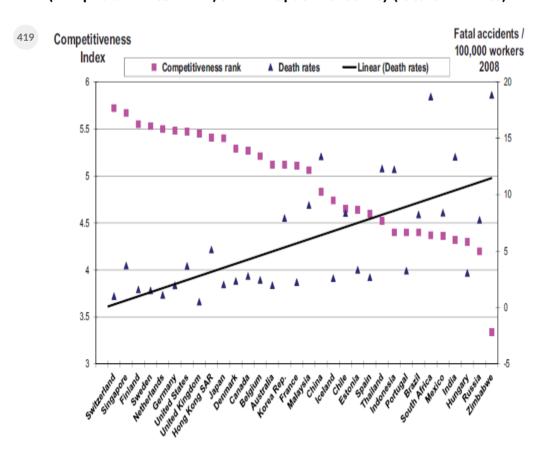
Broadly speaking, four categories of unhealthy work can be distinguished, in addition to the afflictions resulting from job loss and precarious employment: (1) occupational injuries and exposure to 'traditional' (physical, chemical, biological) occupational hazards; (2) physically strenuous work; (3) work-time related stressors (e.g., shift work, long work hours); (4) stressful psychosocial work environments (e.g. work pressure, job insecurity, harassment). In many occupations, diverse combinations of these conditions are

observed, often resulting in an accumulation of disadvantage. As mentioned, this is most often the case among working people in lower socioeconomic positions. It should be emphasized that these categories reflect the general recognition that the importance of work for health goes beyond traditional occupational diseases and beyond traditional occupational safety approaches towards preventing accidents and injuries, thus requiring a more comprehensive, inter-disciplinary approach towards dealing with occupational health.

- In the following paragraphs a brief summary of substantial scientific research findings is given. As the majority of empirical studies were conducted in industrialized countries there are obvious gaps of knowledge, in particular with regard to informal work, agricultural work, and a variety of precarious jobs in the formal sector in economically less developed countries (Benach et al. 2007).
- 413 Unemployment, precarious employment and health
- The causal link of associations between unemployment and health has long been debated, given powerful selection factors and evidence on reverse causation which means that people with poor health are more likely to lose their job. Valid findings are restricted to prospective epidemiologic cohort studies based on individual data that control for baseline health and important confounding factors. Several such studies have been analysed in systematic reviews and meta-analyses. The main results indicate that long-term unemployment is associated with a statistically significant, but moderate increase of relative risks of suffering from depression, suicide, or cardiovascular disease. Moreover, according to some studies, allcause mortality following long-term unemployment is elevated (Roelfs et al. 2011). These associations should be interpreted with some caution as important, protective and aggravating factors were reported. Strong social support, psychological resilience (e.g. selfefficacy, optimism), and the provision of comprehensive social protection policies at national level reduce the strength of these associations, whereas health-adverse behaviours, financial disadvantage, and social isolation act as aggravating conditions (Gallie 2013).
- Precarious employment has been defined as a condition of high job instability and lack of alternative employment opportunity, often combined with low wage and low social protection (Kalleberg 2009). Accordingly, a wide spectrum of employment arrangements in the formal economy is considered precarious, including involuntary part-time jobs, fixed-term contracts, temporary agency work, freelance and some forms of self-employment. Research on potential effects of precarious work on health is still limited, not least due to

methodological difficulties. However, job instability and job insecurity in the face of business restructuring or downsizing are clearly associated with reduced mental health (Cooper et al. 2012). In line with these findings preliminary evidence indicates that the recent great economic crisis adversely affects the health of populations at working age, partly due to stressful effects of labour market disadvantage and financial strain, partly due to restrictions in access to healthcare (Karanikolos et al. 2013).

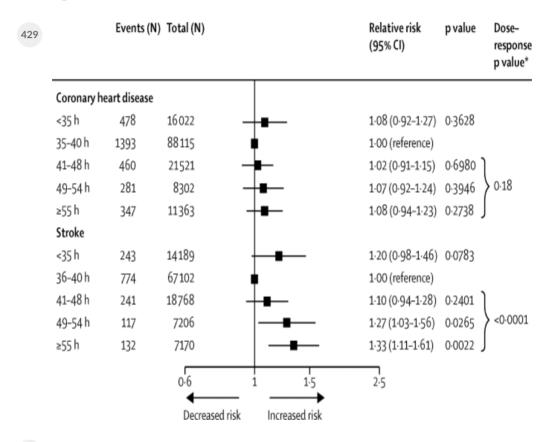
- Occupational diseases and injuries, physical, chemical, and biological occupational hazards
- diseases (mainly cancer and cardiovascular diseases) and occupational injuries (Takala et al. 2014). Almost one thousand workers lose their life every day due to occupational accidents, most of them in low- or middle-income countries. Failures in developing and controlling basic standards of occupational safety measures and training are the major determinants of a high burden of occupational injuries, especially so in low income countries (WHO 2014). Importantly, there is a strong link between a country's overall level of economic progress and competitiveness on one hand and the total occupational accident rate on the other hand. As can be seen from Figure 12, an inverse association is obvious, with lower rates of accidents in more competitive countries (Takala et al. 2014).
- Figure 12: Inverse association of economic growth (competitiveness index) and occupational safety (fatal accidents).



- While substantially reduced in high-income countries, exposure to 'traditional' occupational hazards remains high in developing countries. As an example, in rapidly developing countries it was estimated that 125 million workers are still exposed to asbestos (WHO 2008), and the incidence of cancers caused by occupational exposures is likely to increase in most regions of the world. Other occupational diseases are due to dangerous workplace exposures such as biological agents, mutagenic substances, skin and airways sensitizers, noise, heat, cold, or vibration, causing high societal costs, for instance in case of occupational asthma or hearing impairment (Montano et al. 2014).
- Physically strenuous and repetitive work
- Work in the agricultural sector and in certain industries is associated with heavy lifting, tiring and painful positions, and repetitive movements. Although these conditions are more frequent in less developed countries and among unskilled or semi-skilled workers certain biomechanical and posture-related risks (e.g. repetitive hand or arm movements in computer work) prevail in the service and IT sectors of advanced societies. For instance, about half of the European workforce exerts repetitive movements on the job, mainly due to computer work (Eurofound 2015). In the long run, back pain and musculoskeletal disorders (MSD) result from these exposures. MSD of the neck, lower back, lower and upper limbs are the second most frequent medical cause underlying disability benefit claims in OECD countries, and they define the most frequent occupational disease and the highest self-reported work-related health complaint in Europe, where strong social gradients are observed (OECD 2010). Sedentary work is a further occupational health risk, widely prevalent among white collar occupations.
- Shift work, long working hours
- In economically advanced countries (e.g. Europe), shift work affects more than 20 percent of the workforce (Eurofound 2015). Research on shift work documents elevated risks of cardiovascular disease and metabolic syndrome, in particular after chronic exposure (Härmä 2006). However, it is difficult to disentangle work-related influences from those related to a disturbed work-life balance, changes in circadian rhythms, and health-adverse behaviors.
- A further health risk at work relates to *long working hours*. In Europe, every tenth male worker reports to work regularly more than 60 hours per week. For special service occupations and professions, persons performing on-call jobs, freelancers, and several groups

having atypical jobs, it has become increasingly difficult to clearly distinguish work from non-work periods in their daily life. Long working hours (e.g. >55 h/week) were associated with moderately increased relative risks of depression, coronary heart disease, and stroke (Bannai et al. 2014). For instance, a large-scale study observed a dose-response relationship between number of working hours and risk of stroke (see Figure 13 (Kivimäki et al. 2015).

Figure 13: Association of categories of weekly working hours with incident coronary heart disease and stroke. Estimates adjusted for age, sex, and socioeconomic status.



430 *For trend from standard to long working hours.

432 Source: Kivimaki et al. (2015)

433 Stressful psychosocial work environments

A collective increase in competition, work pressure and job demands occurred in the context of significant changes in work and employment mentioned above. In relevant parts of the labour force work intensification was associated with increased job insecurity resulting from economic or socio-political transformation or from far-reaching organizational restructuring (Eurofound 2015). High levels of stressful experience are observed under these conditions. *Psychosocial stress* occurs if a person is exposed to a threatening demand (stressor) that taxes or exceeds her or his capacity of successful response. Furthermore, stress results from experiences of

severe injustice, unfairness, and threats to one's physical or psychological integrity. Threats to personal control and appreciation elicit sustained negative emotions of anxiety and anger, paralleled by 'stress responses' originating from the organism's innate physiologic alarm mechanisms. While potentially beneficial in acute lifethreatening situations chronic stress in the long run impairs the functioning of distinct bodily systems and increases the risk of developing a stress-related mental or physical disorder, such as depression, cardiovascular or metabolic disease.

Recurrent psychosocial stress at work acts as a major determinant of these developments, but the variety and complexities of work and employment characteristics provide a challenge to scientific research. In fact, theoretical concepts are needed to delineate particular stressful aspects within these complexities that can be identified at a high level of generalization. Among several approaches (for review Cartwright and Cooper 2009) two such concepts were widely applied in international occupational stress research, 'demand-control', and 'effort-reward imbalance'. The demand-control (or job strain) model identifies stressful work in terms of job task profiles defined by high psychological demands and a low degree of control or decision latitude (Karasek and Theorell 1990). Stressful experience resulting from this exposure is due to limited experience of personal control in combination with continued high work pressure. The effort-reward imbalance model was developed as a complementary approach with a primary focus on the work contract; the principle of social reciprocity being at the core of the model (for review Siegrist and Wahrendorf 2016). Rewards received in return for efforts expended at work include money, recognition, and career opportunities (promotion, job security). The model asserts that lack of reciprocity (high effort in combination with low reward) occurs frequently and generates strong negative emotions and psychobiological stress responses with adverse long-term effects on health.

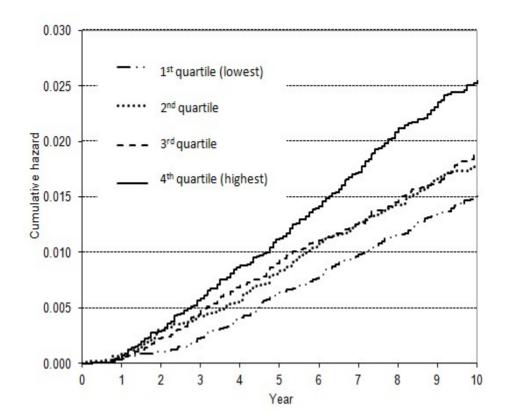
The utility of these two theoretical models is due to the fact that their measurement in terms of psychometrically validated questionnaires is available in a variety of languages, thus enabling cross-country comparisons. Moreover, their core stress-theoretical notions, 'control' and 'reward', can be identified at different levels, i.e. the socio-structural level (e.g. labor market, income distribution), the individual level (characteristics of individual work environment), and at the psychobiological level of the organism (lack of control activating the innate stress axes; lack of reward activating the brain reward system). Importantly, strong social gradients of both forms of stressful psychosocial work (high effort and low reward; low control)

were documented, leaving those in lower positions at higher risk. This latter fact contributes to the explanation of social inequalities in work-related health (Marmot 2015).

Several systematic reviews summarize the current state of knowledge in this rapidly expanding field of occupational health research that is mainly based on prospective observational cohort studies, supplemented by experimental research and intervention studies. Strong evidence indicates that the risk of incident depression is almost twice as high among workers exposed to job strain or effort-reward imbalance compared to workers with low or no stress at work. Moreover, relative risks of coronary heart disease are increased by 30 to 60 percent under these conditions. The burden of work-stress related disease is even larger as additional risks are associated with stressful work, such as metabolic disorders, alcohol dependence, sleep disturbances, sickness absence, reduced health functioning, and disability pension, thus generating substantial economic loss in addition to human suffering (Marmot 2015, Schnall et al. 2009, Siegrist and Wahrendorf 2016). As depression is one of the leading disorders worldwide and as it has been observed as a main cause of disability pension, at least in high income countries (OECD 2010), evidence of the contribution of stressful psychosocial work environments to this latter development is warranted. Figure 14 provides some of this evidence, documenting a linear relationship of stressful work with risk of disability pension due to depression, based on a large longitudinal study in Finland (Juvani et al. 2014).

Figure 14: Cumulative hazard curves of disability pension due to depression by psychosocial stress at work (quartile of effort-reward imbalance). Finnish Public sector study; N= 51.874 employees; 75% women.

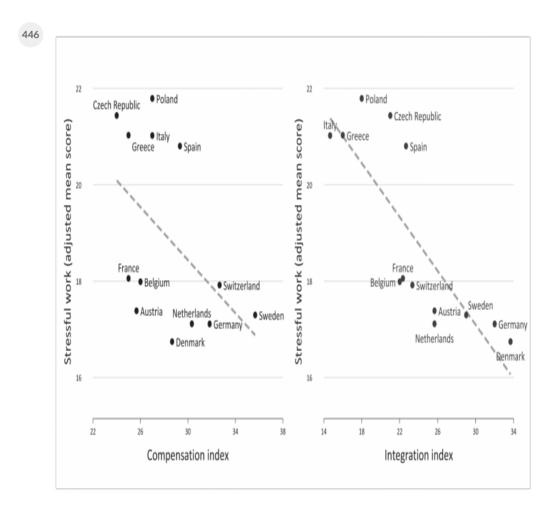
439



- 440 Source: Juvani et al. (2014)
- Although the majority of studies were conducted in high-income countries, there is accumulating evidence that these work stress models are valid in rapidly developing countries as well, specifically in China and Latin America, an observation of particular interest in times of economic globalization (Siegrist and Wahrendorf 2016).
- 442 National labour and social policies
- National labor and social policies can influence the quality of work and employment within respective workforces by setting rules and regulations which protect workers' health, by investing in active labor market policies including rehabilitation services, and by offering financial support in case of job loss and other income shocks. It is therefore assumed that the mean quality of work and employment is more favorable in countries that developed comprehensive welfare state measures than in countries with poor welfare state investments. In addition, favorable policies to some extent may mitigate the adverse effects of stressful work on the health of workers.
- There is some *preliminary evidence* along these lines. For instance, concerning the first assumption, a comparative cross-country study of older workers in Europe analysed the association of a summary measure of work stress per country with two indices of each country's amount of offering compensation (or social protection) and integration (or active labour market) policies respectively. *Figure 15* displays the scatter plots of this association. To interpret the results one should note that scores of stressful work range from 0 (no stress)

to 48 (high stress) and that each one of the two policy indices developed by OECD ranges from 0 (poorest policy) to 50 (best policy). In case of the compensation index, associations are slightly less pronounced. In contrast, an almost linear association is observed in case of the integration index where more pronounced integration policies are related to lower levels of stressful work (Wahrendorf and Siegrist 2014).

Figure 15: Adjusted mean scores of stressful work among older male and female employees (N=11181) and policy indices.



Note: Mean scores of stressful work are adjusted for sex, age, retirement age, periods of disability, job absence due to disability, childhood circumstances (occupational position of main breadwinner, number of books, housing conditions and overcrowding) and labour market disadvantage (occupational position in main job, involuntary job loss (laid off and plant closure) and period of unemployment). Source: Wahrendorf and Siegrist (2014)

448 7.3 Work and health: two causal directions

The previous section demonstrated selective evidence on how adverse working and employment conditions affect the health of people in the labour market. This evidence is based on the assumption of a causal link between adverse work and subsequent poor health. Despite an ongoing methodological debate this assumption is

supported by crucial quality criteria of epidemiological research, such as the strength and consistency of prospectively documented associations between exposure and health in occupational cohorts, the dose-response relationship of this association, the demonstration of biological pathways explaining the link, and the reduction of risk following removal of the exposure.

- With a major focus on noxious aspects of work and their risks for morbidity and mortality, the *positive*, *health-promoting aspects of modern working conditions* are disregarded. However, in keeping with the theoretical models mentioned, we can conclude that jobs that offer options of personal control, skill development, and recurrent experience of self-efficacy, and employment relationships characterized by just exchange, fairness, and appropriate material and non-material rewards, including promotion prospects and job security, are conducive to the health and wellbeing of workers. In fact, a broader approach stressing the protective, health-promoting features of work has been proposed as guidance to public policies related to workers and the workplace (Schulte et al. 2015). Moreover, several *intervention studies* that improved working conditions along these principles demonstrated *beneficial effects* on workers' health and wellbeing (Siegrist and Wahrendorf 2016).
- 451 A second causal direction between work and health is of similar importance: Sickness and disability can impair access or return to work as well as adequate performance on the job. In view of a globally ageing workforce and economic pressures towards postponing pension age chronic diseases and disabilities are increasingly perceived as challenges to maintain the workability and productivity of older people (OECD 2010). In most countries people with chronic disease or disability experience barriers to employment in terms of prejudice and discrimination, lack of vocational rehabilitation, employers' fear of reduced productivity, or absence of national integration policies. For instance, while most people with spinal cord injury can work to some extent, the average global employment rate among people with this type of disability is as low as 37% (WHO 2013). Large variations between countries are mainly due to the development of appropriate medical and vocational rehabilitation and the implementation of anti-discrimination policies. Mental illness, and specifically depression, is another case of concern. Rates of return to work after disease onset are low and occur late, and stigmatization of depressed people within proximal social environments and the society at large is still a major obstacle. Programs of early, stepwise return to work, applying individual placement and support models as well as continued medical and psychological treatment were shown to be successful and costeffective (Marmot 2010).

The fact that people with disability or long-term sickness are disadvantaged in their opportunities of fair participation in social life, and specifically of access to paid work, contradicts basic human rights. Therefore, policy initiatives are needed that aim at reducing discrimination and at widening fair opportunities of social participation.

7.4 Policy implications

- To strengthen fair work and employment globally major policy efforts are required at different levels. The provision of safe work and basic social protection to employed people is a key responsibility of employers. However, respective commitments need to be controlled by authorities, based on national laws and regulations. Despite some binding international conventions, most importantly the convention on fundamental rights that has meanwhile been endorsed by the member states of the International Labor Organization (ILO 2013b), many countries in less developed parts of the world still lack basic safety, health and social protection measures of working people, they are deprived of occupational health and safety services, and their social security system fails to meet even basic needs of working people and their families (WHO 2008; Benach et al. 2007). With the diffusion of neo-liberal policies stimulated by economic globalization, the impact of national legislation, of social protection and active labor market programs has been weakened. Against this background, it has become increasingly difficult to achieve progress in negotiations on fair employment and working conditions between employers, trade unions and governments, given their restriction to the national context. Therefore, efforts are needed towards establishing effective supranational regulation to ensure basic human rights at work internationally.
- Protection Floor Initiative'. Amongst others, this initiative recommends the introduction of minimal wages, of health- and unemployment-insurance, and of reliable pension systems, thus extending formal employment contracts at the expense of the informal sector.

 Moreover, national labor market programs are proposed to reduce youth unemployment and adult long-term unemployment.

 Transnational corporations are asked to apply the same employment standards for their employees in high-income and low-income countries, and to refrain from relocating their production sites to countries with minimally regulated workforce. There is now some evidence that the World Trade Organization (WTO) recognizes the importance of occupational health and safety standards and related social protection measures in transnational trade and investment treaties (Labonté 2015).

- Importantly, the World Health Organization (WHO) has fostered a global movement to promote health equity, including work-related health, based on the Commission's on Social Determinants of Health Final Report (WHO 2008). From this report and related documents (Marmot 2015, Siegrist et al. 2015), the following core recommendations are proposed:
- Full and fair employment in the formal sector should be made a central aim of international institutions and national developmental strategies, where social and labour policies at national level secure work and a living wage;
 - Effective occupational health, safety and rehabilitation services should be provided to support work ability and integration of all employees, including most vulnerable groups, thus reducing social inequalities of the burden of work-related health;
 - Work- and employment-related material and psychosocial adversities should be monitored in a systematic, scientifically valid way within companies, based on national legislation, and worksite health promotion programs should be implemented that enable workers to meet important human needs.
- In conclusion these policy efforts at different levels directed towards responsible stakeholders, political and financial decision-making bodies, and professional and civil organizations involved in occupational affairs should result in substantial progress of developing and preserving fair, just and healthy working and employment conditions and in reducing social inequalities in health.

459 8. Collective bargaining[30]

8.1 Introduction: what collective bargaining does

For some time collective bargaining structures and institutions have been under pressure of globalisation, market integration, new technologies, and new management strategies of how to organize and reward work. Standardisation of the employment relationship, against variations in business, and labour market conditions, had been the norm for at least half a century, but has in recent times become less attractive from an employers' perspective. Instead, employers have pressed for more flexibility, decentralisation and control at enterprise level. Higher levels of education and skill, feminization, change in family structures, diversity, and new forms of

employment contracting have also created new demands, challenges and opportunities on the union side. The pressure to decentralise and even individualise bargaining over wages, working hours and working conditions has been felt from both sides, but with higher levels of unemployment and the weakening of labour unions employers have been in the drivers' seat. Yet, there are large differences in how (much) collective bargaining has changed. In this contribution we try to chart these changes as well as the variation across countries, together with their causes and consequences.

Collective bargaining over wages and other working conditions between unions and employers is a key labour market institution in democratic societies. It is a fundamental principle and right at work, recognized by the international community. The relevant convention of the International Labour Organization (C98, adopted in 1949) defines collective bargaining as a *voluntary* process between *independent* and *autonomous* parties, and calls on public authorities to take 'measures appropriate to national conditions [...] to encourage and promote the full development and utilisation of machinery for voluntary negotiation [...] with a view to the regulation of terms and conditions of employment by means of collective agreements.' To date, C98 has been ratified by 164 countries.

463 For workers, collective bargaining has a protective function - ensuring adequate pay, establishing limits on daily and weekly working time, and regulating working conditions for those with weak individual negotiating power; a voice function - the collective expression of grievances and participation in the success of the enterprise; and a distributive function - securing a fair share of the benefits of training, technology and productivity growth. For employers, collective bargaining has a key conflict management function - it provides a process for resolving disputes and managerial control tends to become more acceptable and effective when it is legitimised through joint rules. Collective agreements, fixing wages and hours for a larger group of workers and over a longer period, can have a stabilizing function for the economy, help firms to plan their operations and workers to plan their lives. From a macroeconomic perspective this reduction of uncertainty can stimulate investment, growth and development. If sufficiently coordinated across bargaining units and sufficiently inclusive to outsiders (persons seeking entry to the labour market and those with weak bargaining power), collective bargaining offers a societal mechanism for responsible wage setting, with outcomes that are compatible with price stability, job growth and low unemployment (Aidt and Tzannatos 2008; Blanchard and Wolfers 2000; Flanagan 1999; OECD 2006; Traxler and Brandl 2012).

Not least, collective bargaining relieves the state from the complex task of setting standards and solving coordination problems in an area where there is significant possibility for conflict and a high risk of non-compliance. Like the statutory minimum wage, collective bargaining can establish a floor in the labour market for a particular occupation, sector or country, and where coverage is extended to all enterprises, it can provide a level playing field for fair competition. Unlike a national minimum wage, collective agreements provide the possibility to tailor this floor to varying conditions in an enterprise, occupation or industry. In some countries, for instance in Scandinavia, Belgium or the Netherlands, it is possible to derogate by collective agreement from legal minimum standards on wages, working time, working conditions and employment protection. This regulatory flexibility can be an important advantage in any economy.

465 Collective bargaining is associated with higher earnings, more security for employees and more earnings equality. A study based on ISSP survey data for 1995-99 covering 17 countries found a wage advantage for workers under collective bargaining from less than 1 percent, negative or insignificant in Sweden, Italy or the Netherlands, 4 percent in Germany, 7 percent in Norway and Spain, rising to more than 20 percent in Japan (Blanchflower and Bryson 2003). A recent study of German wage data found that the gap between mean wages of covered and uncovered workers had risen from 8 to 19 percent between 1999 and 2010, or from 1 to 10 percent if controlled for firm size. The authors concluded that the decline of collective bargaining in Germany - with the coverage rate decreasing from over 80 in 1990 to under 60 percent in 2014 - has contributed more to rising wage inequality than international trade (Felbermayr et al. 2014). Addison et al. (2014), using a different methodology and controlling for employee heterogeneity, report a smaller 'wage gap' in Germany of 3-4 percent during the first half of the 2000s. Their analysis shows workers whose firms abandoned the sectoral collective agreement experienced a loss, whereas workers whose firms joined the agreement enjoyed a gain.

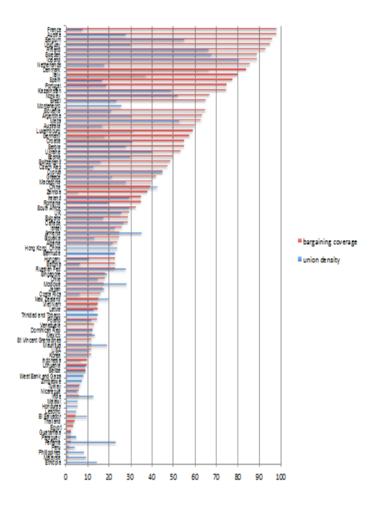
466 8.2 Bargaining coverage

The scope and relevance of collective bargaining varies massively across countries (Figure 16, data for 85 countries). Bargaining coverage, defined as the share of employees in a formal employment relationship to whom a collective agreement applies, varies from less than 5 percent in Egypt, Ethiopia, El Salvador, Guatemala, Panama, Paraguay, Peru, Malaysia, the Philippines and Thailand and to about 90 percent or more in Iceland, Sweden, Finland, Uruguay, France, Belgium and Austria. The first thing to note is that collective bargaining plays a marginal role in low-income countries with a small formal wage sector and a large informal labour market (Rsq=.25

between per capita income and bargaining coverage). However, the relationship with industrialisation, development, growth or income is not straightforward. In some of the richest countries, foremost the USA and Japan, collective bargaining plays an ever smaller role, with coverage rates having dropped to 11.8 in the USA (7.4 percent in the private sector) and 17.1 percent in Japan.

Figure 16: Bargaining coverage and union density rates across 85 countries in 2013





Within countries, we find almost always the same pattern of variation. The highest coverage rates are in the public sector (unless terms of employment are established by government decision), in manufacturing, construction and transport, whereas collective bargaining tends to be less established and widespread in market services and agriculture. Large firms are more likely to be covered than small firms, and this explains part of the sectoral variation. Workers with open-ended employment contracts, those with full-time jobs, and older workers are more likely to have access to collective bargainig than temporary workers, part-time workers and younger workers. These variations mirror, imperfectly, differences in unionization (ICTWSS database, Visser 2015). Interestingly, bargaining coverage (and union density) rates between men and women have converged, with female unionization and coverage rates

overtaking those of men in some Northern and Eastern European, Anglo-Saxon, and African countries (Visser, Hayter and Gammarino 2015)

471 The role of union organization

As a voluntary process between independent and autonomous parties, collective bargaining pressupposes employee representation acting independently from the emplouyer. Usually this is the labour union and we can expect that where unions are weak (few members, no independent means, no strike capacity) collective bargaining is weak. For most labour unions negotiating wages and working conditions for their members is a core activity besides lobbying for worker friendly laws and managing common (insurance) funds. Unions need members to claim representation and recognition as bargaining agents, and they need members to back up their demands with strike action, if need be. Does this mean that more workers will be covered by collective agreements when more are unionized?

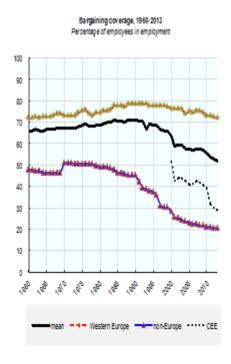
Figure 1 addresses this question in a cross-country comparison, showing union density and bargaining coverage rates in 2013, both calculated as a proportion of employed wage earners. It turns out that half of the differences in bargaining coverage rates are accounted for by differences in union density rates (Rsq=.49). Both at the low and high end there are large differences, however. At the low end, union density rates often exceed bargaining coverage rates - as is the case in a number of African, Asian and Central American low-income countries. The main explanation is that unions are established and recruit members in the state sector where union organizing is comparatively easy but collective bargaining (and striking) is often unlawful (as wages are set by public authorities). Instead, labour unions are marginal in the private sector where they have a hard time organizing and gaining recognition from employers as bargaining agents. At the high end, there are many countries (e.g., France, Spain, Portugal, the Netherlands, Austria, Germany, Switzerland, Uruguay, Argentina) in which bargaining coverage rates exceed union density rates three times or even more mainly because unions negotiate agreements not with single employers but with employers' federations, whose member firms apply the agreement's terms and conditions, by law or custom, to all employees, union members and non-members. This inclusion of non-members does also happen with enterprise agreements (as employers prefer to apply the union contract to non-union members so as to forestall conflict and incentives for unionization), but the inclusion effect of sectoral bargaining is much larger, since especially in medium-sized and smaller firms there are usually few union members. Moreover, sectoral agreements can be extended by public law to non-organized

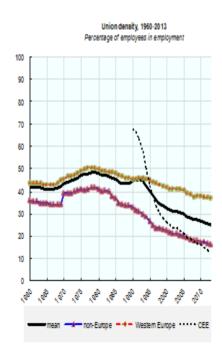
firms in the same region or sector (enterprise agreements cannot) and this is what happens in many (albeit not all) countries at the top end of Figure 1.

Figure 17 allows us to address the relationship between unionization and bargaining coverage in a chronological way for the 32 industrialized high-income countries with (annual) data over a longer time period. Looking at the mean, we see a downward trend in bargaining coverage beginning around 1990, starting about one decade later than the downward trend in unionization. Decomposing the average in three groups – fifteen Western European countries, nine non-European countries (USA, Canada, Australia, New Zealand, Japan, Israel, Turkey, Mexico and Chile) and eight post-Communist countries in Central and Eastern Europe (CEE) - we gain some insight as to what has been going on.

Figure 17: Time trends in bargaining coverage and union density rates, 1960-2013, by country groups.

476





477

In the non-European part of the OECD both unionization and coverage rates have decreased since the early 1980s in a parallel movement: in 2013 the average coverage rate stands at 20 percent compared to 50 percent in 1980; this compares with an average

unionization rate of 16 percent today compared to 36 percent in 1980. In CEE both unionization and coverage rates have dropped year after year since free unions and free collective bargaining was restored after 1989. In Western Europe union decline began around 1980 but was milder and the bargaining coverage rate stayed close to 80 percent until 1995 when it began to decline slowly until 72 percent today. Here, unionization and bargaining rates have diverged.

479 Multi-employer versus single-employer bargaining

- The main difference among these three groups of countries and the main explanation for the variation in trends is the presence or absence of multi-employer bargaining, i.e. collective agreements negotiated and signed by employers' association on behalf of their member firms. This practice is still predominant in (continental) Western Europe (the main exceptions being the UK and, since the Great Recession, Ireland and Greece), but has disappeared or was never well-established in the non-European and Eastern European countries (with some exceptions). The level of bargaining explains about three-quarters of the variation in bargaining coverage across countries (Rsq=.77).
- Employers face different choices under enterprise and sectoral bargaining. Under conditions of single-employer (enterprise) bargaining employers may withhold or withdraw union recognition as a credible threat in seeking a cheaper or less constraining contract, or else relocate employment to a non-union environment. Newly established firms may refuse recognition to begin with and base the choice of where to invest on how easy it is to avoid unions. Union contracts tend to become associated with older firms and investments, and coverage and unionization rates decrease together with declining employment in older firms and sectors. Legally mandated union recognition procedures, based on elections in which workers must choose between offers from the union and threats issued by the employer, as in the USA and since 2000 in the UK, have done nothing to stop the erosion in bargaining coverage and union representation that results from this logic (Moore et al. 2013).
- When collective agreements apply to whole branches of the economy, employers who seek a change in the contract face different strategic options. They cannot easily escape collective arrangements by switching to a non-union environment, at least not when staying in the same sector and country. They can outsource activities to firms located in branches with cheaper collective agreements; make greater use of 'flexible employment'; discontinue membership in employers' associations; or work hard to obtain a change in the sector agreement, for instance transforming it into a framework for

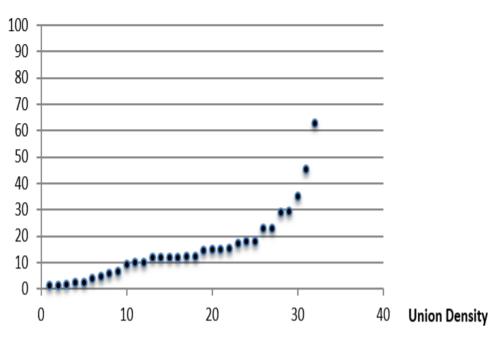
local negotiations. All of these strategies have been used and are visible in the data, but the overall impact on coverage rates is not a priori clear. For instance, outsourcing to cheaper contracts, or greater use of flexible employment, may be matched by an increase of collective bargaining activities and coverage of agreement in sectors such as cleaning, catering and security, and for agency work, part-time and fixed-duration employment, as has been the case in the Netherlands (Visser 2013).

Clearly, the relationship between union organizing and collective bargaining is mediated by the level at which unions and employers negotiate. If nearly all bargaining takes place at enterprise level, the two variables - union density and bargaining coverage rates - move in tandem. Unions must show that they represent enough members and have enough disruptive potential to be recognized by the firm as the bargaining agent for its workers. If they don't, there will be no bargaining and no collective agreement. If however, recognition is granted on a national or sectoral basis and unions can negotiate or extend agreements to sectors and firms where they represent only few members, the relationship between the two variables becomes weak. This is shown in Figure 18, which divides the full sample of 85 countries in two: 32 countries with collective bargaining mainly at enterprise level; and 32 countries with bargaining mainly at the sector or cross-industry level (for 21 countries the dominant bargaining level is unclear or unknown). In the first group (panel A, left), differences in unionization account for 85 percent of the differences in bargaining coverage rates (Rsq=.85); in the second group (panel B, right), there is only a very weak relationship, if any (Rsq=.24).

Figure 18: The relationship between union density and bargaining coverage rates, by level of bargaining

Panel A: Enterprise bargaining (32 countries)

Bargaining Coverage



Bargaining Panel B: Multi-employer bargaining Coverage **Union Density**

There is more to learn from Figure 3. Under conditions of enterprise bargaining, the national aggregate bargaining coverage rate rarely exceeds 30 percent. The outliers (panel A) are the small island states of Cyprus and Malta. Other countries at the top end are Ireland (with an estimated coverage rate of 35 percent), Canada (28.2 percent, 16.8 percent in the private sector) and the UK (27.5 percent, 17.4

percent in the private sector), in each case with still some sectors or regions in which employers negotiate jointly. Under conditions of multi-employer bargaining the average coverage rate is much higher and the range of variation larger. At the low end, below the 50 percent line, we find Slovakia (24.9), Israel (26.1), Bulgaria (29.0), South Africa (32.6), Romania (35.0), Macedonia (40.0 and Greece (42.0). In each of these countries, there has been a significant weakening of the institutions supporting multi-employer bargaining in recent years, in particular during financial crisis and Great Recession (Visser 2016).

490 Employer organization

- Rather than union membership, the extent of employers' membership in organizations with a mandate to negotiate explains the level of bargaining coverage. For the group of countries in the lower panel of figure 2 those with multi-employer barganing the extent of employers' organization (measured, like union density and bargaining coverage, as the share of employees working in member-firms) accounts for 57 percent in the cross-national variation in coverage rates. Employer organization is a precondition for multi-employer bargaining at sector, occupational, regional or national level. It is only when employers are organized and willing to negotiate together in a significant number of sectors (regionally or nation-wide) that collective agreements will cover the majority of workers.
- Employer organization is also a condition for *extending* collective agreements and make its terms binding on non-organized firms, a legal practice that is currently used in some fourty countries, most of them in Europe (but also in, for example, Argentina, Brazil and South Africa). Firstly, extension can only happen when there is multi-employer bargaining resulting in a sectoral or occupational agreement. This presupposes employer organization. Secondly, all but few countries require that for any agreement to be extended it must pass a majority threshold, in most cases, that the agreement applies to the majority of workers before extension. In practice this means that the member firms of the employers' organization(s) signing the agreement must together employ at least 50 percent of the sector's employees.

493 Extension

Extension is a public policy act, based on specific legislation, mandating the government, a public agency or the court to make the collective agreement binding beyond its signatories, usually in a particular sector or occupation. Such a decision can serve several purposes like i) supporting collective bargaining and self-regulation;

(ii) furthering industrial peace; (iii) promoting common standards or funds for apprenticeship and vocational training; (iv) establishing and enforcing minimum wages and terms of employment in a sector or occupation; (v) binding foreign service providers to domestic standards; and (vi) protecting wages and rights of migrant and posted workers.

Extension leads to higher bargaining coverage rates by supporting multi-employer bargaining and by adding the (non-organized) firms and its employees bound by collective agreements. Extension increases the likelihood of sectoral agreements; without the assurance that their agreement will be extended, employers in many sectors might refrain from signing an agreement that binds them to conditions that can be undercut by non-organized competitors. The recent reform in Portugal to move from quasi-automatic extension to a 50% threshold for employers (later lowered to 30%) proofs the point. In most sectors, the threshold could not be passed (dominated by small firms, employer organization is rather low; with a national average of 38 percent). Consequently, employers stopped renewing sectoral agreements (the dire ecomomic situation and uncertainty about impending reforms surely contributed as well to the decline in collective bargaining. Blanchard, Jaumotte, and Loungani (2013) plausibly argue that in sectors dominated by small firms (as is the case in most sectors in Portugal, or Greece, and many developing countries)transaction costs might pre-empt collective bargaining ab initio and that extension arrangements help to rule out or at least lessen incentives to undercut decent wages and working conditions. The flipside is that extension creates free rider problems, especially on the union side.

496 Against these potentially disorganizing effects, extension increases union bargaining power (Flanagan et al. 1993:424). By eliminating the competition from low wage firms outside the employers associations (and usually non-union), extension reduces the incentives for employer resistance and lowers the incentives for consumers to shift purchases to the non-union sector. For the critics of extension this is reason to seek its abolishment, as was recommended in the OECD Jobs Study (OECD 1994). Unfortunately, there is not much empirical research comparing sectors or years with and without extension; or comparing extension systems operating with different thresholds and exemption practices. Also, the critics make no mention of potentially positive contributions of extension, for instance facilitating the production of public goods such as industrial peace or vocational training; making wage coordination more effective by raising the coverage rate; or helping to combat substandard competition.

In the Netherlands several econometric studies (sources) have shown that extension does not push up wages and that extended agreements are not more expensive than non-extended agreements or enterprise agreements (Hartog, Leuven and Teulings 2002; Rojer 2002). These findings have been confirmed in a study of the Dutch Labour Inspectorate comparing employee characteristics and wages under different contractual arrangements (Venema et al. 2005). There are however also studies, using data for Spain and Portugal, that show that extended agreements are more costly. How the policy is designed and interacts with other features of collective bargaining clearly matters.

Whatever its importance as a public policy tool, extension is neither sufficient nor necessary for achieving inclusive bargaining coverage. It facilitates but does not create or replace multi-employer bargaining. Central and Easter Europe after 1989 is a case in point; extension is legally possible, under restrictive conditions, but there are fewer and fewer sectoral agreements. Where there are no sectoral agreements there cannot be extensions. This absence can have many reasons, most often the lack of employer organization, but also unions that are weak and fight each other, dire economic conditions, turbulence and rapid change, domination by small or foreign firms, et cetera. Where labour unions are very strong, on the other hand, and where they can resort to solidarity strikes with workers in firms that are not organized in employers organizations and thus not bound by collective agreements, they often manage to impose the "going rate" on unorganized firms even without the help of the law. Denmark and Sweden are among the very few countries in which inclusive coverage is maintained by 'voluntary' means - the other Nordic countries (Finland, Norway and Iceland) have meanwhile adopted extension laws to defend their national wage floors and bind foreign competitors to the same conditions as domestic producers, workers and service providers.

499 8.3 Decentralisation

Since it was first used (in New Zealand) more than a century ago and especially since its diffusion during the 1930s Great Depression (Hamburger 1939), extension has inextricably become connected with the establishment and promotion of sectoral bargaining. More than just a technical tool, extension embodies a legal and political philosophy that values and supports *self-regulation*. Through extension, governments and parliaments acknowledge that collective standards created through negotiations between private interest organizations, if sufficiently broad in coverage, can have "the same social function and may be given therefore the same legal status as state-created standards" (Kahn-Freund 1954). This philosophy held currency during most of the middle years of the Twentieth Century.

Still in 1989, most if the post-Communist countries of Central and Eastern Europe changed their laws to allow for free collective bargaining and make provisions for sectoral bargaining and legal extension of agreements. However, the tide had already turned and the United States, where extension introduced under Roosevelt's 1933 National Recovery Act was declared unconstitutional a year later, began to set a trend of single-employer (enterprise- of firmlevel) bargaining.

The structural adjustment programs in developing countries, meant to liberalize product and labour markets, ended legal provisions for multi-emplouer bargaining and extension in countries like Chile, Indonesia, Malaysia, Turkey, and Mexico. The United Kingdom was the main, actually the only example in Europe where multi-employer bargaining at sectoral level was phased out, leading to a fall in bargaining coverage from 69 percent in 1980 to 47 percent ten years later, 36 perent in 2000 and 29 percent today. New Zealand, after a complete overhaul of the law in favour of individual employments contracts in 1991, is another showcase; coverage dropped from 67 percent before the reform to 15 percent in 2013. Other countries with a more gradual erosion of bargaining coverage caused by firms abandoning employers' associations, fewer union members, and fewer extension orders, are India (from 20 percent or more in 1990 to 6 percent in 2013), Israel (from 60 percent or more to 29 percent), Australia (from 78 to 60 percent), South Africa (from 50 percent or more to 33 percent) and Germany (from 80 to 58 percent).

Many of these developments exemplify processes of 'disorganized decentralisation, based on 'the withdrawal or collapse of the regulatory capacity of multi-employer bargaining' (Traxler 1995:190). In some cases (Chile, Turkey) laws have been rewritten such that sectoral bargaining has become impossible; in other cases (the UK, New Zealand) government ended almost a century of support for multi-employer bargaining; in yet other cases (Israel, South Africa, Germany) it was a more gradual process of erosion, based on the withdrawal of firms from employers' associations, or their opting out from sectoral agreements, and an increasingly limited use of extension orders. But decentralisation can also happen in a very different way, without the destruction or erosion of sectoral agreements and shrinkage of coverage rates. 'Organized decentralisation' occurs when sectoral agreements are changed through 'the gradual delegation of the competences to regulate wage and working conditions to lower levels through framework agreements or opening clauses, while maintaining some control over these lower levels' (Traxler 1995:190). Examples of this development can be found throughout Northern Europe. Together with the devolvement of more issues to be decided at company level, sectoral agreements are maintained, broadened in their coverage (sometime

including new categories, such as part-time workers, temporary work agency and 'dependent independent workers') and often even extended. This devolvement can take different forms depending on differences in legal culture and the presence of unions in the firmsometimes the sector agreement offers a minimum, sometimes a procedural framework, sometime a default position, only to be used if local bargainers cannot find a compromise. Increasingly, these sectoral agreements allow exemptions and opening clauses, allowing the renegotiation of certain issues under particular conditions specified *ex ante* in the sectoral agreement or in the law (Visser 2016).

8.4 Conclusion

504 Collective bargaining, as an established practice and institution which has existed well over hundred years, is under pressure and changing. In many parts of the world it is an institution in retreat, alongside the decline in union organization. This weakening is bad news for workers, especially for those with little individual bargaining power. Collective bargaining is for them the main tool to provides protection, voice and a fair distribution of the proceeds of labour. Governments may step in and in most countries they do provide basic protection, at minimum levels, on wages, working hours, working conditions and workers' rights. Legislation is a complement, but not a substitute for collective bargaining, however. Besides issues of monitoring and enforcement of the law, legislation can never match the potential of collective bargaining, which lies in the combination of negotiated solutions, adaptable and changeable across firms, sectors and economic circumstances in a way the law can never be, and allowing for the direct participation and involvement of the people affected by the outcomes.

In many countries, historically, employers were the initiators and architects of centralised structures of collective bargaining. Their main motive was to prevent unions taking on firms one by one. Keen to lower the level of conflict and create conditions for stable and predictable labour relations, governments offered support for collective bargaining, among others by setting up mediation and arbitration services, and allowing for the possibility to legally extend sectoral agreements and protect these agreements against unorganized low-cost competitors. This has surely contributed to the expansion of collective bargaining as an institution and to the broadening of its coverage. Since the 1980s the winds have blown from the opposite direction. Regaining managerial control over the decisions concerning wages, working hours, working conditions and employment contracting became imperative for many firms, together with aspirations to increase the scope for effort-related pay and variable working hours reflecting each firm's and each sectort's

specific business conditions. The crucial dividing line is whether this process of decentralisation, and in part individualisation, of employment relations marked the end of sectoral and national bargaining or took place through its restructuring, allowing for leaner sectoral agreements and devolving more issues to firm-specific negotiations or individual choice within pre-set menues. The key difference is that in the first case the majority of workers would soon be without any collective bargaining, whereas in the second case a broad and more inclusive coverage could be maintained, even in sectors and countries where union representation had fallen to low levels.

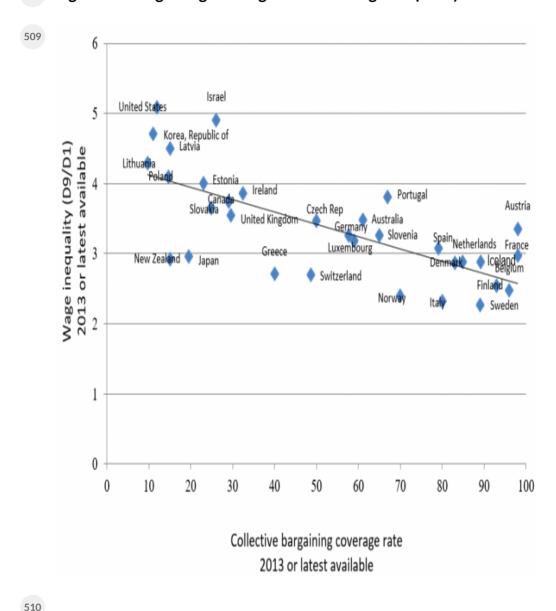
In some recent economic literature it is argued, on theoretical grounds, that at least from a micro-economic perspective enterpriselevel bargaining is always more efficient since it allows faster adjustment to changes in technology, consumer preferences, labour and product markets, or any shock to the system (Bertola et al. 2012). If it is believed that firm level bargaining is optimal and efficient both in terms of setting wages and employment, and never suffer from insider coalitions or engage in rent-seeking, than a multilevel bargaining system, in which sectoral agreements set a wage floor, can only be a drag. Boeri (2012) presents some evidence for this proposition in his survey of two-tiered bargaining in Austria, France, Greece, Ireland, Italy and Portugal before the Great Recession. Unfortunately there is no evidence for the more successful Scandinavian countries or the Netherlands. From a macroeconomic perspective, considering the overall impact on prices and wages, adjustment to shocks and adverse conditions, even if taking placd with some delay, may have a more general effect, involving more firms, if collective bargaining takes a more coordinated form and is based on high coverage rates (Blanchard and Wolfers 2000). Whatever its assumed efficiency, when all collectibe bargaining is relocated to the firm level, the result will be that the large majority of workers will no longer be covered. It would seem more consistent with the goals of both efficiency and equity to promote or support both sectoral and firm-level bargaining, with sectoral agreements profiding a framework, a default in case firm-level bargaining fails, or a predefined set of choices to be made, by negotiators or even

I like to finish this survey by stressing the relationship between bargaining coverage and earnings equality. Using data for 2013 or the nearest year, we find a rather strong negative association between bargaining coverage and wage inequality measured by the P1/P10 earnings ratio. The higher the bargaining coverage, the lower wage inequality, and the highest inequality, clearly, is found in countries in which sectoral and national wage bargaining has disappeared and is inexistent. Bargaining coverage accounts for 50

individual workers, within the employing organization.

percent of the variance in wage inequality across the 32 OECD member states (Visser et al. 2015). Together with other, more sophisticated studies showing the world-wide relationship between union decline and rising inequality, especially at the top half (Jaumotte and Buitron 2015), this should be taken as a warning that collective bargaining is still one of the great countervailing powers against the rise in equality.

508 Figure 19: Bargaining coverage rates and wage inequality 2013



9. Human Capital Formation[31]

This section discuss the main issues involved in the investments of human capital formation based on the literature of human capital.

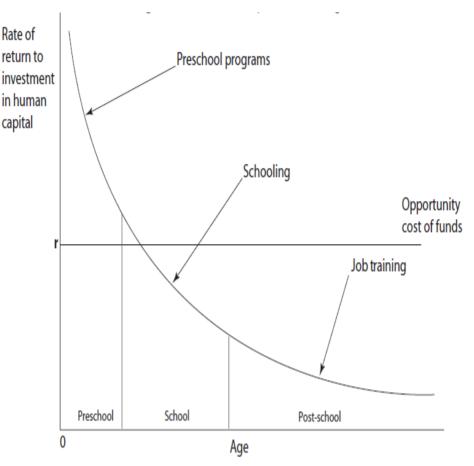
- Since the seminal works of Schultz (1964) and Becker (1962), the role of human capital formation has become central to all discussions about the development of individual potentials and their performance in the labor market, and more broadly, on the success of societies to improve the overall wellbeing of their citizens. By human capital formation it is understood the process of investment and accumulation of a set of skills, abilities and productivity characteristics that an individual acquire along her life cycle. Although investments in human capital encompass several dimensions of skills and ability acquisition we concentrate this section on the issues of investment on formal education and training.
- 515 The human capital can be divided in general human capital and specific human capital (Becker 1993). The general human capital is the stock of skills and knowledge that can be used productively by the individual in any economic activity or task. It is a generic knowledge or skills that are transferable across tasks, sectors or firms. For instance, being literate or able to perform analytical reasoning are skills that are transferable from one task to the other. On the other hand, the specific human capital is the stock of knowledge or skills that are useful in a specific task or company only. The knowledge to operate a specific technology, for example, is valuable to perform that particular task but not much valuable for other tasks or activities. General education is an investment in general human capital and vocational education can be either investment on general or specific human capital.
- The human capital theory predicts that individuals with higher human capital have higher earnings. Mincer (1974) developed an empirical model based on the human capital theory to estimate the rewards of the productivity characteristics in the labor market and, under certain hypothesis, the returns to schooling. In general, the returns to one extra year of schooling estimated ranged from 5% to 15% among the higher income countries (Card 1999).
- 517 Another important aspect of the empirical literature is the issue of measurement of human capital. The proxy widely used is the number of completed years of schooling of the individuals in cross-sectional studies and the average completed years of schooling in crosscountry studies (Barro 1997). More recently, this measure has been called into question. Hanushek and Woessmann (2015) defend that the average years of schooling in a population is not a good proxy for the stock of human capital of a country. More important is the level of cognitive skill of the people proxied by cognitive ability measures such as test scores.

519 Cunha and Heckman (2007) and Cunha et al (2006), based on several evidences of individual's skill formation, develop a very useful analytical framework to discuss the technology of individual's investment in human capital through her life cycle. Skill formation is a life cycle process. Skills are multidimensional and their acquisitions occur in several periods from childhood to adulthood. This technology exhibits two main properties, self-productivity and complementarity. Self-productivity is the property that a skill obtained in one stage of life augments the attainment of other skills later in life. For instance, self-control learned early in life can boost the learning of cognitive skills later on. Complementarity is the property that a skill attained in one period increases the productivity of the human capital investment in future periods. For instance, children exposed to story-telling early on improve their vocabulary so that the investments on learning later on are more productive. Self-productivity and complementarity generates multiplier effects such that skills beget skills and abilities beget abilities. Skill investments at different stages boost each other and earlier investment must be complemented by later investment in order for the early investment to be productive.

These two properties have some important implications. First, it implies that the skill formation has critical periods and sensitive periods. A critical period of a skill is a stage of life when such a skill must be attained; otherwise it will not be acquired anymore. The sensitive period is the stage when a skill is obtained at the lowest cost or effort. Second, it implies that there is no equity-efficiency trade-off in the early life investments. The returns to remediation policies for disadvantaged adolescents are lower than the returns to investments at early childhood among children from disadvantaged background.

The technology of skill formation has a dynamic implication of how human capital investment should be distributed across the life cycle. Figure 20 below depicts the summary of the findings of this large empirical literature that suggests that earlier age investments has greater marginal returns compared to later life investments. The horizontal axis represents the individual's age. The vertical axis represents the returns to investment in human capital. Assuming (i) that the amount invested in each period is the same, (ii) the cost of the investment is constant and exogenous, and (iii) the individual has enough funds to finance the investments, investments in human capital presents decreasing marginal returns and the individuals will invest up to the point that the marginal gain (represented by the curved line) is equal the marginal cost r of funds.





Rates of return to human capital investment initially setting investment to be equal across all ages

524 525

Source: Cunha et al (2006)

526 Cognitive and socio-emotional abilities

- The recent literature on life cycle skill formation has emphasized the fact the skills are multidimensional and both cognitive and socioemotional abilities are important for a successful adult life. Several studies have documented that cognitive abilities are important determinants of schooling, wages and other socio-economic outcomes in the adult life (Heckman 1995; Murnane, Willett and Levy 1995).
- There are also evidences that socio-emotional abilities have important direct effects on adult outcomes. Abilities such as perseverance, motivation, time preference, risk aversion, self-esteem and self-control have direct impacts on schooling as well as on wages and crime behavior (over and above schooling) (Borghans, Duckworth, Heckman and ter Weel 2008; Bowles, Gintis and Osborne 2001; Heckman, Stixrud and Urzua 2006).

The role of the early childhood investments

- Abilities are malleable and can be strongly influenced by the environment. Abilities attained during early childhood are crucial to the development of lifetime skills of an individual. Ability gaps across individuals of different family and economic background appear at early ages and remains later in life (Cunha and Heckman 2006).
- There are evidences, however, that appropriate early childhood interventions can be very effective in reducing or even closing the ability gaps across children of different socio-economic backgrounds. For instance, the Perry Preschool Program, an early childhood program at Chicago targeted at disadvantaged children and which was evaluated experimentally, has significant impacts on several dimensions in adult life such as cognitive tests, employment, earnings, crime behavior and others (Schweinhart et al 2005).

532 Schooling in the developing world: The role of credit constraints

Improvements in the human capital of the individuals are crucial to the development process. Lower income countries exhibit less average years of schooling compared to higher income countries. Figure 21 below presents the average years of schooling of the adult population of 187 countries in 2012.

Figure 21: Average Years of Schooling of Adults by Countries, 2012



- 538 Barro and Lee (2013) compile these Figures using the available data for most of the countries. The average years of schooling across all countries is around 8 years of schooling. The lowest is Burkina Faso with 1.8 and the highest is Germany and US with 12.9.
- The interaction between low income and low education perpetuates the situation characterized as a poverty trap. Many channels can generate poverty traps. One central channel is the role of credit markets in the financing of human capital investments. Poor individuals cannot afford to pay for their education. If they cannot borrow from the credit market, they do not invest in their human capital. In general, poor families lack resources or assets that are used as collaterals for loans. In the absence of a developed credit market which accepts higher future earnings as collaterals for the loans, poor families would invest less in the education of their offspring. Having less education, they would remain poor. On the other hand, richer families are able to invest more in human capital and thereby to earn more in the future. The presence of credit constraints can explain why individuals have different levels of schooling and income within a country (Orazem and King 2008) or why countries differ in their levels of income and human capital (Ljungqvist 1993).
- Several policies have been implemented to improve the human capital accumulation in developing countries. From the demand side, conditional cash transfer programs, school subsides and voucher programs have been experimented in many countries. On the other hand, improvement in school access and school quality and teachers' training are examples of policies in the supply side. The results are mixed. Many policies aimed to increase school enrollment have been successful although improving learning is still a challenge (Glewwe and Kremer 2006). The effectiveness of the educational policies seems to depend on the appropriate policy design well-adjusted to the context (Behrman 2010).

9.2 Vocational education and training

An alternative to the general education path is vocational education and training (VET). This form of education seeks to provide practical experience in a particular occupational field, thereby often breeding specific human capital. VET programs are usually known for easing the school to work transition, increasing workers' productivity and helping provide the market with demanded specific skilled labor. Nonetheless several aspects of this form of education are still unclear: The long term benefits of vocational education, who should pay for it or which system to use, for example, are still up to debate.

The trade-offs between general and specific human capital investments

- On that aspect, one of the first works to assay the trade-offs of specific human capital investments was Becker (1962). Becker defines general human capital as the type of human capital that increases a worker's productivity in all firms. Opposed to it, there is the specific human capital which is a form of capital that increases productivity by different amounts in each firm. For example, a doctor trained internally in a hospital can use her skills in other hospitals and hence it is considered a general skill. The ability to operate a special equipment used in one firm only can be considered a specific skill.
- One advantage of vocational education programs is that they are able to provide workers with both types of skills. Technical Schools for example are known for breeding general human capital that can be used on an entire industry. On-the-job training programs, on the other hand, provide workers with a specific human capital for a particular firm.

546 Short term and long term benefits

- One common claim about specific human capital investments is that it eases the school to work transition by decreasing the probability of unemployment after high-school. Hanushek *et al.* (2011) provides an interesting analysis of life long benefits of this different type of education. After carefully examining unemployment trends in several countries Hanushek *et al.* (2011) concludes that even though vocational education paths may lead to an increase in employability on the short term after graduation, this effect tend to be dissipated over time. In fact, on later stages of life, general education programs seem to contribute more to an increase in worker's employability.
- Although varying considerably by country Hanushek *et al.* (2011) argues that one reason for this difference is that individuals with general education are more likely to take a career-related training than individuals with a specific education. That means that general education generally puts workers in a better position to update their skills, an important asset in dynamic economies.

549 Firms' vs. individuals' investments

Becker (1993) argues that since in competitive markets wages are equal to marginal productivity, firms would have no incentives to make general human capital investments as any marginal productivity increase would be offset by an equal increase in wages. A firm will only offer training if its costs are paid by its employees, who ultimately are the ones that will benefit from the higher wages.

Since specific human capital is defined as the type of training that increases productivity for one specific firm only the wage assumption does not hold. That is, the individual cannot find a higher wage elsewhere and hence the firm can benefit from retaining the services of the trained worker.

The practical implications of this theory is that firms tend to pay for specific human capital training since they benefit from the higher productivity of workers while workers pay for general human capital formation since in this case they benefit from the higher wages.

Although purely specific and purely general human capital are rare in practice Becker's model is considered to be an important insight on the forms of financing the investments on human capital.

"In class" training vs. "on the job" training

Countries differ significantly on the relative amount of investment on general and vocational education. Additionally, VET systems vary significantly across countries. Figure 3 below shows the proportion of workers by type of education across selected countries. Some countries rely heavily on general education such as Canada and others rely more on VET such as Austria. As noticed in Eichhorst et al. (2014) three main categories stand out: the vocational and technical schools, the formal apprenticeship programs and the dual system. The vocational and technical schools are more typical of Southern European countries. This system relies on the educational system to provide the practical skills demanded by specific occupations. Although still considered vocational education, vocational and technical schools deal with a highly transferable form of knowledge when considering the Becker model and thus can be used to increased productivity of works on an entire industry and not only on a particular firm.

Figure 22: Shares of general, vocational and "dual" vocational education enrollment at upper secondary level in selected countries in 2011

- 556 Source: Zimmermann et al. 2013
- Second, the formal apprenticeship programs, most commonly found on the United States, United Kingdom and in Australia, human capital is acquired mostly on the workplace, with institutional instruction serving merely as a complement. Different from the previous system apprenticeships teach a very specific type of skill.
- Finally, there is the dual system. Typical of Germanic countries such as Austria, Switzerland and Germany this system consists in a middle ground between apprenticeship and vocational and technical schools. Displaying a high degree of formalization and a strong involvement of social partners, this system relies on both vocational schools and employers to provide vocational training. While knowledge on this system is considerably more transferable than on the previous, governments usually bear the costs of training in schools, while institutional framework allows companies benefit from trained workers.

559

The challenges of the matching between the structure of the supply of the vocational training and the structure of the occupations in the labor market

- Another common argument about vocational education, or about more specific types of human capital is that it leads higher horizontal mismatches. That is, since the vocational education demands very specific skills the chances of mismatches between the field of training and the job structure are higher. This correlation between specific human capital and horizontal mismatch was first noticed in Robst (2007) at the college level but can also be applied to VET courses. In a recent article however, Eymann and Schweri (2015) finds no evidence that this mismatch leads to a wage penalty in a highly vocational education oriented country like Switzerland.
- On the other hand Mavromaras *et al.* (2012) finds that vocational educational workers are less prone to vertical mismatches when compared to other workers with more general degrees. That is, workers in vocational tracks have a lower probability of being considered overskilled or underskilled for the job they hold. Although the final impacts of vocational training on mismatches is still open to debate (Kahn 2014), it seems clear that school-based VET are more effective when a proper match can be made between the vocational training and the future occupation of employment (Zimmermann et al. 2013; Eichhorst et al. 2014).

9.3 Tertiary education

- Higher education is an important path for those students that seek for higher qualification and a successful career in life. Indeed, there are several evidences for many different countries that the college wage premium is high (Peracchi 2006). However, countries differ significantly on the access to higher education. For instance, around 2/3 of high school graduates access some form of post-secondary education in the US (McPerson and Schapiro 2006), whereas this figure is less than 15% in Brazil.
- Given that it is highly specialized, higher education is very costly. This fact raises several questions regarding efficiency and equity issues. On one hand, even among higher income countries there are credit-constrained families that cannot afford its cost. Some of these potential students could profit from going to college beyond its cost. Moreover, higher education can generate positive externalities on societies. It can help, for instance, promote technological change and generate better-informed public debate. Additionally, if selection into college is merit-based only, it can raise inequalities and keep low diversity among higher education population. If the provision is left to market alone, it can create inequities (Chapman 2006).
- Countries have tackled the access issue in different ways. There are cases that the supply of higher education is public and fully subsided to the students (some European and Latin American countries) and

other that the supply are public or private but it is subsidized through student loans (USA). Clearly, there is no silver bullet to the best way to provide higher education. Fully subsidized and free access to college has the advantage of allowing a greater access but with high costs that may lead to over-education (Groot et al. 2000). Credit and students loans may be a better way to self-select individuals into college but in order to be effective it has to be well designed and implemented (Chapman 2006).

The challenge is that the increase of life expectation and the expansion of the technological frontier push for higher education expansion and the societies have to find creative ways to provide affordable access to the new generations.

9.4 On the Job Training

- Individuals can continue to accumulate human capital after they have completed their formal education through further investments on the job training. Training on the job can occur through learning by doing or through formal training programs at or away from the workplace. The costs of such investments includes the reduced productivity of the trainees during the learning process and the time devoted by the trainers. The benefits for the worker are the gains in productivity later on. These investments can be in general or specific human capital. Generally, employees and employers share their costs. The greater the investment in the specific human capital the greater the cost share born by employers.
- There are empirical evidences that on the job training increases worker's productivity. Haelermas and Borghans (2011) conduct a meta-analysis of the wage effects of on the job training and find that it increases wages, on average, by 2.6 percentage points. Adjusting for hours spent on the job training and schooling, and assuming the rate of return to schooling is 8 per cent, the authors estimate that training courses are profitable until the age of mid-50.
- of course, there are great heterogeneity across training courses. Knowledge about the expected wage returns of a specific program is important for a firm choose which investments on the job training to provide. Moreover, if well designed, on the job training can be a helpful policy for those that missed the opportunity to invest in their human capital in the proper time and need to catch up later in life. For instance, Heinrich et al. (2013) find positive impacts on earnings and employment of the two primary adult workforce support and training programs under the U.S. Workforce Investment Act (WIA).

- This chapter highlights the main issues involved in process of the human accumulation as discussed the human capital literature. There are accumulated evidences about the importance of the investments on human capital for an individual's productive and successful adult life. The correct investments on abilities and skills in the appropriate time along the life cycle of the skill formation can have lasting effects. And well-designed interventions can mitigate or even compensate those less fortunate individuals that did not have the appropriate human capital investment early on.
- There are some clear policy recommendations from this literature. First, appropriate early childhood investments are crucial for individual's success in life and are the most cost effective way to reduce inequalities of opportunities. Thus, governments should create opportunities for early childhood investments for all and appropriate interventions for those less fortunate children in order to avoid potential future risks for their human capital accumulation process.
- Second, skills beget skills. Thus, later life investments should be made in order to the development of abilities and skills be fully realized.

 Governments should provide opportunities for the continuation of the human capital investment process.
- Third, even if an individual reach adult life with lags and gaps on their human capital, there are appropriate policies that can mitigate or compensate for these gaps. In these cases, government can provide appropriate policies that need to be well designed and contextualized in order to bear their full fruits.

577 10. Labor market regulation and social protection[32]

The welfare state has a major influence on the functioning of the labor market through different types of benefits, work incentives, active labor market policies, but these institutions also interact with other labor market institutions such as employment protection, human capital formation or wage setting. From the perspective of social progress in times of constant economic change, technological innovations and globalization, it is an important empirical research topic and a policy issue to understand and adapt labor market institutions and welfare state features in order to balance flexibility

and security in line with a progressive orientation. Therefore, the different pillars of protection against labor market risks need to be analyzed - employment protection, unemployment benefits and active labor market policies – but special attention has to be paid on design issues that relate to the interaction of the three pillars.

- 10.1 Where do we stand and what are the trends in employment protection?
- Employment protection legislation (EPL) is a set of norms governing the dismissal and the hiring of employees. The rules of employment protection can have several objectives: protecting employees against the abusive behaviour of employers, limiting dismissals to reduce the social costs of reorganising the productive apparatus, stabilising the total volume of employment, increasing employment, etc.
- Figure 23 displays the OECD indicator of the strictness of employment protection legislation for workers on regular contracts, which focuses on the conditions for terminating employment and the consequences if a dismissal is found to be unfair. The OECD indicator goes from 0, for the less strict regulation, to 5 for the most stringent. Figure 23 shows that there is a strong heterogeneity across OECD countries in 2013. The stringency of regulation is low English-speaking and common law countries whereas it is high, above the OECD average, in the Czech Republic, Portugal, France, the Netherlands, and Germany.
- It should be remarked that the actual heterogeneity in strictness of employment protection may be even more important than that displayed on Figure 23 because the OECD only reports the mandatory legislative restrictions governing recruitment and dismissal. In practice, employment protection can be specified in legislation, collective agreements, or individual employment contracts. It also depends on the interpretation of rules by courts or tribunals and the effectiveness of enforcement that are not accounted for by the OECD indicator.
- Figure 23: OECD indicator of the strictness of employment protection for individual and collective dismissals (regular contracts) in 2013

585 Source: OECD.

Economic analysis indicates that EPL mainly has an ambiguous impact on unemployment and employment. Of course, employment protection reduces the destruction of permanent jobs. However, on the other hand, it reduces employment creation, as the additional costs induced by maintaining an unprofitable workforce reduces the anticipated profitability of new jobs. Furthermore, EPL can increase the stability of some jobs and increase the instability of other jobs not concerned by the most restrictive provisions, leading to more dualism or segmentation in the labour market. EPL also has an ambiguous impact on productivity: on one hand it can improve the

experience of workers because it increases their job tenure, but on the other hand it may weaken the necessary reallocation of the labour force towards more productive jobs.

- Many empirical studies have been devoted to EPL over the last two decades, exploiting natural experiments provided by reforms of EPL. The empirical literature which relies on microeconomic data with proper identification strategies finds that more stringent EPL reduces labour turnover of permanent workers, but has adverse effects on overall employment and increases the instability of temporary jobs (see Boeri et al. 2015, for a recent survey). EPL also reduces labour productivity and lengthen unemployment spell.
- All in all, EPL has strong redistributive implications. It protects those who already have a job, notably a permanent contract in the formal sector. Unemployed individuals and workers with temporary contracts generally suffer in the presence of strict EPL rules for permanent contracts and therefore gain from labour market flexibility enhancing reforms, notably when they are implemented uniformly across the board rather than being confined to new hires in new types of contracts. Two-tier regimes that allow for the coexistence of very rigid and very flexible contract types indeed increase labour market segmentation, preventing the outsiders from having access to the primary labour market of permanent contracts. Therefore, EPL does not appear to be an efficient tool to protect workers against economic uncertainty.
- 10.2 What do principles of justice suggest?

590

591 Protecting employees against abusive dismissals

The need to protect salaries against abusive dismissals constitutes an objective of employment protection in Europe. It is the doctrine of the 'just cause', which states that employers cannot fire their employees without invoking a proper reason. This doctrine is not applied everywhere. For example, the United States, which have the lowest degree of strictness of job protection among OECD countries, have adopted the doctrine of employment at will, which states that an employer can terminate a work contract for good reasons, bad reasons or without reason, as long as it does not infringe on fundamental human rights. This doctrine, which does have a few exceptions in the United States, is justified by the idea that imposing constraints on the choice of work contracts is more of an inconvenience than an advantage for employees. They are free to negotiate redundancy payments, even for lower salaries, if they want. However, according to this doctrine, imposing legal

redundancy payments would have negative effects on salaries or other benefits that an employee would get out of the employment relationship, which an employee does not necessarily want.

This doctrine is valid in an environment where the labour market works in a perfectly competitive manner without information asymmetry between employers, employees and public authorities. This is obviously not the case in general. As such, the doctrine of the just cause needs relevant justification. For example, an employer can fire employees because they demand the application of costly regulations, even if they are useful for the entire company, like regulating work accident prevention. This kind of dismissal is clearly abusive: it goes against a regulation that is justified by efficiency and fairness.

Providing insurance against dismissals

Besides justifying employment protection legislation by the need to protect workers from arbitrary actions by employers, it can be argued that job protection can provide insurance to workers when the lack of public employment insurance or imperfection of financial markets limit the possibilities for workers to insure themselves against dismissals. However, job protection inhibits the ability of firms to adapt their manpower and hinders the reallocation of workers toward more productive jobs. More stringent protection of open-ended contract also induces firms to use more temporary jobs, which increases job turnover and labour market segmentation. From this perspective, job protection is clearly not the best policy to provide insurance against dismissals. Unemployment insurance accompanied by active labour market policies aiming at facilitating the reallocation of workers from low to high productive jobs is much more efficient than job protection.

Job protection and the social value of employment

- 597 The decision to destroy a job can have repercussions that go far beyond just the interests of the company and the employee concerned. In this case, the value of a job for the whole economy its social value is different from its private value.
- An important reason for the gap between the social value and private value of a job resides in the design of the tax system. A very large majority of tax revenues come from people who have a job. The unemployed and the non-working contribute very little to financing collective goods and transfers. This results in a difference between the social value and private value of a job, measured by the loss of

obligatory contributions and the additional costs in the form of social transfers induced by the passage of the status of employee to that of unemployed or non-working.

In this context, an employer that fires one of its employees counts on the other employees and employers to finance the benefits of the dismissed employee. This employer also does not taken into account the fact that the job they destroyed will no longer help finance unemployment insurance. By neglecting the fiscal consequences caused by their behaviour when they dismiss someone, companies only take into account the personal costs of what they suffer and not the actual cost of this dismissal for the group. In situations where this actual cost exceeds the personal costs, companies will have a tendency to destroy too many jobs. As stressed by Blanchard and Tirole (2007), a tax on layoffs, proportional to the social cost induced by layoffs can constitute a form of EPL that incentivises employers to take socially efficient layoff decisions.

600 Major obstacles and opportunities

601 Governments carry out reforms to increase the flexibility of the labour market. Nevertheless, most frequently, these reforms essentially made the labour market flexible to the fringe by facilitating the use of temporary jobs without significantly modifying the protection of permanent jobs. In many European countries, this evolution has resulted in a strong segmentation of the labour market, with a market for temporary jobs, reserved as a priority to the youth, women, immigrants and less qualified employees, and a market for permanent jobs, reserved as a priority to the most qualified employees with good professional experience. In this context, temporary jobs act as an adjustment variable, and it is the most precarious populations that are systematically the most affected by recessions. The segmentation of the labour market between temporary and permanent jobs raises more issues than just those of fairness. It also causes an ineffective rotation of the workforce on many levels. Firstly, it translates into a rotation excess of the workforce, as companies avoid transforming temporary jobs into permanent jobs when the costs of parting with the employee are different. Consequently, the employees in temporary jobs that stay with the company for a limited time benefit less often from professional training programmes and have more problems building up a professional career. Moreover, the strong protection of permanent jobs, characteristic of highly segmented labour markets, limits the reorganisation possibilities of a large part of the productive apparatus.

In order to complete labour market reforms, as a priority, governments should fight against the segmentation between temporary and permanent jobs and align the social and the private values of employment. A foreseeable strategy consists in substituting Pigouvian layoff taxes (setting incentives to avoid negative external effects) to the rules that limit the dismissals for economic causes. The details of implementing this strategy depend of course on each national context (Garcia Pérez, 2015). These reforms should be part of a comprehensive package that promotes better safety net and the reallocation of labour towards more productive jobs relying on effective unemployment insurance and re-employment services (Scarpetta, 2014, Eichhorst, Marx and Wehner, 2016), effectively linking the functioning of the different pillars of protection so that they support each other in providing flexibility and security at the same time and in a fair and balanced way.

10.3 Unemployment Benefits and Active Labor Market Policies

- Welfare state elements such as unemployment benefits and active labor market policies can provide security of income and adaptability via better reemployment chances in a flexible and turbulent labor market. This understanding of unemployment protection allows for the reconciliation of security objectives with a flexible labor market that depends on successful transitions from job to job.
- Figure 24: Unemployment protection schemes worldwide by extent of legal coverage of the labour force, latest available year

- Note: Figures in brackets refer to the number of countries in each group. Data from 2009-13; for most countries, 2012/13.
- 609 Source: ILO World Social Protection Report 2014/15.
- Figure 25: Effective coverage of unemployment benefits, 2007, 2009 and 2012/13

611

- Notes: Numbers of unemployed receiving unemployment benefits collected from national social security unemployment schemes.
 Global average weighted by the labour force.
- 613 Source: ILO World Social Protection Report 2014/15.
- Most countries with unemployment benefits have a two-tier system based on (a) unemployment insurance linked to contributions during employment that provides earnings-related benefits for a limited duration, and (b) means-tested income support schemes for those unemployed people with no or insufficient entitlements to insurance benefits. Graphs 24 and 25 however show the huge differences in formal and effective coverage by unemployment benefit systems. In many low- and medium-income countries access to benefits is very limited.
- The effects of benefit systems on income, employment trajectories and other indicators have been analyzed intensively. First, it can be shown that unemployment benefits play a stabilizing role at the level of the individual or household as well as at the level of the economy.

On the one hand, they compensate for part of the individual income loss due to unemployment, and on the other hand, as they kick in quickly in a recession with increasing unemployment, they can effectively stabilize domestic demand (Dolls, Fuest and Peichl 2012). Hence, well-designed and accessible benefits can help avoid poverty, social exclusion and an aggravation of economic slumps.

Second, unemployment benefits, in particular regarding earningsrelated unemployment benefits collected in the initial phase of unemployment, can help protect acquired human capital as the unemployed are not forced to take up the first best jobs, but can afford some time to find the best available job match. At the individual level, this can lead to better labor market transitions, more productive employment and higher earnings, while, at the aggregate level, better job matches imply a more productive employment of those in the labor force. More generally speaking, unemployment benefits systems can serve as a mechanism to ensure the acceptance of a flexible and dynamic labor market (with less rigid EPL) that is characterized by creative destruction and job turnover associated with labor turnover that requires an adaptable and productive labor force. If employment protection becomes dysfunctional to the extent that it stabilizes obsolete jobs and tends to slow down structural change by hampering mobility to more dynamic sectors, welldesigned unemployment benefits (articulated with effective ALMPs) can ensure a more mobility-friendly, dynamic labor market. However, in particular, insurance benefits can lead to a double disadvantage for those that have only relatively short employment records such as young people, women, labour market entrants.

Unemployment benefits also interact with alternative benefits such as disability insurance or early retirement options that may lead to early withdrawal from the labor market. In general, designing unemployment benefits in a way to minimize disincentives to work and avoid long-term benefit dependency is a core issue. Benefit systems allow the public employment service to remain in contact with their clients, but to counter potentially long-lasting benefit dependency many OECD countries have turned towards activation over the last two or three decades. Making benefit receipt conditional upon active job search and participation in active labor market policy measures has been the major change in this respect, this implies stricter monitoring and enforcement on the one hand, providing better targeted and tailor support on the other hand. Of course, this could not be achieved without changes the mode of operation of public employment services and making them more effective (see also Martin 2014; Martin and Grubb 2001, Eichhorst, Kaufmann, Konle-Seidl 2008, Graversen and van Ours 2008, Rosholm 2014).

When looking at the development of unemployment benefits and ALMPs in major world regions, in particular after the crisis, one major trend has been to try to buffer the impact of the crisis through some benefit expansion, in particular towards vulnerable groups such as fixed-term employees, freelancers or young people – however, in times of austerity this was oftentimes counterbalanced by retrenchment measures (ILO 2015c, EC 2016). The same holds for ALMPs where both expansionary and curtailing steps could be observed. Hence, there is the challenge of unequal or limited protection and support in some countries, not only developing countries, as regards insurance for labor market entrants, unemployed with short employment spells and in case of exhaustion of insurance benefits.

The evaluation of ALMP has made major progress both in terms of data, methods and establishing a significant body of evidence, mostly for developed countries (Card, Kluve and Weber 2010, 2015; Carling and Richardson 2004; Jespersen, Munch and Skipper 2008; Sianesi 2008; Greenberg, Michaloupoulos and Robins 2003). While micro studies analyze the effects of measures on participants in comparison to similar non-participants, macro studies can also take into account potentially significant side effects such as deadweight losses, displacement and substitution effects. Apart from that, medium and long-run effects might differ significantly from short-run outcomes of ALMPs.

In general, direct job creation schemes fully funded by the public sector are seen as rather problematic with respect to later entry into the regular labor market. However they may play a certain role for the hardest-to-place, but this requires proper targeting and selection. Publicly sponsored training has been proven to show positive medium- and long-run effects on employment probabilities and subsequent careers, once the lock-in effect during the training period is overcome. Again, carefully designing training programs that prepare for actual work experience is crucial. Subsidizing employment with private employers through temporary hiring incentives is costly and has potential side effect on non-subsidized workers and firms, but they can lead to higher employment probabilities of those who would not have entered the labor market so quickly. Finally, job search assistance and placement have been identifies as effective and cost-efficient measures. However, there is now also a broad consensus that mainly demanding, work-first interventions based on counselling and strict activation are effective in shortening unemployment, but they work only in such a way for unemployed close to the labor market, but not for others as regards access to decent and sustainable jobs. If there are individual barriers to employment, highly individualized support is preferable, including

a broad repertoire of measures, including major training. However, this is quite demanding as regards PES capacities and funding needed.

Active labor market policies are not unaffected by broader institutional arrangements and economic conditions. In rigid labor markets with heavily regulated permanent contracts and other barriers to mobility the role of ALMPs in stimulating entry and career advancement is more limited than in more permeable or 'flexible' constellations. And in a situation of weak labor demand, the capacity of the labor market to absorb job searchers, even if supported, trained and advised is more difficult. In difficult economic situations with high or increasing unemployment, effective delivery of services at high quality might be more problematic due to a lack in appropriate delivery infrastructure and funding possibilities as well as limited labor demand – which implies also that labor market problems cannot be solved through ALMPs. However, there is also some evidence that ALMPs have a larger impact in bad times (Kluve 2010).

Despite many reforms in the labor market, many countries continue to suffer from a high share of long-term unemployed people or otherwise excluded working-age persons. Long-term unemployment can be combatted with tailored supportive services as many studies show particular effectiveness of ALMPs with regard to those at risk of long-term unemployment (ideally at an early stage) (see also Lalive, Morlok and Zweimüller 2011). However, this requires major fiscal and administrative effort, in particular to deliver appropriate packages of tailored support, including training and other forms of ALMP. For the most difficult to place, some well targeted forms of subsidized employment may be the only realistic option once all other efforts have failed and when one still wants to ensure social inclusion.

Unemployment benefits and active labor market policies have a long tradition in developed countries, designing proper benefit systems and ALMP delivery structures is an unsolved issue in many developing countries and emerging economies, in particular when there is a high share of informal workers and self-employed. In the formal sector, employment protection and severance pay often ensure against income losses. Non-contributory schemes can play a role here as can steps to establish conditional income support schemes that help move to the formal sector (Robalino 2014). On the ALMP side, public works programs can act as a partial replacement for income support in these cases. All in all, a benefit system combined with active labor market policies generates significant demand for fiscal resources as well as administrative capacities to ensure proper delivery.

Unconditional basic income has been proposed as alternative to existing conditional benefit schemes with a view of simplifying administration, removing the punitive element of activation policies and facilitating innovation and creativity. However, unconditional basic income is a contested issue as some think that unconditional basic income support would be a plausible option for a future characterized by a decline in paid work while other see this as a risky break with a welfare state and society based on paid work as a major mechanism of societal inclusion, a division of labor and public revenues. In any case, unconditional basic income would imply a massive change in social policies with fiscal and economic implications that are hard to assess at the outset.

625 10.4 Flexicurity

- 626 The Concept of "Flexicurity"
- 627 Linking the institutional elements discussed above, the term flexicurity, as defined by the European Commission, refers to "an integrated strategy for enhancing, at the same time, flexibility and security in the labour market" (European Commission 2007: 5). The strategy was pioneered in Denmark and subsequently began to figure prominently in the policy recommendations of the EU and the OECD (Jorgensen 2005; Viebock and Clasen 2009). As the name itself suggests, flexicurity policies seek to reconcile employers' increased demands for flexibility with the continuing demands of employees for some measure of job security. On the flexibility side, this involves various measures designed to loosen restrictions on employment, including for example changes to employment protection legislation to make it easier or less costly for employers to hire and fire workers, or measures that loosen restrictions on employers' ability to hire workers in various forms of "atypical" (nonstandard) employment (agency work, fixed term contracts, and other forms of irregular (on-demand) employment). On the security side, flexicurity often involves one or more of a bundle of measures designed to support workers in period of unemployment but also especially—to ease the transition from one job to another - e.g. through assistance with job searches or job placement, or by providing opportunities and support for retraining. Such encouragements and supports are typically accompanied by inducements - e.g., requirements to actively seek alternative employment or to participate in training programs—a kind of activation "stick" to reduce periods of unemployment and dependence on passive (as opposed to active) support.
- The idea of flexicurity took hold in some European policy circles in the 1990s as a response to persistently high unemployment, particularly long-term unemployment and unemployment among

youth in many countries. From a neoliberal perspective, some economists had long drawn invidious comparisons between Europe's "sclerotic" labor markets and the more flexible labor markets of the US and other "liberal" market economies. While such arguments were often overdrawn, it did appear that high levels of employment protection in some cases contributed to the exclusion of labor market outsiders, "hamper[ing] the transition from employment to work" (Viebrock and Clasen 2009:7).

While flexibility argument were thus often brought especially by proponents of deregulation, other critiques emanated from the left, sometimes inspired by the increasing participation of women in the labor market and the growth of various forms of atypical employment. For example, other studies suggested that strong employment protections tend to suppress women's employment (Nelson and Stephens 2013). In this context, social democrats also had their own reasons for questioning the capacity of traditional social protections to protect against new emerging risks in the labor market. As Colin and Palier (2015), for example, pointed out, traditional social policy in many countries organized around the assumption of households headed by male breadwinners enjoying stable careers within a particular firm or industry, was long out of synch with the growing realities of the service and knowledge economies, in which women make up a large proportion of the workforce and in which employment is often less routine and less stable. Adapting social policy to this new reality would require a rethinking of traditional assumptions in which the state would be called upon not just to cover "traditional risks" (above all, occasional spells of unemployment) but to adapt to new emerging risks, including those associated with less continuous career paths, ongoing rapid technological change and the need to reconcile work and family in a context in which women no longer stay at home (Beramendi et al. 2015). This rethinking has been associated with a reorientation of policy initiatives, away from the traditional emphasis on job security toward an increasing focus on employment security i.e. a retreat from the idea that individuals should be protected against losing a particular job toward facilitating and promoting employability generally—hence the centrality of training and retraining to most conceptions of flexicurity.

630 Clearly, then, one of the great attractions of flexicurity lies in the appeal it holds for observers and policy makers on different ends of the ideological spectrum (Viebrock and Clasen 2009). Neoliberals praise the "flexibility" components, i.e., the reductions in traditional employment protections and the activating elements of labor market policy, and urge further moves in this direction. Defenders of social democracy, for their part, stress the "security" aspects and the way the model provides support for those displaced by the market, thus

reconciling "adaptability to a changing international environment [with] a solidaristic welfare system [that] protects the citizens from the more brutal consequences of structural change" (Madsen 2002: 243).

631 Flexicurity in Practice

- The idea of flexicurity first gained traction in the context of the Danish "jobs miracle" of the 1990s. After a decade of soaring joblessness and a suffocating public debt, Denmark succeeded in reducing its unemployment rate dramatically, from over 12% to under 5% in the late 1990s. Denmark's success has been attributed to a set of policies that have been characterized as involving a "golden triangle" of mutually reinforcing components, namely: flexible labor markets, generous support for the unemployed, and labor market policies that actively underwrite retraining and placement. Some elements of the golden triangle in particular, relatively low employment protection were inherited from the past (e.g. Campbell and Hall 2006). Other elements, notably activation and training-based labor market policies were products of policies initiative in the 1990s (Madsen 2006: 331; also Viebrock and Clasen 2009).
- Activation in Denmark was put on the agenda by a center-right government, but its political fate relied on a broader consensus. Although some of the initial steps were undertaken by a conservative government, when the Social Democratic Party returned to power in 1993, the party did not use its strong majority to turn back, but instead to push forward with labor market reform along the lines recommended by a tripartite commission (the Zeuthen Commission) that included representatives of both employers and unions (Green-Pedersen 2001: 60, 63). The recommendations of the Zeuthen Commission struck a balance between flexibility and security. Thus some moves were unambiguously liberalizing and represented a decisive "departure from a 'rights-based' to an 'obligation-based' regime in which unemployed individuals are met with increasing demands in order to receive benefits" (Mailand and Ibsen 2009: 85). A foundational 1993 law (1) reduced passive unemployment support to four years, followed by a period of three years of activation; (2) attacked the problem of cycling by specifying that, unlike previously, participation in active labor market policies (ALMPs) would not prolong eligibility for unemployment benefits; and (3) required longterm unemployed persons to work out an individual action plan with labor market representatives aimed at reintegrating them into the labor market.

However, alongside these more stringent activation requirements, the supports for reintegration were also strong. Thus, through the 1990s activation policies under the Danish Social Democrats were coupled with a vast expansion of funding for ALMPs designed to facilitate a move on the part of the unemployed back into employment. Government funds supported measures to ease workers' reentry – through enhanced support from the public unemployment service, heightened efforts directed specifically at long-term unemployed and minorities, and stepped up efforts to provide training that was designed to meet the needs of local employers. Important initiatives in the area of continuing training emerged in conjunction with these reforms, so that government policy not only supported the retraining of unemployed persons to upgrade their skills while out of work, but also promoted ongoing skill acquisition by workers who held jobs, mostly through tuition

subsidies and wage supplements.

Another widely cited example of the implementation of flexicurity can be found in the Netherlands in the 1990s. The Dutch implemented a quite different model of flexicurity, however -arrived at politically via a very different path and taking different form (e.g., Thelen 2014; Viebock and Clasen 2009). In this case, flexicurity referred more to the "normalization" and upgrading of benefits attached to various forms of part-time and atypical employment. In this case, previous decade (1980s) had seen a rather striking increase in part time work, fueled in large measure by the entry of women in the labor market in an effort to shore up household incomes in the context of deindustrialization and widespread inactivity among male blue collar workers (see especially Visser 2002). Again, tripartite negotiations played a crucial role, and the so-called "New Course" agreement of 1993 marks the beginning of the turn toward the Dutch version of flexicurity. Different from Denmark, in the Netherlands flexibility revolved around upgrading part-time work as a solution for expanding employment and reconciling work and family in Christian democratic context featuring limited public day care support (Keizer 2011: 151). The New Course Agreement thus focused heavily on the goal of upgrading the wages and benefits attached to part-time and other forms of atypical work.

Unions and Social Democrats alike had come under increasing pressure to adapt their strategies to new conditions. An internal report of the Social Democratic Party, commissioned by Party Chairwoman Marianne Sint and released in July 1991, had "criticized internal party structure and decision making procedures as being dominated by [male blue-collar] 'in-groups'" (Wolinetz 1993: 107). Dutch feminists were ambivalent about part-time work as inherently second-class, but within the trade union confederation (FNV),

women members "began to campaign for more equality between part-time and full-time workers" (Visser 2011: 15). Women remained seriously underrepresented in the unions, but at the same time the traditional male breadwinner model had clearly lost its "once dominant position in the Dutch labour market," since by the early 1990 s close to half (44 percent) of all adult union members were part of dual-earner households (Visser 2002: 29, 31).

- The goals of the New Course agreement were pursued in the late 1990s under the auspices of the so-called Purple Coalition composed of Social Democrats and Liberals, a government that excluded the Christian Democrats for the first time in the postwar period. The growing influence of social liberals - both within the government and in the Social Democratic Party itself - paved the way for a series of government reforms over the next seven years that regularized parttime employment by upgrading the status and benefits attached to such jobs. Major legislation in 1996 prohibited discrimination on the basis of working hours; henceforth, part-time workers were entitled to equal treatment in wages, overtime pay, holidays, bonuses, occupational pensions, and training (Bovenberg and Wilthagen 2008: 10; also van Oorschot 2004 a: 20, 2004 b: 216). Part timers would also be covered by the same rules as full-time workers with respect to dismissal protection, probation, unemployment benefits, sick pay, and disability (Visser 2011). The previous working-hour threshold for entitlement to the statutory minimum wage - which had exempted jobs involving very few hours - was eliminated (Salverda 2009: 12 -13; Keizer 2011).
- The New Course agreement also set the scene for improvements in the rights of temporary agency workers. In 1996, new rules were formulated in a central agreement on "Flexibility and Security," which became the basis for the law of the same name passed in 1999 (Hemerijck and Visser 2000: 242 –243). These measures relaxed restrictions on fixed-term contracts while they also stabilized the employment status of agency workers by stipulating that those who were employed for over twenty-six weeks were entitled to a permanent (open-ended) contract with the agency. As "regular" employees, agency workers would then be entitled to all the usual rights and benefits, including employment protection, rights to training, wage guarantees, and supplementary pensions (Bekker and Wilthagen 2008: 10; Bovenberg and Wilthagen 2008: 10; see also Viebrock and Clasen 2009: 315).
- Similar to Denmark, changes in labor market policies were accompanied by a significant increase in support for ongoing training. However, whereas in Denmark the state itself played a strong and direct role in sponsoring and financing such training, in the Netherlands, these changes ran largely through collective

bargaining. Thus, beyond the different emphasis in the substance of flexicurity policies (in the Netherlands, focused on part-time and atypical work, in Denmark, focused on measures for the unemployed), the training component is realized in somewhat ways in Denmark with stronger direct involvement on the part of the state (through state funding and subsidies), and the Netherlands, relying more heavily on collective bargaining. An important difference, then, is that in Denmark the unemployed have stronger training and retraining rights and benefits, whereas in the Netherlands, collectively bargained training rights by definition do not extend beyond the currently employed. In short, what is strikingly missing in the Netherlands is a similarly strong public commitment to investing in skill development for the most vulnerable segments of the working class. In Denmark, state-sponsored training (especially for low-skill workers) is the single most important mechanism through which the activating elements in labor market policy are compensated and through which the attendant risks are collectivized. In the Netherlands, by contrast, continuing training runs mostly through collective bargaining. While the reach of training agreements is impressive - and a direct consequence of state extension clauses there are still problems with respect to the training of the unemployed, who are by definition outside the ambit of collective bargaining.

640 Varieties of Flexicurity

- As these examples suggest, considerable "play" in how policy makers embrace and implement what travels under the broad banner of flexicurity. Above all, we can observe considerable cross-national variation in the balance struck between the "flexibility" and the "security" components. Thus, for example, labor market reforms in the UK under Prime Minister Tony Blair tended to emphasize the goal of flexibilizing the labor market over compensatory policies and training rights. Similarly, in Germany, the Hartz reforms of the early 2000s emphasized deregulation.
- Moreover, even in the classic cases of flexicurity, the balance between flexibility and security continued and continues to be contested (Lødemel and Trickey 2001; J. Andersen 2010: 23). In the Netherlands, the Center right government that succeeded the Purple Coalition scaled back on many of the compensatory elements, including scaling back on rights and benefits for contract and agency workers. In Denmark as well, in the hands of less redistributively minded parties, the model has similarly shown signs of vulnerability to a tilt toward more flexibility and less security, even if it continues to rest on both elements (Berkel and Møller 2002; Bredgaard and Larsen 2006: 19; Larsen 2009).

443 11. Conclusion and policy recommendations

- 644 Summarizing the evidence
- This chapter aims at summarizing and assessing the global evidence on major factors influencing the future of work. It has become evident that there is a large variation in national developments, yet, there are shared issues of general relevance that make it possible to tell a global story.
- Technology and globalization are intimately related forces driving permanent structural change in employment and affecting the global distribution of economic activities and jobs. While there has been permanent technological change, its implications differ with respect to levels of development and speed of adjustment around the globe. Over time, global integration has become stronger, not least facilitated by modern IT and other technological innovation, leading to declining costs of international transactions, but also by political decisions to remove barriers. This all points at the importance of political decisions in shaping the impact globalization can have on the further development of employment patterns. Looking at most recent changes, workers in different parts of the world have been affected quite asymmetrically by technology and globalization. Winners and losers of change can be identified, with a certain tendency towards employment polarization in many developed countries, creating societal and political challenges in compensating for losses while not foregoing the potential wins - and by preparing societies to reap the benefits of technological advancements and global integration through forward-looking, preventive strategies.
- When looking at different types of employment types we can identify a large variety of contracts, deviating more or less from a permanent, full-time dependent employment status in the formal sector, the standard employment relationship, which is often taken as a benchmark to assess the quality of a job. Part-time work, fixed-term contracts, temporary agency work, but also different forms of selfemployment or own-account and crowd work as well as informal employment differ regarding core parameters such as employment stability, earnings and inclusion into social protection from standard employment. Institutional changes, but also changes in the structure of demand and supply for certain skills have opened up this broad diversity of contractual relationships in the world of work around the globe, not least the creation of highly flexible demand patterns and complex value chains in today's economies. Virtually all labour markets exhibit some forms of segmentation, with barriers to mobility between the segments. From a policy perspective,

narrowing the regulatory gaps as well as inequality regarding inclusion into social protection between different contract types is a pressing issue, with concrete challenges depending on the national context.

While there is a fragmentation of labour markets characterized by different forms of 'external' flexibility, firms have also become more flexible 'internally', i.e. as regards their internal processes of working, but in particular regarding working time and mobile working. In general, patterns of working time and work place flexibility can be in the interest of employers, of workers or both. Over time we have seen many new and diverse arrangements emerging, potentially reconciling productivity and flexibility interests of employers and work/life preferences of workers. There has been an improvement in many cases. Still, there are many issues that can be perceived as problematic from a social progress point of view, in particular very short, very long and unpredictable working time requirements or ill-designed shift work arrangements which have negative effects on workers' health and families. This is also observed in poorly regulated

informal employment or in segments of formal labour markets where

working time standards have eroded due to a lack of collective

bargaining and appropriate legislation and enforcement.

Moving to the margins of the labour market, different forms of under-, non- or unemployment continue to exist, pointing at a full or partial exclusion of some groups from paid work. Patterns of exclusion and boundaries of the labour market are structured by institutional rules defining certain status forms, and in particular only the existence of a welfare state and social policies make unemployment a useful category and indicator in some regions of the world. This creates measurement issues on the one hand, calling for a multitude of indicators to assess and compare the extent of lack of work, and effective policies to combat unemployment and exclusion on the other hand.

objustive in the labour market is on the increase, with rising employment of women, older workers and migration, although significant gaps regarding the labour market integration of women, older workers as well as migrants, continue to exist in some regions of the world. Empirical studies into the effects of diversity create a nuanced picture, pointing at the many dimensions of diversity and its consequences. More heterogeneous work force can bring about gains in terms of productivity and innovation while requiring additional efforts regarding cohesion and integration. Diversity is also often linked to discrimination. In fact, there is empirical evidence on discrimination in the labour market based on ethnicity, gender, age, disability, sexual or religious orientation – this is not only creating barriers for individual careers but also implying a loss of

productive potentials in the economy. Anti-discrimination rules and systematic awareness raising, monitoring and enforcement are therefore justified as are positive strategies to change actual practices in the labour market.

Work is a core human activity, and it is intimately related to individual health and well-being. While unemployment is definitively harmful in terms of well-being and health, being employed can help raise individual well-being and health. However, there are also some health risks attached to work. Precarious forms of work can have negative effects on mental health. Industrial work was particularly at risk of physically hazardous working conditions as regards occupational injuries or work-related diseases caused by chemical substances, but as a matter of fact, in many low and medium income countries these risks are still very much a present phenomenon. However, in many developed countries recent changes in the modern world of work have created new mental and psychological demands on individuals, creating stressful psychosocial work environments and working-time related stress. These conditions have now been identified using theoretical models and standardized measurements, and respective research evidence indicates that jobs defined by high demands and low control, and by high effort in combination with low reward, increase the risk of stress-related disorders, such as cardiovascular disease or depression. While this evidence has clear implications for work practices within firms so that employers have to meet their responsibilities, there is a role for public policies as regards the prevention of health risks at the workplace, in particular with respect to regulation, monitoring and support services.

652 Collective bargaining is an important institutional mechanism to establish negotiated standards regarding pay, working time and other working conditions. It also has a role in settling distributional conflicts. Compared to legislation, collective agreements can be more flexible as they take into account sectoral or firm-specific issues. Empirical research can show that multi-employer collective bargaining can lead to lower earnings inequality and that coordinated or centralized bargaining is beneficial to a positive economic development. Yet, bargaining systems are quite diverse around the globe, with huge differences in bargaining coverage, union density and employer organization, as well as a tendency to decline in collective bargaining coverage and increased decentralization; similar differences can also be observed inside individual countries. While collective bargaining is a voluntary system, public policies such as extension clauses can also contribute to high coverage in systems with low organizational density.

Human capital is a core element of individual life chances and employment potentials. It is also crucial for economic productivity and societal wealth. Empirical research points at the fact that skill formation has a peculiar pattern over the life course with educational investments at different stages building upon each other. Education in early childhood has the strongest returns and a clear potential of reducing ability gaps across children from different backgrounds. Schooling enrolment is far from complete, in particular in medium and low income countries, but is essential in securing individual chances of independent living outside of poverty. Comparative research also gives hints at the specific contribution of vocational education and training for a smooth transition from school to work, in particular if combined with structured learning in firms. Higher education is important for societal progress and innovation. As with schooling also higher education tends to operate under credit constraints so that support through public subsidies is an important measure to mitigate inequality in access to higher education. Finally, continuous training on the job is needed to update skills in a changing

Policies regarding employment protection, unemployment protection and reemployment have direct influence on stability and mobility on the labour market. In many countries, institutional rules governing permanent contracts in the formal sector stabilize openended employment relationships, but may hamper entry into the core labour market for some groups in the labour force as they tend to reinforce a segmentation of employment. Furthermore, in many countries both formal and effective coverage by unemployment benefits is very limited, leading to a double disadvantage of those in more temporary or informal employment as their access to unemployment protection is also limited. Hence, employment and unemployment protection often privilege certain groups over others, creating gaps in protection for the most vulnerable people. Active labour market policies can help promote the reentry into employment after phases of unemployment, and in fact, there are many options of effective reemployment measures - however, taking a global perspective, the delivery of such policies is quite unequal given institutional, administrative and fiscal constraints. All in all, relaxing employment protection while strengthening unemployment benefit systems and active labour market policies can help support individuals in a dynamic economic environment where transitions between jobs need to be secured. This, of course, requires fundamental institutional change and capacity building in many countries.

economic environment.

- Based on our assessment of the global evidence on core employment issues, some conclusions for supranational, national and sub-national policy making can be derived.
- First, and going much beyond employment policies, opportunities for economic growth should be provided in accordance with ecological sustainability without such sustainable dynamism good jobs for all can hardly be realized.
- Second, in our understanding, full and fair employment in the formal sector should be made a central aim of international institutions and national developmental strategies.
- Third, while there is much variation between countries and sectors in terms of development, resources available and institutional capacities, we think that good jobs can be characterized by a couple of essential features.

660 Good jobs

- are free of major characteristics of precariousness, such as a lack of stability and a high risk of job loss, a lack of safety measures and an absence of minimal standards of employment protection
 - enable working persons to exert some control on matters such as the place and the timing of work and the tasks to be accomplished, and these jobs place appropriately high demands on the working person, without overtaxing their resources and capabilities and without harming their health
 - provide fair employment in terms of earnings and of employers' commitment towards guaranteeing job security
 - offer opportunities for skill training, learning and promotion prospects within a life course perspective, thereby sustaining work ability and stimulating individual development
 - prevent social isolation and any form of discrimination and violence
 - aim at reconciling work and extra-work demands by implementing appropriate rules in day-to-day practices
- Global employment goals embedded in the SDG with a focus on the different aspects of decent work, but also regional political strategies such as Europe 2020 have not fully met their ambitions. However, having such global or regional benchmarks is helpful as an ultimate policy orientation, but change is still mainly driven by national if not subnational actors. Here, both economic crises as well as political and fiscal constraints hamper easy progress. Hence, policies towards strengthening full and fair employment and good work for all may

vary according to the level of economic and cultural development in different regions of the world as well as according to institutional arrangements at national level. However, we see a core set of policies that are essential:

- 663
- 1. rules regarding employment protection, allowing for flexibility while avoiding a deeper segmentation of the labour market
- 2. unemployment protection through social insurance and basic income support coupled with appropriate active labour market policies to both replace income losses in phases of unemployment and accelerate reintegration into employment
- 3. skill formation at different stages of the life course, with ensuring the acquisition of skills that can be used in the labour market as well as access to education also for vulnerable groups
- 4. effective policies to make the most out of diversity and ensure non-discrimination
- 5. legislative and collectively agreed standards regarding working conditions such as remuneration, working time and health-related aspects of work, ensuring a fair distribution of economic gains as well as working conditions that are compatible with health and extra-work demands
- All in all, while supranational and national legal rules can establish a broad, but binding framework, particular emphasis lies on collective bargaining between employers and trade unions in establishing suitable arrangements regarding working conditions in certain sectors or regions. Hence, capacities to bargain collectively are seen as a major complement to legislation.

665 12. References

- Addison J.T., P.Teixeira, K. Evers, L. Bellmann. 2014. "Indicative and Updated Estimates of the Collective Bargaining Premium in Germany," *Industrial Relations* 53 (1): 125-156.
- Adida, C.L., D.D. Laitin, M.-A. Valfort. 2010. "Identifying barriers to Muslim integration in France," *PNAS* 107(52): 384-390.

- Aidt T.S., Z. Tzannatos. 2008. "Trade Unions, Collective Bargaining and Macroeconomic Performance," *Industrial Relations Journal* 39: 258-95.
- Alesina, A., E. La Ferrara. 2000. "Participation in heterogeneous communities," *Quarterly Journal of Economics* 115(3): 847-904.
- Alesina, A., E. La Ferrara. 2002. "Who trusts others?," *Journal of Public Economics* 85(2): 207–234.
- Alesina, A., E. La Ferrara. 2005. "Ethnic diversity and economic performance," *Journal of Economic Literature*, 43(3): 762–800.
- Alesina, A., E. Zhuravskaya . 2011. "Segregation and the quality of government in a cross section of countries," *American Economic Review*, 101(5): 1872–1911.
- Alesina, A., R. Baqir, W. Easterly. 1999. "Public goods and ethnic divisions," *Quarterly Journal of Economics* 114(4): 1243–1284.
- Alesina, A., A.Devleeschauwer, W. Easterly, S. Kurlat, R. Wacziarg. 2003. "Fractionalization," *Journal of Economic Growth*, 8(2): 155–194.
- Alesina, A., J. Harnoss, H. Rapoport. 2016. "Birthplace diversity and Economic Prosperity," *Journal of Economic Growth*, forthcoming.
- Alesina, A., S. Michalopoulos, E. Papaioannou, E. 2016. "Ethnic inequality," *Journal of Political Economy*. forthcoming.
- Alesina, A., E. Spolaore, R. Wacziarg. 2000. "Economic integration and political disintegration," *American Economic Review 90*(5): 1276–1296.
- Altonji, J., R. Blank. 1999. "Race and Gender in the Labor Market," in C. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, Vol. 3C, Amsterdam: North-Holland.
- 679 Ameri, M., L. Schur, A. Meera, S. Bentley, P. McKay, D. Kruse. 2015. "The disability employment puzzle: a field experiment on employer hiring behaviour," *NBER Working Paper No. 21560*.
- Anxo D., Boulin J.Y., and Cebrián I. 2006. Working time options over the life course Dublin: European Foundation for the Improvement of Living and Working Conditions, Luxembourg: Office for Official Publications of the European Communities.
- Anxo D., Fagan C., Letablier M.T., Perraudin C. and Smith M. 2007.

 Part-time Work in European Companies, European Foundation for the Improvement of Living and Working Conditions, Luxembourg: Office

- for Official Publications of the European Communities.
- Arai, M., M. Bursell, L. Nekby. 2016. "The reverse gender gap in ethnic discrimination: employer stereotypes of men and women with Arabic names," *International Migration Review*. forthcoming.
- Arrow, K. J. 1973. "The theory of discrimination," in O.A. Ashenfelter and A. Rees (eds.), *Discrimination in Labor Markets*, Princeton University, Princeton, NJ, pp. 3-33.
- Ashraf, Q., O. Galor. 2013. "The out of Africa hypothesis, human genetic diversity and comparative economic development," *American Economic Review* 103(1): 1–46.
- Aslund, O., O. Nordströum Skans. 2012. "Do anonymous job application procedures level the playing field?," *Industrial and Labor Relations Review* 65(1): 82-107.
- Atkinson, A. 2015. *Inequality: What Can Be Done?* Cambridge: Harvard University Press.
- Autor, D., F. Levy, R. Murnane. 2003. "The Skill Content of Recent Technological Change: An Empirical Exploration," *Quarterly Journal of Economics*, 118(4), November, 1279-1334.
- Autor, D. 2015. "Why Are There Still So Many Jobs? The History and Future of Workplace Automation (http://economics.mit.edu/files/11563)," Journal of Economic Perspectives 29: 3–30.
- Autor, D., D. Dorn, and G. H. Hanson. 2016. "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade (http://economics.mit.edu/files/11675)," Annual Review of Economics, forthcoming
- Azmat, G., B. Petrongolo. 2014. "Gender and the labor market: what have we learned from field and lab experiments," *Labour Economics* 30: 32-40.
- Baert, S., J. Norga, Y. Thuy, M. Van Hecke. 2015. "Getting grey hairs in the labour market: an alternative experiment on age discrimination," *IZA Discussion Paper No. 9289*.
- Baert, S. 2016. "Wage subsidies and hiring chances for the disabled: some causal evidence," *European Journal of Health Economics* 17(1): 71-86.
- Bahramitash, R. 2005. Liberation from Liberalization: Gender and Globalization in Southeast Asia. London: Zed.

- Bail, C. 2008. "The configuration of symbolic boundaries against immigrants in Europe," *American Sociological Review* 73: 37–59.
- Bailyn, L. 2006. Breaking the Mold Redesigning Work for Productive and Satisfying Lives, New York: Cornell University Press
- Banerjee, A., M. Bertrand, S. Datta, S. Mullainathan. 2009. "Labor market discrimination in Delhi: Evidence from a field experiment," *Journal of Comparative Economics* 37: 14-27.
- Bannai, A, A. Tamakashi. 2014. "The association between long working hours and health: A systematic review of epidemiological evidence," *Scandinavian Journal of Work, Environment and Health* 40: 5-18.
- Barro, R.J. 1997. The determinants of growth. A cross-country analysis. Boston: The MIT Press.
- 699 Barro, R. J., J.W. Lee. 2013. "A New Data Set of Educational Attainment in the World, 1950-2010," *Journal of Development Economics*, vol. 104(C), pages 184-198.
- Becker, G. S. 1957. The Economics of Discrimination, Chicago:University of Chicago Press
- Becker, G. 1962. "Investment in human capital: A theoretical analysis," *The Journal of Political Economy*, 70:5, 9-49.
- Press. Becker, G. 1993. Human capital. A theoretical and empirical analysis, with special reference to education. Chicago: The University of Chicago Press.
- Possible Pos
- Behrman, J. 2010. "Investment in education inputs and incentives", in Rodrik, D. and Rosenzweig, M., *Handbook of development economics vol. 5*, Amsterdam: Elsevier.
- Bekker, S., T. Wilthagen. 2008. "Europe's pathways to Flexicurity: Lessons presented from and to the Netherlands," Intereconomics 43(2): 68-73.
- Bell, D.N.F., D.G. Blanchflower. 2011. "Young people and the Great Recession," Oxford Review of Economic Policy 27(2): 241–267.

- Benach, J., C. Muntaner, V. Santana. 2007. Employment conditions and health inequalities. Final Report to the WHO Commission on Social Determinants of Health (CSDH), Geneva: WHO
- Benach, J., A. Vives, M. Amable, C. Vanroelen, G. Tarafa, C. Muntaner. 2014. "Precarious employment: understanding an emerging social determinant of health," *Public Health* 35(1): 229-253.
- Pendick, Jr. M., C. W. Jackson, V. Reinoso. 1994. "Measuring employment discrimination through controlled experiments," *Review of Black Political Economy* 23(1): 25-48.
- Bendick, Jr. M., C. W. Jackson, J. H. Romero. 1997. "Employment discrimination against older workers: an experimental study of hiring practices," *Journal of Aging & Social Policy* 8(4): 25-46.
- Beramendi, P., S. Häusermann, H. Kitschelt, H. Kriesi (eds.) 2015. *The Politics of Advanced Capitalism*, Cambridge: Cambridge University Press.
- Berg, P., G. Bosch, J. Charest. 2014. "Working-time configurations: a framework for analyzing diversity across countries," *Industrial and Labor Relations Review* 67(3):805-837
- Berkel, Van R., I.H. Møller. 2002. *Inclusion through Participation*, Bristol: The Policy Press.
- Bertola, G., A. Dabusinskas, M. Hoeberichts, M. Izquierdo, C. Kwapil, J. Montornès, D. Radowski. 2012. "Price, Wage and Employment Response to Shocks: Evidence from the WDN Survey," *Labour Economics* 19: 783-791.
- Bertrand, M., E. Duflo. 2016. "Field experiments on discrimination," NBER Working Paper No. 22014.
- Bertrand, M., S. Mullainathan. 2004. "Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination," *American Economic Review* 94(4): 991-1013.
- Bescond D., Châtaignier A., Mehran F., 2003. "Sept indicateurs pour mesurer le travail décent : une comparaison internationale, " *Revue internationale du travail*, 142(2), 195-229.
- Blanchard, O., J. Wolfers. 2000. "The Role of Shocks and Institutions in the Rise of European Unemployment," *Economic Journal* 110 (462): C1-C33.

- Blanchard, O., F. Jaumotte, P. Loungani. 2013. "Labor Market Policies and IMF Advice in Advanced Economies during the Great Recession," *IMF Staff Discussion Note*, SDN/13/02. Washington, DC: International Monetary Fund.
- Blanchard, O., J. Tirole. 2007. "The optimal design of unemployment insurance and employment protection: A first pass," *Journal of the European Economic Association* 6(1): 45–77.
- Blanchflower, D., A. Bryson. 2003. "Changes over time in relative union wage effects in the UK and the USA revisited," in J.T. Addison and C. Schnabel (eds.), *International Handbook of Trade Unions*, Cheltenham: Edward Elgar.
- Blau, F., M. Brinton, D. Grusky (eds.) 2006."The Declining Significance of Gender?," New York: Russell Sage Foundation.
- Blau, F., L. Kahn. 2007. "The gender pay gap," *The Economists' Voice* 4(4).
- Blinder, A. S. 1973. "Wage discrimination: reduced form and structural estimates," *Journal of Human Resources* 8(4): 436-455.
- Boeheim, R., G. Horvath, K. Mayr. 2012. "Birthplace diversity of the workforce and productivity spill-overs in firms," *WIFO Working* Papers No. 438.
- Boeri, T. 2014. "Two-Tier Bargaining," *IZA Discussion Paper* No. 8358. Bonn: Institute for the Study of Labor.
- Boeri, T., P. Cahuc, A. Zylberberg. 2015. "The Costs of Flexibility-Enhancing Reforms for Individuals: a Literature Review," *OECD Economics Department WP* 2015-45.
- Bøg, M., E. Kranendonk. 2011. "Labor Market Discrimination of Minorities? Yes, But Not in Job Offers," MPRA Paper No. 33332.
- Boland T., R. Griffin (eds.) 2015. *The Sociology of Unemployment*, Manchester: Manchester University Press.
- Booth, A., A. Leigh, E. Varganova. 2012. "Does ethnic discrimination vary across minority groups? Evidence from a field experiment," Oxford Bulletin of Economics and Statistics 74(4): 547-573.
- Borghans, L., Duckworth, L., Heckman, J., B. ter Weel. 2008. "The economics and psychology of personality traits," *Journal of Human Resources*, 43:972–1059.

- Bourguignon, F. 2015. *The Globalization of Inequality*, Princeton: Princeton University Press.
- Bosch G., Dawkings, P. and F. Michon. 1994. Times are changing: Working Time Developments in 14 Industrialised Countries, Geneva: ILO
- Bovenberg, L., T. Wilthagen. 2008. "On the road to flexicurity: Dutch proposals for a pathway towards better transition security and higher labour market mobility," *European Journal of Social Security* 10(4): 325.
- Bovenkerk, F. 1992. Testing Discrimination in Natural Experiments. A Manual for International Comparative Research on Discrimination on the Grounds of 'Race' and Ethnic Origin, Geneva: ILO
- Bowles, S., Gintis, H., M. Osborne. 2001. "The Determinants of earnings: a behavioral approach," *Journal of Economic Literature*, 39:1137–176.
- Bredgaard, T., F. Larsen. 2006. "The transitional Danish labour market: understanding a best case, and policy proposals for solving some paradoxes," Aalborg: CARMA Research Paper 2.
- Brunow, S., M. Trax, J. Suedekum. 2015. "Cultural diversity and plant-level productivity," *Regional Science and Urban Economics* 53: 85–96.
- Progress and Prosperity in a Time of Brilliant Technologies, New York: Norton.
- Burchell, B., Fagan, C., O'Brien, C., and Smith, M. 2007. Working conditions in the European Union: the gender perspective, Luxembourg: Office for Official Publications of the European Communities
- Burchell, B.J., V. Hardy, J. Rubery, M. Smith. 2014. A New Method to Understand Occupational Gender Segregation in European Labour Markets, Luxembourg: Publication Office of the European Union.
- Bursell, M. 2014. "The multiple burdens of foreign-named men. Evidence from a field experiment on gendered ethnic hiring discrimination in Sweden," *European Sociological Review* 30(3): 399-409.
- Cappelli, P. 1999. The New Deal at Work: Managing the Market-Driven Workforce, Boston: Harvard Business School Press.
- Card, D. 1999. "The causal effect of education on earnings," in Ashenfelter, O. and Card, D. *The Handbook of Labor Economics vol. 3*, Amsterdam: Elselvier.

- Card, D., J. Kluve, A. Weber. 2010. "Active Labour Market Policy Evaluations: A Meta-Analysis, (http://ideas.repec.org/a/ecj/econjl/v120y2010i548pf452-f477.html)" Economic Journal, Royal Economic Society 120(548): F452-F477
- Card, D., J. Kluve, A. Weber. 2015. "What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations," *IZA DP No. 9236*.
- Carling, K., K. Richardson. 2004. "The relative efficiency of labor market programs: Swedish experience from the 1990s," *Labour Economics* 11: 335-354.
- Carlsson, M. L. F., D.-O. Rooth. 2014. "Does the design of correspondence studies influence the measurement of discrimination?," *IZA Journal of Migration* 3:11.
- Carlsson, M. and D.-O. Rooth. 2007. "Evidence of ethnic discrimination in the Swedish labor market using experimental data," *Labour Economics* 14(4): 716-729.
- 750 Cartwright S., C.L. Cooper (eds.) 2009. The Oxford handbook of organizational well-being. Oxford: Oxford University Press.
- 751 CIETT. 2015. *Economic Report 2015*. International Confederation of Private Employment Services.
- Chan S., A.H. Stevens. 2001. Job Loss and Employment Patterns of Older Workers, *Journal of Labor Economics*, 19(2), 484-521.
- Chapman, B. 2006. "Income contingent loans for higher education: International reforms", in Hanushek, E. and Welsch, F. (eds.), Handbook of the economics of education vol. 2, Amsterdam: Elsevier.
- Chung, H., Kerkhofs, M., and Ester, P. 2007. Working Time Flexibility in European Companies, European Foundation for the Improvement of Living and Working Conditions, Luxembourg: Office for Official Publications of European Communities.
- Clasen J., D. Clegg D. 2006. "Beyond Activation: Reforming European Unemployment Protection Systems in Post-industrial Labor Markets," *European societies*, 8(4), 527-533.
- Colin, N., B. Palier. 2015. "The Next Safety Net," Foreign Affairs 94(4): 29.
- Collier, P. 1999. "On the economic consequences of civil war," Oxford Economic Papers, 51: 168–183.

- Collier, P. 2001. "Ethnic diversity: An economic analysis of its implications," *Economic Policy* 32: 129–166.
- 759 Cooper, C.L., A. Pandey, J.C. Quick (eds.). 2012. *Downsizing. Is less still more?* Cambridge: Cambridge University Press.
- Cranfield University School of Management and Working Families, 2008. Flexible Working and Performance: summary of research, London: Working Families
- Cross, H., K. Genevieve, J. Mell, W. Zimmerman. 1990. Employer hiring practices: differential treatment of Hispanic and Anglo job seekers.

 Washington, DC: Urban Institute Press.
- Cunha, F., J. Heckman, L. Lochner, D. Masterov. 2006. "Interpreting the evidence on life cycle skill formation", in Hanushek, E. and Welsch, F. (eds.), *Handbook of the economics of education vol.* 1, Amsterdam: Elsevier.
- Cunha, F., J. Heckman. 2007. "The technology of skill formation," *The American Economic Review Papers & Proceedings*, 97:2, 31-47.
- Davis, S., J. Faberman, J.C. Haltiwanger. 2012. "Labor Market Flows in the Cross Section and Over Time," NBER Working Paper No. 17294, August 2011, published in Journal of Monetary Economics, 59(1): 1-18.
- De Soto H. 1989. The Other Path: The Invisible Revolution in the Third World, New York: Harper and Row.
- De Stefano, V. 2016. "The rise of the 'just-in-time workforce': Ondemand work, crowdwork and labour protection in the 'gigeconomy'," *Conditions of Work and Employment Series No.* 71. Geneva: International Labour Organization.
- Demazière D., N. Guimarães, H. Hirata, K. Sugita. 2013. Être chômeur à Paris, Sao Paulo, Tokyo. Une méthode de comparaison internationale, Paris: Presses de Sciences Po.
- Desmet, K., I. Ortuño-Ortín, R. Wacziarg. 2012. "The political economy of ethnolinguistic cleavages," *Journal of Development Economics* 97(2): 322–338.
- Dolls, M., C. Fuest, A. Peichl. 2012. "Automatic Stabilizers and Economic Crisis: US vs. Europe (http://www.iza.org/en/webcontent/publications/papers/viewAbstract? dp_id=4310)," Journal of Public Economics (http://www.sciencedirect.com/science/article/pii/S0047272711001642) 96 (3-4): 279-294.

- Duguet, E., N. Leandri, Y. L'Horty, P. Petit. 2010. "Are young French jobseekers of ethnic immigrant origin discriminated against? A controlled experiment in the Paris area," *Annals of Economics and Statistics* 99-100: 187-215.
- Easterly, W., R. Levine. 1997. "Africa's growth tragedy: Policies and ethnic divisions, " *Quarterly Journal of Economics* 112(4):1203–1250.
- Economic Policy Institute. 2015. Five Social Disadvantages That Depress Student Performance, Report by Leila Morsy and Richard Rothstein, June 10, 2015: http://www.epi.org/publication/five-social-disadvantages-that-depress-student-performance-why-schools-alone-cant-close-achievement-gaps/ (http://www.epi.org/publication/five-social-disadvantages-that-depress-student-performance-why-schools-alone-cant-close-achievement-gaps/)
- Edgerton, D. 2006. The Shock of the Old: Technology and Global History Since 1900, Oxford: Oxford University Press.
- Eichhorst, W., T. Boeri, A. Coen, V. Galasso, M. Kendzia, N. Steiber. 2013. "How to Combine the Entry of Young People in the Labour Market with the Retention of Older Workers?," *IZA Discussion Paper No. 7829*, Bonn: IZA
- Eichhorst, W., N. Rodriguez_Planas, R. Schmidl, K. Zimmermann. 2015. "A road map to vocational education and training in industrialized countries," *ILR Review*, 68:2, 314-337.
- Eichhorst, W., O. Kaufmann, R. Konle-Seidl. 2008. *Bringing the Jobless into Work?*, Berlin: Springer.
- Eichhorst, W., P. Marx, C. Wehner. 2016. "Labor Market Reforms in Europe: Towards More Flexicure Labor Markets?," *IZA Discussion Papers No. 8963*, Bonn: IZA
- Esteban, J., E. Ray. 1994. "On the measurement of polarization," *Econometrica* 62(4): 819–851.
- Esteban, J., E. Ray .2011. "Linking conflict to inequality and polarization," *American Economic Review* 101(4): 1345–1374.
- Esteban, J., L. Mayoral, E. Ray. 2012. "Ethnicity and conflict: An empirical study," *American Economic Review* 102(4): 1310–1342.
- Eurofound. 2006. Working time options over the life course: new work pattern and company strategies, Luxembourg: Publications Office of the European Union

- Eurofound. 2007. Fourth European Working Conditions Survey, Luxembourg: Publications Office of the European Union
- Eurofound. 2012. Fifth European Working Conditions Survey, Luxembourg: Publications Office of the European Union
- Eurofound. 2012b. European Quality of Life Survey
- Eurofound. 2012c. Young People and NEETs in Europe. First Findings, European Monitoring Centre on Change.
- Eurofound. 2013b. Women, men and working conditions in Europe, Luxembourg: Publications Office of the European Union
- Eurofound. 2015. First findings: Sixth European Working Conditions Survey. Dublin: European Observatory of Working Life
- Eurofound. 2016. Working time developments in the 21st century: Work duration and its regulation in the EU, Luxembourg: Publications Office of the European Union
- European Commission. 2016. "Women and unpaid work: recognise, reduce, redistribute!" Employment Social Affairs and Inclusion http://ec.europa.eu/social/main.jsp?
 langId=en&catId=89&newsId=2492&furtherNews=yes (http://ec.europa.eu/social/main.jsp?
 langId=en&catId=89&newsId=2492&furtherNews=yes); Press release downloaded 07/03/16
- European Commission. 2007. Towards common principles of flexicurity-More and better jobs through flexibility and security, Luxembourg
- Furopean Commission. 2016. Employment and Social Developments in Europe.
- Findings, London: Department for Business, Innovation and Skills
- Fvans J., Lippoldt D. and Marianna P. 2001. "Trends in working hours in OECD countries," *Labour Market and Social Policy Occasional Papers*, No. 45, OECD: http://www.oecd-ilibrary.org/social-issues-migration-health/trends-in-working-hours-in-oecd-countries_674061356827 (http://www.oecd-ilibrary.org/social-issues-migration-health/trends-in-working-hours-in-oecd-countries_674061356827)
- Fymann, A., J. Schweri. 2015. "Horizontal Skills Mismatch and Vocational Education", IZA conference paper, mimeo.

- Fagan, C. 2001. "The temporal re-organisation of employment and household rhythm of work schedules: the implications for gender and class relations," *The American Behavioural Scientist*, 44, 7, March, pp.1199-1212
- Fagan, C. 2004. "Gender and working-time in industrialized countries: Practices and Preferences," in J. Messenger (ed.) Working-time and Workers' Preferences in Industrialized countries: Finding the balance, the Institute for Labour Studies of the International Labour Organization, London: Routledge
- Fagan, C., and Burchell, B. 2002. *Gender, jobs and working conditions in the European Union*, Eurofound, Luxembourg: Publications Office of the European Union
- Fagan, C., and Walthery, P. 2011. "Individual working-time adjustments between full-time and part-time working in European firms," *Social Politics*, 18(2): 269-299
- Fagan, C., McDowell, L., Perrons, D., Ray K., and Ward, K. 2008. "Class differences in mothers' work schedules and assessments of their 'work-life balance' in dual-earner couples in Britain," in J. Scott, S. Dex and H. Joshi (eds.), Women and Employment: Changing Lives and New Challenges, Edward Elgar Publishing
- Fagan, C., C. Lyonette, M. Smith, A. Saldaña-Tejeda. 2012. The influence of working time arrangements on work-life integration or 'balance': A review of the international evidence, Background Report to the International Labour Office for the ILO Tripartite Meeting of Experts on Working time Arrangements, Geneva: International Labour Office http://www.ilo.org/travail/whatwedo/publications/WCMS_187306/lang-en/index.htm (http://www.ilo.org/travail/whatwedo/publications/WCMS_187306/lang-en/index.htm)
- Fagan. C., H. Norman, M. Smith, M. González Menéndez 2014. *In search of good quality part-time employment*, Geneva: International Labour Office http://www.ilo.org/travail/whatwedo/publications/WCMS_237781/lang-en/index.htm (http://www.ilo.org/travail/whatwedo/publications/WCMS_237781/lang-en/index.htm)
- Fagnani, J. and Letablier, T. 2004. "Work and family life balance: The impact of the 35-hour laws in France," Work, Employment and Society, 18(3), pp. 5551-572

- Fearon, J. (2003). "Ethnic and cultural diversity by country," *Journal of Economic Growth* 8(2): 195–222.
- Fearon, J., D. Laitin. 2003. "Ethnicity, insurgency, and civil war," American Political Science Review 97(1): 75–90.
- Felbermayr G., D. Baumgarter, S. Lehwald. 2014. Wachsende Lohhungleichkeit in Deutschland. Gütersloh: Bertelsmann Stiftung.
- Felstead, A. and Jewson, N. 2000. *In Work, At Home: Towards an Understanding of Homeworking*, London: Routledge
- Felstead, A., Jewson, N., Phizacklea, A. and Walters, S. 2002. "The option to work at home: another privilege for the favoured few", New Technology, Work and Employment 17(3) Autumn: 188-207
- Flanagan R.J. 1999. "Macroeconomic Performance and Collective Bargaining: an international perspective," *Journal of Economic Literature* 37:1150-75.
- Flanagan R.J., J. Hartog, J. Theeuwes. 1993. "Institutions and the Labour Market: Many questions, some answers," in J. Hartog, and J. Theeuwes (eds.), *Labour Market Contracts and Institutions*. A crossnational comparison, Amsterdam: North-Holland.
- Ford, M. 2015. Rise of the Robots: Technology and the Threat of a Jobless Future, New York: Basic Books
- Galarza, F., G. Yamada. 2014. "Labor Market Discrimination in Lima, Peru: Evidence from a Field Experiment," World Development 58: 83–94.
- Gallie D. (ed.) 2004. Resisting Marginalization. Unemployment Experience and Social Policy in European Union, Oxford: Oxford University Press.
- Gallie, D. 2013. Economic crisis, quality of work, and socials integration: The European experience. Oxford: Oxford University Press.
- Ganssmann, H. 2000. "Labor Market Flexibility, Social Protection and Unemployment," *European Societies*, 2, 243-269.
- Garcia Pérez, J.I. 2015. Should severance pay be consistent for all workers? Single, open-ended contracts with severance pay smoothly rising with seniority can decrease both unemployment and job losses, IZA World of Labor.
- George, J., M. Kumar, D. Ojha (eds.) 2012. Working Class Movement in India in the Wake of Globalization, New Delhi: Manohar.

- Glewwe, P., M. Kremer. 2006. "Schools, teachers, and education outcomes in developing countries," in Hanushek, E. and Welsch, F. (eds.), *Handbook of the economics of education vol.* 2, Amsterdam: Elsevier.
- Golden, L., D. M. Figart 2001. Working Time: International Trends, Theory and Policy Perspectives, London: Routledge
- Golden, L. 2012. Effects of working time on productivity Conditions of Work and Employment Series No. 33, Geneva: International Labour Organisation,
 http://www.ilo.org/travail/whatwedo/publications/WCMS_187307/lang-en/index.htm
 (http://www.ilo.org/travail/whatwedo/publications/WCMS_187307/lang-en/index.htm)
- Goldin, C., C. Rouse. 2000. "Orchestrating impartiality: the impact of blind auditions on female musicians," *American Economic Review* 90 (4): 715–741.
- Gordon, R.J. 2016. The Rise and Fall of American Growth: The US Standard of Living since the Civil War, Princeton: Princeton University Press
- Graversen, B.K., J.C. van Ours. 2008. "How to help unemployed find jobs quickly: Experimental evidence from a mandatory activation program," *Journal of Public Economics* 92: 2020-2035.
- Green-Pedersen, C. 2001. "Minority governments and party politics: the political and institutional background to the "Danish miracle".

 Journal of Public Policy 21(01): 53-70.
- Greenberg, D.H., C. Michalopoulos, P.K. Robins. 2003. "A metaanalysis of government-sponsored training programs," *Industrial & Labor Relations Review* 57(1), 31-53.
- Groot, W., H. Maassen van den Brink. 2000. "Overeducation in the labor market: A meta-analysis," *Economics of Education Review*, 19:2, 149–158.
- Haelermans, C., L. Borghans. 2011. "Wage Effects of On-the-Job Trainig: A Meta-Analysis," *IZA Discussion Paper No. 6077*, October.
- Hambrick, D., T. Seung Cho, M.J. Chen. 1996. "The influence of top management team heterogeneity on firms' competitive moves," *Administrative Science Quarterly* 41(4): 659–684.

- Hamburger, L. 1939. "The Extension of Collective Agreements to Cover Intere Trades and Industries," *International Labour Review*, XL (2): 153-94.
- Hanushek E.A., G. Schwerdt, S. Wiederhold., S. Woessmann. 2015. "Returns to Skills around the World: Evidence from PIAAC," European Economic Review, 73, 103-130.
- Hanushek, E., L. Woessmann. 2015. *The knowledge capital of nations*, Boston: The MIT Press.
- Hanushek, E., L. Woessmann, L. Zang. 2011. "General education, vocational education, and labor market outcomes over the life-cycle," *NBER working paper series* n. 17504.
- Härmä, M. 2006. "Work hours in relation to work stress, recovery and health," *Scandinavian Journal of Work, Environment & Health* 32: 502-514.
- Harris, S.D., A.B. Krueger. 2015. "A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The Independent Worker." The Hamilton Project Discussion Paper 2015-10.
- Hartog J., E. Leuven, C.N. Teulings. 2002. "Wages and the Bargaining Regime in a Corporatist Setting: the Netherlands," *European Journal of Political Economy* 18:317-31.
- Harvey, D. 2005. A Brief History of Neoliberalism, New York: Oxford University Press.
- Heath, A., S.Y. Cheung. 2007. "Unequal Chances: Ethnic Minorities in Western Labour Markets," Proceedings of the British Academy 137, Oxford: Oxford University Press
- Heath, R., A. Mushfiq Mobarak. 2015. "Manufacturing growth and the lives of Bangladeshi women," *Journal of Development Economics*, 115: 1-15
- Heckman, J.J., P. Siegelman. 1993. "The urban institute audit studies: their methods and findings," in M. Fix and R. Struyk (eds.), Clear and Convincing Evidence: Measurement of Discrimination in America, Washington D.C.: The Urban Institute Press.
- Heckman, J. 1995. "Lessons from the Bell Curve," *The Journal of Political Economy*, 103:1091–152.
- Heckman, J., J. Stixrud, S. Urzua. 2006. "The Effects of Cognitive and Non-cognitive Abilities on Labor Market Outcomes and Social Behavior," *Journal of Labor Economics*, 24:411–82.

- Hegewisch, A. 2009. Flexible working policies: a comparative review,
 Manchester: Equality and Human Rights Commission,
 http://www.equalityhumanrights.com/sites/default/files/documents/research/16_flexik(http://www.equalityhumanrights.com/sites/default/files/documents/research/16_flexik)
- Heinrich, C.J., P.R. Mueser, K.R. Troske, K. Jeon, D.C. Kahvecioglu. 2013. "Do Public Employment and Training Programs Work?," IZA Journal of Labor Economics, 2:6
- Hemerijck, A., J. Visser. 2000. "Change and immobility: three decades of policy adjustment in the Netherlands and Belgium," West European Politics 23(2): 229-256.
- Hewison, K., A.L. Kalleberg. 2013. "Precarious Work and Flexibilization in South and Southeast Asia," *American Behavioral Scientist* 57(4): 395-402.
- Hjort, J. 2014. "Ethnic divisions and production in firms," *Quarterly Journal of Economics* 129(4): 1899–1946.
- Hobson, B. (ed) 2014. Worklife Balance: The Agency and Capabilities Gap across European and Asian Societies and within firms, Oxford: Oxford University Press
- Hoefinger, H. 2014. Sex, Love and Money in Cambodia: Professional Girlfriends and Transactional Relations, New York: Routledge.
- Holzer, H. 2010. "Enhancing Diversity through Affirmative Action: What Other Countries Can Learn from the United States' Experience," in OECD, Equal Opportunities? The Labour Market Integration of the Children of Immigrants, Paris: OECD Publishing, http://dx.doi.org/10.1787/9789264086395-en.
- Hoogendoorn, S., M. van Praag. 2012. "Ethnic diversity and team performance: A field experiment," *IZA Working Paper No. 6731*.
- Ingre M, Åkerstedt T, Ekstedt M, and Kecklund G. 2012. "Periodic self-rostering in shift work: correspondence between objective work hours, work hour preferences (personal fit), and work schedule satisfaction," Scandinavian journal of work, environment and health 38(4):327
- International Labour Organization. 2008. *ILO Declaration on Social Justice for a Fair Globalization*, ILO conference, 97th session, Geneva, June.
- International Labour Organization. 2012. Statistical Update on Employment in the Informal Economy. Geneva: ILO. http://laborsta.ilo.org/informal_economy_E.html, accessed May 19,

- International Labour Organization. 2013a. Measuring informality: a statistical manual on the informal sector and informal employment, Geneva: ILO
- International Labour Organization. 2013b. World of work report. Geneva: ILO
- International Labour Organization. 2014. World Social Protection Report 2014/15, Geneva: ILO
- International Labour Organization. 2015a. World Employment Social Outlook 2015. Geneva: ILO
- International Labour Organization. 2015b. World Report on Child Labour 2015. Geneva: ILO
- International Labour Organization. 2015c. World Employment and Social Outlook, Trends 2015, Geneva: ILO
- International Labour Organisation. 2015d. ILO Global estimates on migrant workers: results and methodology. Geneva: ILO
- International Labour Organization. 2016. Women at Work: Trends 2016. Geneva: ILO http://www.ilo.org/gender/Informationresources/Publications/WCMS_457317/lang-en/index.htm (http://www.ilo.org/gender/Informationresources/Publications/WCMS_457317/lang-en/index.htm)
- Jacoby, S.M.1985. Employing Bureaucracy: Managers, Unions, and the Transformation of Work in the 20th Century, New York: Columbia University Press.
- Jaumotte, F. 2003. "Female labour force participation: Past trends and main determinants in OECD countries," *OECD Economics Department Working Papers* No. 376.
- Jaumotte F., C.O. Buitron. 2015. "Inequality and Labour Market Institutions," Washington DC. *IMF Staff Discussion Note* 15/14.
- Jespersen, S.T., J.R. Munch, L. Skipper. 2008. "Costs and benefits of Danish active labour market programmes," *Labour Economics* 15: 859-884.
- Jorgensen, C. 2005. Seminar highlights flexicurity in the labour market. Dublin: European Industrial Relations Observatory.

- Jowell, R., P. Prescott-Clarke. 1970. "Racial discrimination and whitecollar workers in Britain," *Race & Class* 11(4): 397-417.
- Juvani, A, T. Oksanen, P. Salo, M. Virtanen, M. Kivimäki, J. Pentti, J. Vahtera. 2014. "Effort-reward imbalance as a risk factor for disability pension: the Finnish Public Sector study," *Scandinavian Journal of Work, Environment and Health* 40(3): 266-277.
- Kahane, L., N. Longley, R. Simmons. 2013. "The effect of coworker heterogeneity on firm-level output: Assessing the impacts of cultural and language diversity in the National Hockey League," *Review of Economics and Statistics* 95(1): 302–314.
- Kahn, L. 2015. "Skill shortages, mismatches, and structural unemployment: A symposium," *ILR Review*, 68(2): 247-250.
- Kahn-Freund, O. 1954. "Intergroup Conflicts and Their Settlement," British Journal of Sociology 5(3): 193-222.
- Kalleberg, A.L. Good Jobs, Bad Jobs: The Growth of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s, New York: Russell Sage Foundation, 2011.
- Kalleberg, A.L.2000. "Nonstandard Employment Relations: Parttime, Temporary, and Contract Work," Annual *Review of Sociology* 26:341-365.
- Kalleberg, A.L. 2009. "Precarious work, insecure workers: Employment relations in transition," *American Sociological Review* 74: 1-22.
- Kalleberg, A.L., M. Dunn. 2016. "Good Jobs, Bad Jobs in the Gig Economy." Perspectives on Work, Labor and Employment Relations Association.
- Kalleberg, A.L., P.V. Marsden. 2015. "Transformation of the Employment Relationship," in R. Scott and S. Kosslyn (eds.), *Emerging Trends in the Social and Behavioral Sciences*, Hoboken, NJ: John Wiley and Sons.
- Kalleberg, A.L., J. Reynolds, P.V. Marsden. 2003. "Externalizing Employment: Flexible Staffing Arrangements in U.S. Organizations," *Social Science Research* 32(4): 525-552.
- Karabarbounis, L., B. Neiman. 2014. "The Global Decline of the Labor Share," *Quarterly Journal of Economics*, 129(1): 61-103

- Karamessini, M., J. Rubery. 2014. Women and Austerity: The Economic crisis and the future for gender equality, Abingdon, Oxfordshire: Routledge.
- Karanikolos, M, P. Mladovsky, J. Cylus, S. Thomson, S. Basu, D. Stuckler, J.P. Mackenbach, M. McKee. 2013. "Financial crisis, austerity, and health in Europe," *The Lancet* 381: 1323-1331.
- Karasek, R.A., T. Theorell. 1990. *Healthy work*. New York, NY: Basic Books.
- Keizer, A.B. 2011. Non-regular Employment- Issues and Challenges Common to the Major Developed Countries. ILPT Report No. 10.
- Kelly, E. L., Kossek, E. E. Hammer, L. B., Dunham, M., Bray, J., Chermack, K., Kaskubar, D. (2008). Getting there from here: Research on the effects of workfamily initiatives on work-family conflict and business outcomes. *The Academy of Management Annals*, 2(1), 305-349
- Kibischo, W. 2009. Sex Tourism in Africa: Kenya's Booming Industry, London: Routledge.
- Kingston G, F. McGinnity, P.J. O'Connell. 2015. "Discrimination in the labour market: Nationality, ethnicity and the recession," *Work, Employment and Society* 29(2): 213–232.
- Kivimäki, M, M. Jokela, S.T. Nyberg, A. Singh-Manoux, E. Fransson, L. Alfredsson, J.B. Bjorner, M. Borritz, H. Burr, A. Casini, E. Clays, D. De Bacquer, N. Dragano, R. Erbel. G.A. Geuskens, M. Hamer, W.E. Hooftman, I.L. Houtman, K.-H. Jöckel, F. Kittel, A. Knutsson, M. Koskenvuo, T. Lunau, I.E.H. Madsen, M.L. Nielsen, M. Nordin, T. Oksanen, J.H. Pejtersen, J. Pentti, R. Rugelies, P. Salo, M.J. Shipley, J. Siegrist, A. Steptoe, S.B. Suominen, T. Theorell, J. Vahtera, P.J.M. Westerholm, H. Westerlund, D. O'Reilly, M. Kumari, G.D. Batty, J.E. Ferrie, M. Virtanen. 2015. "Long working hours and risk of coronary heart disease and stroke: a meta-analysis for 603 838 individuals," *The Lancet* 386: 1739-1746.
- Kluve, J. 2010. "The effectiveness of European active Labor market programs," *Labour Economics* 17: 904-918.
- Koen J., U.C. Klehe, A. Van Vianen. 2013. "Employability among Longterm Unemployed: a Futile Quest or Worth the Effort?," *Journal of Vocational Behavior*, 82(1): 37-48.

- Kossek, E. E. 2005. "Workplace policies and practices to support work and families: Gaps in implementation and linkages to individual and organizational effectiveness," in S. Bianchi, L. Casper,& R. King (eds.), Workforce/workplace mismatch? Work, family, health, and wellbeing, Mahwah, NJ: Lawrencce Erlbaum Associates
- Krause, A., U. Rinne, K.F. Zimmermann. 2012. "Anonymous job applications of fresh Ph.D. economists," *Economics Letters* 117(2): 441-444.
- Kundra, A. 2000. The Performance of India's Export Zones: A Comparison with the Chinese Approach, New Delhi: Sage.
- Kuruvilla, S., M.E. Gallagher, C.K. Lee (eds.) 2011. From Iron Rice Bowl to Informalization: Markets, Workers, and the State in a Changing China, Ithaca, NY: ILR Press.
- La Valle, I., Arthur, S., Millward, C., Scott, J. and Clayden, M. 2002. Happy families? Atypical work and its influence on family life, Bristol: The Policy Press.
- Labonté, R. 2015. "Globalization and health," *International Encyclopedia of Social and Behavioural Science*. 2nd ed. New York: Elsevier.
- Lahey, J. 2008. "Age, women, and hiring: an experimental study," *Journal of Human Resources* 43(1): 30-56.
- Lalive, R., M. Morlok, J. Zweimüller. 2011. "Applying for jobs: Does ALMP participation help?" Working Paper Series, Department of Economics, University of Zurich, No. 19.
- Larsen, F. 2009. "How new governance and operational reforms can transform employment policies towards work-first Lessons from the implementation of employment policies in the Danish municipalities," Paper for the symposium at the University of Chicago, 15th May 2009: Welfare States in Transition: Social Policy Transformation in Organizational Practice, Chicago, USA.
- Lee, E. 1984. Export Processing Zones and Industrial Employment in Asia, Bangkok: ILO.
- Lee, S., and McCann, D. 2006. "Working Time Capability: Toward Realizing Individual Choice," in J.-Y. Boulin, M. Lallement, J. Messenger, and F.Michon (eds.), *Decent Working Time – New Trends*, New Issues, Geneva: International Labour Office

- Lefresne F. 2008. "Regard comparatif sur l'indemnisation du chômage: la difficile sécurisation des parcours professionnels," Chronique Internationale de l'IRES, 115: 3-22.
- Linotte D. 1994. "Sur-emploi et chômage déguisé dans les économies planifiées et en transition: une interprétation néo-classique," Revue d'études comparatives Est-Ouest, 25(1): 139-156.
- Ljungqvist, L. 1993. "Economic underdevelopment: the case of missing market for human capital", Journal of Development Economics, 40:219-239.
- Lødemel, I., Trickey, H. (eds.) 2001. An offer you can't refuse- Workfare in International Perspective, Bristol: The Policy Press.
- Lustig N., L.F. Lopez-Calva, E. Ortiz-Juarez. 2013. "Deconstructing the Decline in Inequality in Latin America", *Policy Research Working Paper Series* n°6552, Washington, DC: World Bank.
- Madsen, P.K. 2002. "The Danish model of flexicurity: A Paradise-With Some Snakes," in H. Sarfati and G. Bonoli (eds.), Labour Market and Social Protections Reforms in International Perspective, UK: Ashgate.
- Madsen, P.K. 2006. "Labour market flexibility and social protection in European welfare states- contrasts and similarities," Australian Bulletin of Labour 32(2): 139.
- 906 Mailand, M., C. Ibsen. 2009. Flexicurity and Collective Bargaining-Balancing Acts across sectors and countries, Copenhagen: University of Copenhagen.
- 907 Marmot, M. 2010. Fair society, healthy lives. The Marmot Review. London: Institute of Health Equity.
- 908 Marmot, M. 2015. The Health Gap. The challenge of an unequal world. London: Bloomsbury Publishing.
- 909 Martin, J.P. 2014. "Activation and Active Labour Market Policies in OECD Countries: Stylized Facts and Evidence on their Effectiveness," *IZA Policy Paper No.* 84.
- Martin, J.P., D. Grubb. 2001. "What works and for whom: A review of OECD countries experiences with active labour market policies," Swedish Economic Policy Review 8: 9-56.
- 911 Maruani M. (dir.) 2013. *Travail et genre dans le monde*. Paris: La Découverte.

- Maurer-Fazio, M. 2012. "Ethnic discrimination in China's internet job board labor market," *IZA Journal of Migration*, 1:12.
- Mavromaras, K., P.J. Sloane, Z. And Wei. 2012. "The role of education pathways in the relationship between job mismatch, wages and job satisfaction; A panel estimation approach", *Education Economics*, 20:3, 303–321.
- Mazzucato (https://www.amazon.co.uk/s/ref=dp_byline_sr_book_1? ie=UTF8&text=Mariana+Mazzucato&search-alias=books-uk&field-author=Mariana+Mazzucato&sort=relevancerank), M. 2013. The Entrepreneurial State, London: Anthem
- 915 McGinnity F., P. Lunn. 2011. "Measuring discrimination facing ethnic minority job applicants: an Irish experiment," Work, Employment and Society 25(4): 693–708.
- McKinsey Global Institute (MGI). 2015. The power of parity: How advancing women's equality can add \$12 trillion to global growth. London, San Francisco and Shanghai: McKinsey and Company.
- 917 McKinsey Global Institute. 2016. Poorer than their Parents? Flat or Falling Incomes in Advanced Economies
- McPherson, M., M. Schapiro. 2006. "US higher education finance", in Hanushek, E. and Welsch, F. (eds.), *Handbook of the economics of education vol.* 2, Amsterdam: Elsevier.
- 919 Meng, G. 2003. The Theory and Practice of Free Economic Zones: A Case Study of Tianjin, People's Republic of China, Bern: Peter Lang.
- 920 Messenger, J. (Ed). 2004. Working time and workers' preferences in industrialized countries: Finding the balance, London and New York: Routledge
- 921 Milanovic, B. 2016. Global Inequality: A New Approach for the Age of Globalization, Cambridge: Harvard University Press.
- 922 Milliken, F. J., L.L. Martins. 1996. "Searching for common threads: Understanding the multiple effects of diversity in organizational groups," *Academy of Management Review*: 21(2), 402–433.
- 923 Mincer, J. 1974. *Schooling, Experience, and Earnings*, New York: Columbia University Press.
- Miranda, V. 2011. "Cooking, Caring and Volunteering: Unpaid Work Around the World," OECD Social, Employment and Migration Working Papers, No. 116, OECD Publishing

www.oecd.org/berlin/47258230.pdf (http://www.oecd.org/berlin/47258230.pdf)

- 925 Montalvo, J., M. Reynal-Querol, M. 2005. "Ethnic polarization, potential conflict and civil war," *American Economic Review 95*(3): 796–816.
- 926 Montano, D. 2014. "Chemical and biological work-related risks across occupations in Europe: a review," *Journal of Occupational and Medical Toxicology* 9: 28.
- 927 Moore S., S. McKey, S. Veale. 2014. Statutory Regulation and Employment Relations. The Impact of Statutory Trade Union Recognition, London: Palgrave-McMillan.
- Moss, P. (ed) 11th International Review of Leave Policies and Related Research 2015, International Network of Leave Policies and Research. Available from:

 http://www.leavenetwork.org/lp_and_r_reports/review_2015/
 (http://www.leavenetwork.org/lp_and_r_reports/review_2015/)
- 929 Murnane, R., J. Willett, F. Levy. 1995. "The Growing Importance of Cognitive Skills in Wage Determination", *Review of Economics and Statistics*, 77:251–66.
- Nelson, M., J.D. Stephens. 2013. "The service transition and women's employment," *The Political Economy of the Service Transition*, 147-170.
- Neumark, D., I. Burn, P. Button. 2015. "Is it harder for older workers to find jobs? New and improved evidence from a field experiment," NBER Working Paper No. 21669.
- Neumark, D. 2012. "Detecting discrimination in audit and correspondence studies," *Journal of Human Resources* 47(4): 1128-1157.
- Nijp HH, Beckers DGJ, Geurts SAE, Tucker P, and Kompier MAJ. 2012. "Systematic review on the association between employee worktime control and work–non-work balance, health and wellbeing, and job-related outcomes," Scandinavian journal of work, environment and health 38(4): 299
- O'Reilly, C., D. Caldwell, W. Barnett. 1989. "Work group demography, social integration, and turnover," *Administrative Science Quarterly* 34(1): 21–37.
- Oaxaca, R.L. 1973. "Male-female wage differentials in urban labor markets," *International Economic Review* 14(3): 693-709.

- Odama, J. S., E. A. Aiyedun (eds.) 2004. Globalization and the Third World Economy: Impacts and Challenges in the 21st Century, Lagos: Malthouse.
- Orazem, P., E. King. 2008. "Schooling in developing countries: The role of supply, demand and government policy", in Schultz, T.P. and Strauss, J. (eds), *Handbook of development economics vol.* 4, Amsterdam: Elsevier.
- Organization for Economic Cooperation and Development. 1994.

 The OECD Jobs Study, Part II: The Adjustment Potential of the Labour Market, Paris: OECD Publishing
- Organization for Economic Cooperation and Development. 2006. OECD Jobs Strategy: Lessons from a Decade's Experience. Main report, Paris: OECD Publishing
- Organization for Economic Cooperation and Development. 2008. "The Price of Prejudice: Labour Market Discrimination on the Grounds of Gender and Ethnicity," in OECD Employment Outlook 2008, Paris: OECD Publishing http://dx.doi.org/10.1787/empl_outlook-2008-en (http://dx.doi.org/10.1787/empl_outlook-2008-en).
- Organization for Economic Cooperation and Development. 2010. Sickness, disability and work: breaking the barriers. A synthsis of findings across OECD countries. Paris: OECD Publishing
- Organization for Economic Cooperation and Development. 2013. "Discrimination against immigrants measurement, incidence and policy instruments," in *International Migration Outlook* 2013, Paris: OECD Publishing. http://dx.doi.org/10.1787/migr_outlook-2013-7-en (http://dx.doi.org/10.1787/migr_outlook-2013-7-en)
- Organization for Economic Cooperation and Development. 2015a. In It Together: Why Less Inequality Benefits All, Paris: OECD Publishing
- Organization for Economic Cooperation and Development. 2015b. Perspectives de l'emploi de l'OCDE 2015, Paris: éditions OCDE
- Organization for Economic Cooperation and Development. 2016.

 Gender Portal 2016: Time use across the world:

 https://www.oecd.org/gender/data/OECD_1564_TUSupdatePortal.xls

 (https://www.oecd.org/gender/data/OECD_1564_TUSupdatePortal.xls)
- Ozgen, C., P. Nijkamp, J. Poot. 2013. "The impact of cultural diversity on firm: Evidence from dutch micro data," *IZA Journal of Migration 2*, 18.

- Pager D., H. Shepherd. 2008. The sociology of discrimination: racial discrimination in employment, housing, credit, and consumer markets," *Annual Review of Sociology* 34: 181–209.
- Parrotta, P., D. Pozzoli, M. Pytlikova. 2014. "Does labor diversity affect firm productivity?," *European Economic Review 66*: 144–179.
- Patacchini, E., R. Giuseppe, Y. Zenou. 2015. "Unexplored dimensions of discrimination in Europe: homosexuality and physical appearance," *Journal of Population Economics* 28(4): 1045-1073.
- Peracchi, F. 2006. "Educational wage premia and the distribution of earnings: An international perspective", in Hanushek, E. and Welsch, F. (eds.), *Handbook of the economics of education vol.* 1, Amsterdam: Elsevier.
- Pessoa, J.P., J. Van Reenen. 2013. "Decoupling of Wage Growth and Productivity Growth? Myth and Reality (http://cep.lse.ac.uk/pubs/download/dp1246.pdf)," LSE CEP Discussion Paper No. 1246
- Petit, P. 2007. "The effects of age and family constraints on gender hiring discrimination: a field experiment in the French financial sector," *Labour Economics* 14(3): 371-391.
- Phelps, E. S. 1972. "The statistical theory of racism and sexism," American Economic Review 62(4): 659-661.
- Pierné, G. 2013. "Hiring discrimination based on national origin and religious closeness: results from a field experiment in the Paris area," *IZA Journal of Labor Economics* 2(4): 1-15.
- Piketty, T. 2014. Capital in the 21st Century, Cambridge: Harvard University Press.
- Plantenga, J., Remery, C. 2005. Reconciliation of work and private life: A comparative review of thirty European countries. Report financed by and prepared for the use of the European Commission Directorate-General for Employment, Social Affairs and Equal Opportunities Unit G.1.
- Porter, E. 2016. "On Trade, Angry Voters Have a Point," New York Times, March 15, 2016, B1.
- Präg, P. and Mills, M. 2014. Family-related working schedule flexibility across Europe, statistical report no.6 RAND report under contract JUST/2011/GEND/PR/1081/A4, European Union

- Putnam, R. D. 1995. "Bowling alone: America's declining social capital," *Journal of Democracy*, 6(1): 65–78.
- Rapoport, R. Bailyn, L., Fletcher, K., Bettye, J., Pruitt, H. 2002. Beyond Work-Family Balance: Advancing Gender Equity and Workplace Performance, Wiley: London, UK
- Ray, R. 2008. A Detailed Look at Parental Leave Policies in 21 OECD Countries, Washington D.C.: Center for Economic and Policy Research
- Reynal-Querol, M. 2002. "Ethnicity, political systems, and civil wars," *Journal of Conflict Resolution* 46(1): 29–54.
- Riach, P.A., J. Rich. 2002. "Field experiments of discrimination in the market place," *Economic Journal* 112(443): 480-518.
- Riach, P.A., J. Rich. 2004. "Deceptive field experiments of discrimination: are they ethical?," *Kyklos* 57(3): 457–470.
- Riach, P.A., J. Rich. 2006a. "An experimental investigation of sexual discrimination in hiring in the English labor market," *The B.E. Journal of Economic Analysis & Policy* 5(2): 1-22.
- Riach, P.A., J. Rich. 2006b. "An experimental investigation of age discrimination in hiring in the French labor market," *IZA Discussion Paper No.* 2522.
- Rich, J. 2014. "What do field experiments of discrimination in markets tell us? A meta analysis of studies conducted since 2000," IZA Discussion Paper No. 8584.
- Riedmann, A., Bielenski, H., Szczurowska, T. and Wagner, A. 2006. Working time and work-life balance in European companies, Luxembourg: Office for Official Publications of the European Communities
- Riedmann, A., van Gyes, G., Roman, A., Kerkhofs, M., and Bechmann, S. 2010. *European Company Survey 2009*, Luxembourg: Office for Official Publications of the European Communities.
- Rinne, U. 2014. Anonymous job applications and hiring discrimination, IZA World of Labor.
- Robalino, D. 2014. Designing unemployment benefits in developing countries, IZA World of Labor.
- Robst, J. 2007. "Education and job match: The relatedness of college major and work," *Economics of Education Review*, 26:4, 397–407.

- Promotic Rodrik, D. 2016. "Premature deindustrialization," *Journal of Economic Growth*, 21: 1-33
- Roelfs, D.J., E. Shor, K.W. Davidson, J.E. Schwartz. 2011. "Losing life and livelihood: A systematic review and meta-analysis of unemployment and all-cause mortality," *Social Science & Medicine* 72: 840-854.
- Rojer, M.F.P. 2002. De betekenis van de CAO en het algemeen verbindend verklaren van CAOs. The Hague: Ministerie van Sociale Zaken en Werkgelegenheid. Werkdocument 271.
- Rooth, D.-O. 2014. Correspondence testing studies. What can we learn about discrimination in hiring?, IZA World of Labor.
- 977 Rosholm, M. 2014. Do case workers help the unemployed?, IZA World of Labor.
- Ruffle, B.J., Z. Shtudiner. 2014. "Are good-looking people more employable?," *Management Science* 61(8): 1760-1776
- 979 Salverda, W. 2009. "The Dutch minimum wage: a radical reduction shifts the main focus to part-time jobs," *AIAS working paper 09-71*.
- Sarna, M., Hegewisch, A., and H. Hartmann. 2013. *Balancing Working and Facmily: how analysing the costs and benefits of work-family legislation supports policy change*, Research-in-Brief Institute for Women's Policy Research
- 981 Scarpetta, S. 2014. mployment protection, IZA World of Labor.
- Schnall, P., M. Dobson, E. Rosskam (eds.) 2009. *Unhealthy work: Causes, consequences, cures*. New York: Baywood.
- Schulte, P.A., R.J.Guerin, A.L. Schill, A. Bhattacharya, T.R. Cunningham, S.P. Pandalai, D. Eggerth, C.M. Stephenson. 2015. "Considerations for incoreporating 'Well-being' in public policy for workers and workplaces," *American Journal of Public Health* 105: e31-e44.
- 984 Schultz, T.W. 1961. "Investment in human capital", *The American economic Review*, 51:1, 1-17.
- Schweinhart, L., J. Montie, Z. Xiang, W. Barnett, C. Belfield, M. Nores. 2005. *Lifetime Effects: The High/Scope Perry Preschool Study through Age 40*, Ypsilanti, Michigan: High/Scope Press.
- Sen, A. 1992. Inequality Reexamined, Oxford: Oxford University Press

- 987 Sianesi, B. 2008. "Differential effects of active labour market programs for the unemployed," *Labour Economics* 15: 370-399.
- Siegrist, J., E. Rosskam, S. Leka (eds.) 2015. Review of social determinants of health and the health divide in the WHO European Region: Employment and working conditions including occupation, unemployment and migrant workers. Copenhagen: WHO, Regional Office for Europe.
- Siegrist, J., M. Wahrendorf (eds.) 2016. Work stress and health in a globalized economy: The model of effort-reward imbalance. Dordrecht: Springer.
- Smeaton, D., Ray, K., Knight, G. 2014. Costs and Benefits to Business of Adopting Work Life Balance Working Practices: A Literature Review, Department for Business Innovation and Skills: London, UK
- 991 Smith, C., J. Chan. 2015. "Working for Two Bosses: Student Interns as Constrained Labour in China," *Human Relations* 68:305-26.
- 992 Stiglitz, J. 2002. Globalization and Its Discontents, New York: Norton
- 993 Stone, K.V.W., H. Arthurs (eds.) 2013. Rethinking Employment Regulation: After the Standard Contract of Employment, New York: Russell Sage Foundation Press.
- Takala, J., P. Hämäläinen, K.L. Saarela, L.Y. Yun, K. Manickam, T.W. Jin, P. Heng, C. Tjong, L.G. Kheng, S. Lim, G.S. Lin. 2014. Global estimates of the burden of injury and illness at work in 2012. *Journal of Occupational and Environmental Hygiene* 11: 326-337.
- Thelen, K. 2014. Varities of liberalization and the new politics of social solidarity, Cambridge: Cambridge University Press.
- Tilcsik, A. 2011. "Pride and prejudice: employment discrimination against openly gay men in the United States," *American Journal of Sociology* 117(2): 586-626.
- 797 Traxler F. 1995. "Farewell to Labour Market Associations? Organized versus disorganized decentralisation as a map for industrial relations," in F Traxler, and C.J. Crouch (eds.), Organized Industrial Relations in Europe. What future? Hants: Vermont.
- Traxler F., B. Brandl. 2012. "Collective Bargaining, Inter-Sectoral Heterogeneity and Competitiveness: A cross-national comparison of macroeconomic performance," *British Journal of `industrial Relations* 50: 73-98.

- Tucker, P., and Folkard, S. 2012. Working time, health, and safety: A research synthesis paper, Conditions of Work and Employment Series No. 31, Geneva: International Labour Organisation http://www.ilo.org/travail/whatwedo/publications/WCMS_181673/lang-en/index.htm (http://www.ilo.org/travail/whatwedo/publications/WCMS_181673/lang-en/index.htm)
- Turner, M., M. Fix, R. Struyk. 1991. Opportunities denied, opportunities diminished: racial discrimination in hiring, Washington, DC: Urban Institute Press.
- United Nations. 2015. The World's Women 2015: Trends and statistics, New York: United Nations, Department of Economics and Social Affairs, Statistics Division.
- United Nations. 2015. Sustainable Development Goals. https://sustainabledevelopment.un.org (https://sustainabledevelopment.un.org) (accessed January 4, 2016).
- Valfort, M.-A. 2016. "Religious discrimination in access to employment: evidence from a correspondence test in France," Working paper.
- Van Oorschot, W. 2004a. "Balancing Work and Welfare: activation and flexicurity policies in The Netherlands, 1980-2000," *International Journal of Social Welfare* 13(1): 15-27.
- Van Oorschot, W. 2004b. "Flexible work and flexicurity policies in The Netherlands. Trends and experiences," *Transfer: European Review of Labour and Research* 10(2): 208-225.
- Viebrock, E., J. Clasen. 2009. "Flexicurity and welfare reform: a review," *Socio- Economic Review* 7(2): 305-331.
- Visser, J. 2002. "The first part-time economy in the world: a model to be followed?," *Journal of European Social Policy* 12(1):23-42.
- Visser, J. 2011. Data base on institutional characteristics of trade unions, wage setting, state intervention and social pacts, 1960–2010 (ICTWSS), University of Amsterdam. http://www.uva-aias.net/208.
- Visser J. 2013. "Flexibility and Security in Post-Standard Employment Relations: The Case of the Netherlands," in H Arthurs and K. Stone (eds.), *Beyond the Employment Contract*, New York: Russell Sage.

- Visser J. 2015. The Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts. ICTWSS Database, version 5.0. Amsterdam: Amsterdam institute for Advanced Labour Studies.
- Visser, J. 2016. "What Happened to Collective Bargaining during the Great Recession?," *IZA Journal of Labour Policy* 5(9): 16-61.
- Visser J., S. Hayter, R. Gammarano. 2015. The coverage of collective bargaining: Stability, erosion or decline. ILO: Labour Relations and Collective Bargaining Policy Brief No.1.
- Vosko L.F., M. Macdonald, I. Campbell. 2009. *Gender and the Contours of Precarious Employment*, London: Routledge
- Wahrendorf M, J. Siegrist. 2014. "Proximal and distal determinants of stressful work: Conceptual framework and analysis of retrospective European data," *BMC Public Health* 14: 849
- Warren, T. 2003. "Class and Gender-based Working Time? Time Poverty and the Division of Domestic Labour," *Sociology*, 37(4): 733-752
- Warren, T. 2015. "Work-time underemployment and financial hardship: class inequalities and recession in the UK," Work, employment and society, 29(2): 191-212
- Weichselbaumer, D. 2003. "Sexual orientation discrimination in hiring," *Labour Economics* 10(6): 629-642.
- Weichselbaumer, D. 2015. "Testing for discrimination against lesbians of different marital status: a field experiment," *Industrial Relations: A Journal of Economy and Society* 54(1): 131-161.
- Weil, D. 2014. The Fissured Workplace: Why Work Became So Bad for So Many, Camridge: Harvard University Press.
- Williams, C.C. 2014. "Out of the Shadows: A Classification of Economies by the Size and Character of their Informal Sector," Work, Employment and Society, 28(5): 735-753.
- Williams C., F. Schneider. 2016. Measuring the Global Shadow Economy. The Prevalence of Informal Work and Labor, Edward Elgar Publishing.
- Wimmer, A. 2008. "The making and unmaking of ethnic boundaries: A multilevel process theory," *American Journal of Sociology* 113: 970-1022.
- Wolinetz, S.B. 1993. "Reconstructions Dutch social democracy," West European Politics 16(1): 97-111.

- World Health Organization. 2008. Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva: WHO.
- World Health Organization. 2013. International perspectives on spinal cord injury. Geneva: WHO.
- World Health Organization. 2014. Review of social determinants and the health divide in the WHO European Region: final report. 2nd ed. Copenhagen: WHO, Regional Office for Europe.
- Yotopoulos, P., D. Romano (eds.) 2007. The Asymmetries of Globalization, London: Routledge [Routledge Studies in Development Economics, No. 55].
- Zhou, X., J. Zhang, X. Song. 2013. "Gender discrimination in hiring: Evidence from 19,130 resumes in China," http://mpra.ub.uni-muenchen.de/43543/
- Zimmermann, K., C. Biavaschi, W. Eichhorst, C. Giulieti, M. Kendzia., A. Muravyev, J. Pieters, N. Podriguez-Planas, R. Schmidl. 2013. "Youth unemployment and vocational training", in Zimmermann, K. et al. Foundations and trends in microeconomics, 9:1-2, 1-57.
- Zschirnt, E., R. Didier. 2016. "Ethnic discrimination in hiring decisions: a meta-analysis of correspondence tests 1990-2015," Journal of Ethnic and Migration Studies, forthcoming.
- [1] We are grateful to external discussants who provided valuable comments on earlier versions of this draft, most notably Eddie Webster, Ajit Ghose, Bernhard Ebbinghaus and Jacqueline O'Reilly as well as other participants at a panel at the SASE Annual Meeting in Berkeley, 24 June 2016. Travel support by the Friedrich Ebert Foundation for a chapter workshop held in Paris in April 2016 is gratefully acknowledged as is support by IZA and the University of Manchester.
- 1032 [2] Institute for the Study of Labor (IZA), Bonn, Germany
- 1033 [3] São Paulo School of Economics, Fondação Getulio Vargas, Brazil
- [4] CREST-ENSAE, Malakoff, and Ecole Polytechnique, Palaiseau, France
- [5] Sciences Po CSO, Paris, France
- 1036 [6] University of Manchester, UK

```
[7] University of São Paulo, Brazil
    [8] Regent's University London, UK
1038
    [9] University of North Carolina, Chapel Hill, US
1039
1040 [10] London School of Economics, UK
1041 [11] The Economic and Social Research Institute (ESRI), Dublin,
    Ireland
1042 [12] University of Paris I Panthéon-Sorbonne, Paris School of
    Economics. France
    [13] Rutgers University, US
1044 [14] University of Duesseldorf, Germany
1045 [15] Massachusetts Institute of Technology (MIT), Cambridge, Mass.,
    US
    [16] University of Paris I Panthéon-Sorbonne, France
    [17] University of Amsterdam, The Netherlands
    [18] Draft by Alan Manning and Phil Scranton, still under revision
1048
1049 [19] One should interpret these results with a degree of caution as
    ILO (2015a) reports results of a similar exercize that are not exactly
    the same and the data availability and comparability are not as good
     as one would like.
1050 [20] This is consistent with a high share of total income gains in the
    world going to the top 1% as their incomes are so much larger than
     median incomes.
    [21] Draft by Arne Kalleberg and Huiyan Fu
1051
    [22] Draft by Colette Fagan
1052
1053 [23] Draft by Didier Demazière and Nadya Araujo Guimarães
```

[25] In fact Zimmermann *et al.* (2013) in their analysis find that there is no competition between younger and older workers in the European countries they examined.

1054 [24] Draft by Frances McGinnity, Hillel Rapoport and Marie-Anne

Valfort

- [26] We focus here on « unfair » discriminations, as opposed to « fair » discriminations that are part of national affirmative action programs and aim to compensate historically discriminated groups (e.g. Blacks in South Africa). See Section 6.5 for a brief discussion of affirmative action.
- 1057 [27] Such 'hard' quotas still exist in some countries like Brazil and Malaysia (OECD 2013).
- 1058 [28] Draft by Johannes Siegrist
- 1059 [29] See also sections 3 and 4 of this chapter.
- 1060 [30] Draft by Jelle Visser
- 1061 [31] Draft by André Portela de Souza
- [32] Draft by Pierre Cahuc, Werner Eichhorst and Kathleen Thelen