

Labour market change

Labour market segmentation: Piloting new empirical and policy analyses



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Country codes

EU28

| AT | Austria | FI | Finland | NL | Netherlands |
|----|----------|----|------------|----|----------------|
| BE | Belgium | FR | France | PL | Poland |
| BG | Bulgaria | HR | Croatia | PT | Portugal |
| СҮ | Cyprus | HU | Hungary | RO | Romania |
| CZ | Czechia | IE | Ireland | SE | Sweden |
| DE | Germany | IT | Italy | SI | Slovenia |
| DK | Denmark | LT | Lithuania | SK | Slovakia |
| EE | Estonia | LU | Luxembourg | UK | United Kingdom |
| EL | Greece | LV | Latvia | | |
| ES | Spain | МТ | Malta | | |

List of acronyms used in the report

| BHPS | British Household Panel Survey (United Kingdom) |
|-------|---|
| СМО | context-mechanisms-outcomes |
| CSR | country-specific recommendation |
| ELM | external labour market |
| EPL | employment protection legislation |
| EPSR | European Pillar of Social Rights |
| FQP | Formation et Qualification Professionnelle (training and vocational skills survey) (France) |
| GSOEP | German Socio-Economic Panel |
| ILM | internal labour market |
| IMW | industry-specific minimum wage (Germany) |
| ISCED | International Standard Classification of Education |
| LMS | labour market segmentation |
| MCVL | Muestra Contínua de Vidas Laborales (continuous sample of working lives) (Spain) |
| NLW | National Living Wage (UK) |
| NMW | National Minimum Wage (UK) |
| PES | public employment services |
| VET | vocational education and training |

Executive summary

Introduction

While labour market segmentation (LMS) has been researched from the perspectives of different branches of literature, it nevertheless remains vague as a concept. It emerged as an alternative to neoclassical economics and human capital theories, which assume that wages and working conditions generally depend on the worker's human capital and productivity level. Instead, LMS theory maintains that differences in working conditions between groups of workers may also be due to factors such as contractual arrangements or other institutional characteristics.

Policy context

- LMS is typically mentioned when discussing the consequences of the 'reforms at the margin' (or two-tier reforms) of the 1980s – reforms in employment protection legislation (EPL) which eased the use of temporary contracts while leaving the regulation of permanent employment largely unchanged. These reforms may have created more jobs, but they also resulted in a growing stock of labour market 'outsiders' among those in employment.
- The policy debate on LMS within the EU is linked to this expansion of temporary contracts in some Member States and its consequences: some people enjoy stable and secure careers with better wages and development prospects, while others are trapped in employment relationships characterised by instability, uncertainty and unfavourable working conditions.

Key findings

- This report understands LMS as a labour market situation with three concurring conditions: a division of the labour force into two or more segments; differences in working conditions that cannot be attributed only to differences in workers' productivity; and limited mobility between segments.
- The report combines a quantitative empirical analysis with a policy analysis. Both follow the above concept of LMS and take a broader perspective than that found in most existing approaches to the topic by looking beyond the type of contract and EPL as key dimensions of LMS. The overall approach is exploratory and illustrative. The in-depth analyses were conducted in France, Germany, Spain and the United Kingdom (UK).

Empirical analysis

The empirical analysis adopts a longitudinal perspective and classifies individuals into groups depending on how their trajectories develop over time. Key results are as follows.

- Standard open-ended contracts represent the most prevalent employment relationship across the four countries, and over a two-year period workers are most likely to remain in the same labour market state. Nevertheless, clear divergences emerge between the selected countries.
- Germany seems characterised by a less mobile labour market with fewer flows and with high upward mobility and relatively low downward mobility.
- The UK is the most flexible labour market, and upward and downward mobility are stronger than in the other countries, but seem equally important.
- Spain is a relatively mobile labour market, but with the most worrisome patterns in terms of LMS: upward labour mobility is limited and typically takes place among those workers who already enjoy a better labour market state, while risks of downward mobility are high and concentrated among those experiencing poorer working conditions, especially during the economic crisis (among them, transitions of temporary employees into unemployment).
- France, like Spain, is characterised by a high incidence of non-standard employment and quite low transition rates into standard forms of employment. Information on transition rates point to the challenge posed by a significant number of temporary employees who are trapped, failing to move to permanent contracts and experiencing (relatively long) unemployment spells which may result in scarring effects.
- o The analysis identifies four labour market trajectory groups in each country: two belonging to the upper segment, where careers are characterised by employment in the best conditions or a very short upward transition to attain such status, and two belonging to the lower labour market segment, where careers are characterised by a higher incidence of non-standard forms with unfavourable employment conditions and also unemployment or inactivity, and typically higher job turnover.

• Lower-educated people, younger people, immigrants and women are most likely to have careers further away from the standard trajectories and fewer opportunities to progress in the labour market. Moreover, a standard career is more likely to take place in large firms and in sectors such as public administration and higher added-value services (financial, real estate), while lower added-value service activities (commerce and hospitality, administrative services) have a stronger relative weight among the bottom career trajectory groups.

Policy analysis

The policy analysis explores how measures adopted in the above countries, beyond the EPL type, can reduce LMS by encouraging upward transitions, preventing involuntary downward mobility or narrowing the gap in working conditions between upper and lower labour market segments. Key results are as follows.

- Tailored active labour market policies (ALMPs) can encourage upward transitions by enabling individuals to access the labour market and by incentivising employers to take on and retain disadvantaged workers. The effectiveness of ALMPs depends on their flexibility in content, individualised provision and good management.
- Assisted contracts (common in France and Spain) can reduce LMS if they are aligned with business cycles, EPL provisions and vocational education and training (VET) policies, especially when financial support is reserved for permanent hires, conversion of temporary into permanent contracts or employee retention.
- Promoting self-employment helps to combat LMS if, in the long run, it results in transitions from unemployment into stable and secure employment rather than inflows into precarious jobs. The lack of proper targeting and safeguards may lead to substitution of standard employment with less stable/bogus self-employment.

- Minimum wage regulations may reduce LMS by lifting working conditions in lower segments closer to the ones in higher segments.
- VET policies can facilitate income increases and upward transitions into stable employment by providing workers with qualifications aligned with labour market needs, especially if such policies are tailored and incentivise transitions after training.
- Tailored family policies can prevent LMS among women who are exposed to it and are strongly influenced by cultural and contextual factors and other existing benefits schemes.

Policy pointers

- A combination of data-driven and policy-based approaches are needed to fully capture LMS.
- For the adequate study of LMS in the future, understanding of this phenomenon should be aligned in academic and policy debates.
- Adequate data are needed for relevant empirical analyses of LMS in Europe: good, comparable and accessible longitudinal data, also covering labour demand-side variables and matched employer– employee data at the individual level.
- Effective policy should not only address barriers to access the upper labour market segments but also consider downward mobility and differences in working conditions. A broader policy approach, beyond EPL reforms, is encouraged.
- Understanding how different groups are affected is fundamental for policy action, as blanket solutions to a heterogeneous segment are unlikely to effectively reach all vulnerable groups.
- As the impacts of individual policies are very limited, integrated context-sensitive approaches combining financial incentives, regulation, monitoring and improving access to quality public services should be fostered to combat LMS.

Introduction

While it is normal to expect relatively poor working conditions among lower-skilled individuals or younger workers starting their careers, labour market segmentation (LMS) refers to a situation where differences in working conditions between individuals in the labour market persist over time and cannot be attributed exclusively to differences in workers' productivity. This means that some people (those in the 'primary' segment) enjoy stable and secure careers with better wages and development prospects, while others (those in the 'secondary' segment) are trapped in employment relationships characterised by instability, uncertainty and poorer working conditions in general such as lower earnings, limited access to social protection, training and representation, more challenging life course planning or a higher risk of workrelated accidents and health issues.

LMS became a more common concept in developed countries from around the 1970s against the background of growing unemployment and mounting evidence of the existence of labour market segments characterised by unfavourable working conditions (for instance, affecting migrants). From the 1980s, unemployment and global competition led to demands for greater flexibility, which resulted in reforms of employment protection legislation (EPL). These so-called 'reforms at the margin' (or two-tier reforms) mainly consisted of easing the use of temporary contracts while leaving the regulation of permanent employment largely unchanged. Some argue that, although the reforms created more jobs, these were more precarious, thus exacerbating concerns about LMS.

LMS is an important area of research and policy debate because its implications are multiple and far-reaching. Individuals in certain groups, such as women, young people or individuals with a low level of educational attainment, are considered to be typically more affected by LMS. They may become trapped in poor-quality jobs (for example, with low pay, atypical working hours, low status, insecurity or lack of opportunities for career development), and experience limited access to training, housing and social security, with consequences for overall well-being and even life course planning.

Moreover, LMS may also have important effects at the macroeconomic and societal levels, such as labour market turbulence and general economic inefficiencies in resource allocation, weaker purchasing power and economic demand, lower productivity and human capital development, higher poverty rates and inequality or reduced social mobility. In turn, LMS may

contribute to reducing social trust and confidence in democracy as these impacts threaten political stability and social cohesion.

Policy background

The topic of LMS features high in policy discussion at EU and national levels, typically linked to the above-mentioned two-tier EPL reforms. Reducing EPL has been advocated as a way to fight the high unemployment that was considered to be caused by inflexible labour markets in European countries (Blanchard, 2006; European Commission, 2012). This process of EPL deregulation has been underway for decades and accelerated following the 2008-2009 economic crisis (Myant and Piasna, 2017). In some European labour markets, mainly in continental and southern EU Member States, these reforms largely maintained the regulation of permanent contracts while easing the use of temporary contracts, which was seen as a key factor leading to LMS (Kahn, 2010; Boeri, 2011). This trend led to growing levels of temporary employment and often resulted in the workforce being split into several segments characterised by different working conditions and limited mobility between those segments (ILO, 2013a).

Sustainable and equitable employment growth is among the key priorities of the EU, and part of this involves tackling LMS. For instance, the European Commission linked strict EPL to 'reduced dynamism of the labour market and precarious jobs' and encouraged EPL deregulation in order to 'revive job creation in sclerotic labour markets while tackling segmentation' (European Commission, 2012, p. 4). The guidelines of the European Employment Strategy underscore the importance of better-functioning labour markets, placing specific focus on reducing LMS.

Typically, reference to LMS in EU policy debates combines the requirement for more flexibility in EPL and the need to reduce LMS. In practice, combining both objectives would mean reducing EPL for permanent employment (helping to close the gap with the EPL applying to temporary contracts). However, research has shown EPL relaxation to be neither economically advantageous for the countries implementing it nor a useful approach to reducing LMS (Rubery and Piasna, 2017).

Moreover, there is no clearly established definition of LMS to guide policy discussion and research. LMS is increasingly understood as a relevant contextual phenomenon or as part of the background against which individual EU actions are launched – only rarely does it feature at the centre of these policy initiatives.

Beyond EPL, references to LMS have mainly appeared in employment policies and initiatives focused on labour rights, access to training, access to social protection and social dialogue as well as in other types of policies targeting specific vulnerable groups, such as young people, migrants or atypical workers.

More recently, the discussion on 'new forms of employment' has focused on their implications in terms of working conditions, access to training, social protection and social dialogue (Eurofound, 2015). Against the backdrop of rapid technological change and its important labour market implications, EU policymakers and researchers are feeding into the LMS debate by paying increasing attention to the differences in living standards and working conditions between standard and non-standard forms of employment – a relevant example being the principle of 'secure and adaptable employment' in the European Pillar of Social Rights (EPSR).

Objectives of the report

The main objectives of this study are to address the theoretical concept of LMS, to conduct an exploratory empirical analysis of LMS and to identify different policy approaches which could be helpful in tackling this phenomenon in four EU Member States. France, Germany, Spain and the United Kingdom (UK) were selected as the countries of focus because they fulfil the criteria of relevance of LMS and data availability. Each country has available and ready-to-use longitudinal data and is characterised by different economic structures, institutional settings and labour-market-related problems, making them relevant from an LMS perspective.

First, given the lack of a standard definition, the starting point of this study is a theoretical literature review which helps clarify the nature of LMS. According to this report, LMS is a useful theoretical framework for understanding labour market dynamics and inequalities. It puts forward an operational definition of LMS which takes into account three concurring conditions for the existence of LMS: a division of the labour force into two or more segments; differences in working conditions that are not attributable only to differences in worker productivity; and limited mobility between segments, with differences persisting over time and not characteristic only of first labour market entry or re-entry.

Second, given the complexity of examining LMS at an empirical level, this report proposes an innovative set of analyses which may be useful for the study of LMS and that goes beyond the common understanding of LMS as mainly linked to a significant presence of temporary contracts. These analyses apply a dynamic (applying sequence analysis to longitudinal data monitoring the careers of individuals over several years) and multidimensional (basing categorisation of the labour market state of individuals not only on contractual arrangements but also on earnings and occupational category) approach to observing labour market mobility in the four countries selected. Individuals are categorised in terms of employment conditions and by how their careers develop over time, allowing for the identification of different trajectory groups.

Third, at policy level, the report explores how a wide range of policy measures have contributed to addressing LMS - by influencing labour market transitions, progressions and working conditions in the selected countries. The ambition of the analysis is to go beyond the interventions typically implemented so far and to address LMS specifically, namely EPL reforms. Measures selected for analysis consist of packages of active labour market policies (ALMPs), assisted contracts¹, self-employment promotion, minimum wage regulations, vocational education and training (VET) and family policies. Reflections are provided on what works and what does not in terms of tackling LMS, taking into account the design, context and potential for transferability of the different measures.

Limitations of the research

The findings of this study must be interpreted with caution due to several important limitations.

The quantitative analysis is affected by challenges common to empirical analyses of LMS generally, as well as limitations posed specifically by the current study. As already noted, a common problem is the lack of a clear definition of the phenomenon of LMS. This study applies its own operational definition of LMS, but developing an empirical strategy that bridges all three elements implicit in this definition constitutes a major challenge. Another general issue is the difficulty of accessing good-quality longitudinal datasets and the lack of matched employer–employee data which permit the exploration of factors such as employer strategy.

These are employment contracts, common in France and Spain, that benefit the employer through financial aid in different forms (see section on 'Assisted contracts' in Chapter 4, p. 63).

Finally, comparability of data across the four selected countries in this study is limited by variations in the available datasets (administrative versus survey data, the time span covered, the duration of uninterrupted periods of observation, the representativeness of samples and the variables available for analysis, among other aspects).

The policy analysis too is limited by the absence of comprehensive data. In particular, evidence of the direct or indirect impacts of measures to tackle LMS is lacking, even where policy evaluations have been carried out. The objective of the policy analysis is to go beyond EPL reforms and study how other types of policy interventions may contribute to addressing LMS. As various measures adopting different policy approaches are considered, the findings should be seen as exploratory and cannot be generalised.

Structure of the report

This report contains five chapters. Chapter 1 explores the concept of LMS from a theoretical perspective. Chapter 2 introduces the operational definition adopted within this study and the approach proposed for the empirical and policy analysis of LMS. Chapter 3 presents the methodology applied in the quantitative analysis and its main findings across France, Germany, Spain and the UK. Chapter 4 introduces the key EU and national policy developments relevant to LMS and explores the potential effectiveness – in terms of reducing LMS – of a set of measures which have been implemented in these four countries. Finally, Chapter 5 concludes and provides some policy pointers.

1 Exploring the concept of labour market segmentation

Inspired by the works of John Elliott Cairnes and John Stuart Mill in the 1870s and 1900s, contemporary LMS theories were consolidated in the 1960s, mostly as alternatives to explanations of the labour market provided by neoclassical economics and human capital theory. These latter theories rest on the assumption that the labour market is a perfect market, where the forces of labour supply and demand, together with investments into human capital, are the only factors determining an individual's position in the labour market. According to human capital theory, the earnings (and other related working conditions) of workers are the result of labour supply-side factors because they would depend on workers' marginal productivity, which is determined by their human capital levels and shaped in turn by their educational levels, experience and training (Becker, 1964; Arrow, 1973; Mincer, 1974).

In contrast to these theories assuming that human capital and related productivity alone determine labour market outcomes and working conditions, alternative approaches emerged in the 1950s and 1960s pointing to the potential relevance of labour demand factors. For example, British economist Pigou highlighted the role of restricted movement of workers in the labour market as an important factor shaping labour market outcomes (Pigou, 1945, cited in Leontaridi, 1998). He argued that competition alone could not eliminate wage differentials between workers of equal productivity, thus demonstrating the imperfect functioning of labour markets due to institutional factors. This perspective was further developed by American economists Kerr (1954) and Dunlop (1957), who underlined the role of labour market institutions in contributing to the imperfect functioning of labour markets (Leontaridi, 1998). These works formed the theoretical foundations for contemporary LMS theories.

Recent theories of labour market segmentation

LMS remains an elusive concept which cannot be easily defined. There is no unified approach to LMS, and contemporary theories can be understood as a collection of approaches with certain similarities (see literature reviews by Leontaridi, 1998; Rubery, 2007; Michon, 2013).

First, these approaches share an understanding of the labour market as being fragmented into separate submarkets (segments) which provide workers with employment opportunities that differ markedly in quality, resulting in the corresponding compartmentalisation of the labour force into workers of higher and lower value (Berndt, 2017). Second, they underline the need to move beyond market-based, labour supply-side explanations and consider labour demand-side factors (such as institutions, labour market regulation, employer strategies) and their role in determining labour market outcomes.

Apart from these similarities, LMS theories branch out along multiple dimensions, including the root causes of LMS which explain the lack of mobility between segments and other elements. The four most notable LMS theories are summarised below, and their key elements are presented in Table 1.

Dual labour market theory

The idea of a dual labour market consolidated in the 1970s with major contributions from Doeringer and Piore (1971) and Thurow (1975). The theory contends that economic processes over time divided the labour market into two sectors: the primary sector, characterised by well-paid stable jobs, opportunities for advancement and good working conditions, and the secondary sector, characterised by low-paid, precarious jobs with little chance of advancement and poor working conditions. Mobility between the two sectors is severely limited. Moreover, workers in the secondary sector experience scarring effects, as employment in this sector has long-term negative impacts on their employability.

According to this theory, the ultimate cause of duality (or LMS) is the uncertainty of demand in modern economies along with the different responses offered by technology and the organisation of production (Berger and Piore, 1980). This, together with the existence of internal labour markets (ILMs) and the stability they perpetuate for primary sector workers, explains why some workers become irreplaceable as quasi-fixed factors of production (through investments in specific training) and enjoy stability and high wages, while others are destined to be the variable factor that absorbs fluctuations experienced in demand or production. Thus, wage structures and employment

conditions are determined not only by workers' individual attributes but also by demand-side drivers, such as employer characteristics and the broader structure of the economy or the organisation of workers into trade unions.

Radical segmentation theory

Radical segmentation theory was developed by authors like Reich et al (1973) and Edwards et al (1975) in the 1970s. Building on the dual labour market theoryinspired division of the labour market, it examines why different groups in society are confined to different labour market segments. Reich et al (1973) argue that the root cause of LMS is monopolistic capitalism, which emerged in the late 19th century when monopolistic corporations broke down unified workforces that threatened their control over workers. This resulted in differences both in industrial structures (due to uneven growth rates across different industries) and in work environments, wages and mobility patterns within the workforce. The reason for the dichotomisation of the latter is that large monopolistic corporations need stability in terms of labour demand in order to fully utilise their investments.

The radical theory of segmentation, like dual labour market theory, highlights institutional changes and behavioural rules as key elements determining labour market structures (Leontaridi, 1998). However, the radical perspective emphasises social relations of production, such as exploitation and control over employees through bureaucratic mechanisms within the broader politico-economic system (capitalism), rather than seeing LMS solely as a reflection of the dual industrial structure.

Insider-outsider theory

Building largely on dual labour market theory, insideroutsider theory emerged in the 1980s offering a largely microeconomic perspective on the key drivers of LMS. It proposes that labour market institutions, such as EPL, collective bargaining or trade unions, lead to some jobs having higher labour turnover costs (Lindbeck and Snower, 2001). According to the theory, the insiders (incumbent workers) benefit from the turnover costs associated with replacing insiders with outsiders (workers external to the firm), and this hinders mobility between the two segments. These turnover costs may perpetuate segmentation of the labour market: for example, even if outsiders are willing and able to do the

same work for lower wages than existing insiders, turnover costs may prevent an employer from replacing the worker.

Some of the most obvious labour turnover costs are those associated with hiring, training and dismissing workers, which in turn can be linked to type of employment contract, trade union membership and other factors (Lindbeck and Snower, 2001). This approach gave rise to an extensive body of literature analysing the effects of labour market institutions on labour market outcomes.

Cambridge segmentation school

The Cambridge segmentation school emerged as a form of constructive criticism to the previously developed dual labour market and radical segmentation theories. Rubery (1978) criticised these two theories on the grounds that they view the development of the economic structure and labour markets through the motivations and actions of capitalists, giving little importance to the role of workers. Similar to the insider-outsider theory, the Cambridge school highlights the need to consider structural developments in the economy and the institutional/regulatory environment in order to explain persisting inequalities in the labour market. The latest approach to studying LMS - which involves an attempt by Grimshaw et al (2017) to incorporate insights from previous LMS research, comparative political economy and feminist theories - is influenced by the Cambridge school.

The school advocates a life course perspective to explain the disadvantages experienced by some groups in the labour market (such as women, young workers or migrants), whose position at a certain point in time is explained by the accumulation of some disadvantages in certain phases of their careers (instability experienced at the early career stage or due to career interruptions). Another important contribution of the school is the notion that LMS could be driven by a confluence of different labour supply and demand factors: this may include, for instance, changes to employment regulations in combination with employee socioeconomic characteristics. Importantly, the Cambridge school refutes the division of the labour market into just two segments – as contended by earlier theories – and advocates examination of various factors of disadvantage and inequalities to capture multiple forms of segmentation.

Table 1: Salient elements of LMS theories

| Theory | Key elements/ideas | Main drivers of LMS | Reason for (lack of) mobility | Career trajectories |
|-------------------------------------|---|---|--|---|
| Dual labour market theory | Primary (upper and lower) and secondary segments – dual economic structure ILMs* and ELMs** | ILMs* and other demand-side factors drive and perpetuate differences in working conditions/LMS | ILMs* in the primary segment but not the secondary segment Protracted stay in the secondary sector has scarring effects | Primary segment – long-term careers (with fringe benefits, pensions, training) and promotion opportunities Secondary segment – few opportunities to progress |
| Radical segmentation theory | Capitalist forces prevent class solidarity Intensity of control mechanisms explains differences in jobs and LMS | Monopolistic capitalism breaks down unification of workforce Dual industrial structure and working environments | Monopolistic capitalists need stability in labour supply and thus exercise hierarchical bureaucratic control over the workforce | Primary (white-collar) and secondary (blue-collar) segments diverge, as in dual labour market theory |
| Insider–outsider theory | Companies have insiders and outsiders Macroeconomic level – standard and non- standard employment relations | EPL and industrial relations Employer strategies to lower hiring and firing costs | Insiders are protected by turnover costs – institutions protect them Trade unions represent insiders more than outsiders | Insiders have stable careers with opportunities for career advancement Outsiders lack opportunities |
| Cambridge segmentation school | Changing worker organisation/ employment structures important Supply-side matters in explaining LMS Heterogenous secondary sector | Institutional factors related to employment regulations in combination with supply-side factors Gender- and age-based divisions of labour in society | Multiple disadvantages explain why individuals remain in the secondary segment Gender and age are among important worker characteristics in relation to LMS | Multiple disadvantages explain why individuals remain in the secondary segment A career approach is important to incorporate the gender dimension in LMS |

Notes: *ILM = internal labour market. ILMs are where workers are hired into entry-level jobs, while higher-level jobs are filled from within the firm. Wages are quite free from market pressures and are determined internally. **ELM = external labour market. ELMs are where workers move quite fluidly between firms. Firms do not have a substantial say on wage-setting (Lazear and Oyer, 2004).

Source: Authors, based on literature

Drivers of labour market segmentation

The drivers of LMS differ depending on the context and particularities of each labour market, which explains why the literature on LMS has identified a wide variety of drivers. In general, these may be divided into two broad categories:

 labour demand-side drivers, including employment regulations, industrial relations, technological developments or economic cycles • labour supply-side drivers, referring to personal characteristics of employees (including age, gender, education, skills level or health) – these drivers are related to the above-mentioned neoclassical economics and human capital theories, which associate workers' human capital levels with their wages and working conditions

Strictly speaking, the labour demand-side drivers are the only ones relevant from an LMS perspective.

Nevertheless, these two types of driver do not act in isolation, and LMS may be the result of their interaction.

A clear understanding of how these factors function individually – and in combination with each other – is provided in Table 2, which presents a list (non-exhaustive) of causal factors for LMS as identified in the specialised literature.

Table 2: Drivers of LMS

| Causal factors | Specific drivers | Pathways to LMS |
|---|--|---|
| Institutional factors | Employment regulations | Multiple studies link the rise of LMS to the deregulation of non-standard forms of employment, which often resulted in a 'two-tier system', with asymmetries in job stability between workers holding temporary and permanent contracts (Boeri and Garibaldi, 2007; Boeri, 2011; Cahuc et al, 2016). The prevalence of non-standard employment contracts is often considered in the policy debate as a proxy indicator for the existence of LMS. However, non-standard forms of employment become really relevant for LMS when the employees are worse off than their counterparts with permanent contracts and, importantly, experience limited mobility vis-à-vis standard forms of employment. |
| | Industrial relations | The moment of the business cycle determines, to some extent, later achievements in the employment career of the individual (Arulampalam, 2001; Stevens, 2008; Leschke, 2012; O'Higgins, 2012), and entering the labour market in a period of economic recession has been shown to have a negative impact (Stevens, 2008). In addition, economic downturns are often associated with growing inequalities and reduced opportunities for upward mobility, and employees may experience a deterioration of their working conditions, together with greater recourse by employers to non-standard forms of employment (Leschke, 2012). |
| | Welfare regimes | Different welfare states and labour market arrangements can create different types of employment structure, which in turn result in various labour market exclusion patterns and, consequently, segmentation (Esping-Andersen, 1990). Welfare states may have reinforced labour market dualisation through differences in access to benefits for those in permanent full-time jobs and those in temporary or part-time jobs (Emmenegger et al, 2012). In continental and southern European welfare regimes, social policies may reinforce this dualisation through their redistribution of taxes and transfers (Häusermann, 2012): in France, Germany and Spain, income differences between employees in different labour market segments remain significant even after redistribution of taxes and transfers by the state, while the opposite occurs in most Nordic welfare regimes. |
| Employer strategies | Efficiency-seeking strategies | Pressures of competition, increasing standardisation of work processes and volatility of demand in global markets lead employers to seek efficiency and cost-saving measures, such as more flexible and less protected employment arrangements (Pulignano et al, 2015) or the creation of bogus self-employment by which workers previously employed at a firm become outside contractors without there being substantive changes to the nature of the work relationship. On the other hand, employers are also more likely to differentiate between employees within the firm, offering more attractive working conditions to the workers they have more incentive to retain. This has often resulted in two-tiered labour markets, with 'core' and 'periphery' employees, where sometimes people doing identical work have different working conditions by virtue of the differences in their contractual arrangements. |
| | | Digitalisation and the rise of online platforms have sometimes been linked to the erosion of employment status and stability, as well as low income and insecure payments (Eurofound, 2017a; Fabo et al, 2017), although this does not hold true for all forms of platform work (Eurofound, 2018a). |
| | Company size and workplace fragmentation | Some studies have identified company size as a potential driver of LMS, with smaller companies less likely to have worker representation and collective bargaining (Michon, 1987; Oliva and Kallenberg, 2003). Moreover, small and medium-sized companies offer fewer opportunities for internal upward mobility. |
| | Hiring strategies | Employers may favour certain groups in the labour market, exacerbating the divide between groups that are more and less well off in the labour market. |
| Structural macro-level factors | Skills-biased technological change | Growing use of technology in workplaces puts low-skilled workers at a disadvantage compared to those who are highly skilled, hence reinforcing already existing inequalities (Card and Di Nardo, 2002; Haskel and Slaughter, 2002; Davidsson and Naczyk, 2009; Acemoglu and Autor, 2011). Technological developments increasingly make low-skilled workers redundant as the tasks they perform are more easily outsourced or automated (Goos et al, 2014). See more on technology as a potential driver of LMS in Box 1 below. |
| | Economic structure of the country | In some countries, sectors with cyclical labour demand fluctuations are more prominent (tourism, agriculture, services), potentially leading to more unstable and fragmented employment relationships. |
| Economic development and business cycles | Overall level of economic development | Countries with a lower level of economic development experience greater labour market inequalities, a greater degree of informal and undeclared work and higher unemployment and underemployment. In those countries, companies are more pressed to adopt efficiency-oriented strategies as competition tends to take place through price/cost, while high value-added sectors (associated with the primary labour market segment) tend to be smaller and have limited opportunities for upward mobility in their labour markets. |

| Causal factors | Specific drivers | Pathways to LMS | | |
|----------------------------------|--|---|--|--|
| | Business cycles | The moment of the business cycle determines, to some extent, later achievements in the employment career of the individual (Arulampalam, 2001; Stevens, 2008; Leschke, 2012; O'Higgins, 2012), and entering the labour market in a period of economic recession has been shown to have a negative impact (Stevens, 2008). In addition, economic downturns are often associated with growing inequalities and reduced opportunities for upward mobility, and employees may experience a deterioration of their working conditions, together with greater recourse by employers to non-standard forms of employment (Leschke, 2012). | | |
| Socioeconomic characteristics | Age Gender Level of education or qualifications Migrant status Family status Health status Other factors | Following the consolidation of the above-mentioned human capital theory in the 1960s, various socioeconomic characteristics (age, gender, family status, skills level, education and others) have been considered as important labour supply-side variables in determining labour market outcomes. Certain groups (young people, women, migrants) are considered to have lower bargaining power and consequently find themselves having to accept work on terms and conditions that are worse than what would be justified given their level of productivity. LMS theory highlights how labour demand-side factors (institutions, employer strategies, macro-level structural changes) in interaction with labour supply-side ones may determine labour market outcomes and lead to segmentation. Employers might be reluctant to hire or invest in employees who do not conform to the perceived ideal type (Bosch, 2004; Piasna and Myant, 2017). Such employees tend to experience discrimination by employers, get trapped in non-standard forms of employment and have less access to training, which in turn could hinder their upward mobility in the labour market and reinforce existing inequalities (Forrier and Sels, 2003). | | |

Source: Authors, based on literature

Box 1: Technology as a potential driver for LMS

Digitalisation is widely recognised as one of the major factors influencing the labour market. Advancements in modern technologies affect the types of job demanded by the economy as well as their nature as regards task content or work organisation (Eurofound, 2014a). These jobs require particular skills and specialisation and involve different working conditions and social status. Technology is seen to have a 'routine-biased' effect on labour demand. Proponents of this idea of pervasive employment polarisation argue that the relative decline of middle-ranking jobs can be attributed to the routine and codifiable nature of their inherent tasks, which increasingly can be replaced by machines (Eurofound, 2014b). This leads to a constant demand for low-skilled tasks that cannot be easily automated, but even more so to an increasing relative demand for high skills – expected to result in a wage premium against other jobs (Eurofound, 2016).

While this does not cause LMS directly, as the resulting differences in working conditions can be justified by worker-related productivity differentials, technology can cause some inequalities that lead to LMS, particularly if it is not considered in isolation but in its interplay with employment regulation, business models, work organisation and institutional frameworks. For example, platform work – the matching of supply and demand for paid labour through an online platform or an app (Eurofound, 2018a) – is often praised for its labour market integration potential due to its low entry barriers. However, as of mid-2019, little is known about whether platform work offers sustainable career options; whether it can act as a stepping stone into more traditional employment forms if the worker so desires; or whether it results in situations in which workers are locked into an employment form they perceive as unfavourable. Given that at least some forms of platform work result in worse working conditions and fewer options for career advancement compared to similar jobs in the traditional economy, some potential for LMS can be assumed (Eurofound, 2019c).

Labour market groups affected and main issues identified

The literature has identified groups of workers with certain socioeconomic characteristics that are more

prone to experiencing the negative effects of LMS due to factors other than their potentially lower levels of human capital. Table 3 lists the groups and presents some of the main challenges they face.

Table 3: Main issues for affected groups

| Affected group | LMS issue |
|---------------------------------------|---|
| Young people | • Young people can get stuck in temporary employment, often offered for labour market entry positions, and are more liable to slip back into unemployment (Autor and Houseman, 2010; Eurofound, 2014b). |
| | Scarring effects hinder upward career mobility in the longer term. |
| Older people | Employers tend to be less willing to invest in the capacities of older employees, which could weaken these workers' labour market positions and trigger downward-spiralling career pathways (Picchio and Van Ours, 2013; Kremer et al, 2017). |
| | Older employees can be more reluctant to take up new skills, change their occupation or look for employment opportunities outside their local area (Eurofound, 2018b). |
| Women | Care responsibilities for women lead to career interruptions. Career advancement after returning to work following maternity leave is often slower (Fitzenberger et al, 2010). |
| | Women are overrepresented in sectors where non-standard forms of employment are predominant (for example hospitality). Such forms of employment offer fewer opportunities for career advancement and are less secure in cases of maternity leave. |
| | Discriminatory practices on the part of employers with respect to women could, in part, explain persistent differences in the labour market situations they enjoy and their mobility possibilities. |
| Immigrants and ethnic minorities | Racial/ethnic employment discrimination, including cultural stereotypes, on the part of employers affects this group. |
| | • People in this group experience lack of recognition or limited transferability of skills and qualifications. |
| Low-educated and low-qualified people | Skills-biased technological change could contribute to rising inequalities between high-skilled and low-skilled workers, as the skills of the former are favoured and those of the latter devaluate and become redundant (Davidsson and Naczyk, 2009; European Parliament, 2018). |
| | Routine-based technological change posits that technological change will negatively affect employees performing routine tasks (Autor, 2013). As a result, low-skilled employees performing routine tasks face greater job insecurity and have more limited prospects for upward mobility. |
| | • Low-skilled employees also tend to work in economic sectors that are more prone to offering non-standard employment contracts and that are more susceptive to business cycles (for instance, hospitality). |
| | Low-skilled employees are less likely to participate in further education or vocational training courses, which could lead to a low-skills trap (European Commission, 2015). |
| People with health issues | • Disability, especially when combined with other factors (particularly gender), may result in negative labour market outcomes, such as low employment rates and low earnings levels (Cregan et al, 2017; Pettinicchio and Maroto, 2017). |

Source: Authors, based on literature

The consequences of LMS, which may manifest to a greater extent among these groups, are varied. On the one hand, the so-called direct effects of LMS refer generally to the relatively poor working conditions and labour market situations of those workers negatively affected by it. Such effects include a higher risk of getting trapped in non-standard forms of employment for extended periods of time, a higher risk of experiencing spells of unemployment, limited access to training opportunities, lower wages and a higher risk of in-work poverty.

On the other hand, individuals may be affected by other more indirect effects of LMS, such as the following: more limited access to social protection, greater difficulties in managing the transition into adulthood (for instance, accessing housing and being able to plan for their own and their families' futures), and a higher risk of mental health problems. Moreover, LMS goes beyond the individual level and may also result in significant challenges for society as a whole, such as those posed by higher levels of poverty and inequality, unemployment and labour market turbulences.

2 Analytical framework to guide the analysis

Operational definition of LMS

Taking into account the complexity of the concept of LMS and the absence of a standard definition, an important first step for the analysis of LMS in this report is the adoption of an operational definition. The operational definition provides a common framework for the development of the specific methodologies for the empirical analysis and the policy analysis of LMS, presented in Chapters 3 and 4.

As defined in this study, LMS refers to a labour market characterised by three concurring conditions, as described below.

1. Division of the labour force into two or more segments

LMS theory, ranging from dual labour market to radical segmentation and insider–outsider schools of thought, is based on the notion that labour markets have two segments (primary and secondary), assuming that persons in each of the segments are similar enough to be treated as one group. In some definitions, this division is made on the basis of permanent versus temporary contracts, demarcating the divide between secure jobs and insecure jobs (European Commission, 2015; Eichhorst et al, 2017).

Nevertheless, in an attempt to fully capture the heterogeneity found in labour markets and to go beyond type of contract as the only determinant of LMS, this study posits the existence of more than two segments, as well as covering all workers, employees and those who are self-employed. Moreover, it takes into account not only people in employment but also those who are unemployed or inactive, since segmentation may occur not only between groups of workers but also between those in employment and those excluded from it.

2. Differences in working conditions which are not attributable only to differences in worker productivity

Looking beyond the types of contract held by workers, this study approaches LMS by exploring employment security in terms of three variables: type of contract held, earnings and occupational category.

Type of contract held (which refers not just to temporary or permanent contracts but also to part-time work or self-employment, among other non-standard employment forms) does not constitute LMS in itself and only becomes problematic when coupled with the other dimensions of working conditions defined here

and, importantly, when it fails to provide adequate mobility to a more 'secure' job (see point 3 below).

While it is expected that workers would receive different levels of earnings depending on their human capital (determined by experience, skills and education), LMS theories point to the role of labour demand factors in explaining wage differences among those with comparable productivity. Existing research mainly attributes such differences to institutional factors that lie behind the imperfect functioning of labour markets (Kerr, 1954; Dunlop, 1957; Leontaridi, 1998). Importantly, earnings in the worse segments are affected by supply and demand factors, while jobs in the better segments are protected from such pressures (Leontaridi, 1998). LMS literature has focused on low pay as an indicator of segmentation (Rubery, 1978), defining this as less than two-thirds of median earnings (McKnight et al, 2016).

Occupational categories are important for the analysis of career trajectories and LMS because of the implicit link between, for example, lower level occupations and certain contract types, such as involuntary part-time contracts (Delsen, 1995; Rubery, 1998).

3. Limited mobility between segments, meaning that the differences are not characteristic only of first labour market entry or re-entry, and persist over time

This is the key component of the operational definition and the one that determines the career perspective adopted in the empirical approach followed in this study (Chapter 3) and the related identification of relevant policy measures (Chapter 4). The need to determine whether or not there is mobility between segments over time means relying on alternative approaches to those commonly used in LMS research, namely approaching LMS through employment (Tilly, 1992; Fagan and Rubery, 1996; Leschke, 2009) and job conditions (Anderson et al, 1987; Gittleman and Howell, 1993; Hardy et al, 2015) experienced by individuals in the labour market at a given point in time. In this study, the lack of vertical mobility from a segment characterised by poor working conditions to one with better conditions and the incidence of downward mobility are treated as indicative of LMS. This indicates that mobility as such can, and indeed does, occur within segments, particularly the worse ones. Hence, in this understanding, a segmented labour market does not mean that there is no mobility at all, but that there is limited upward mobility and possibly downward mobility across segments.

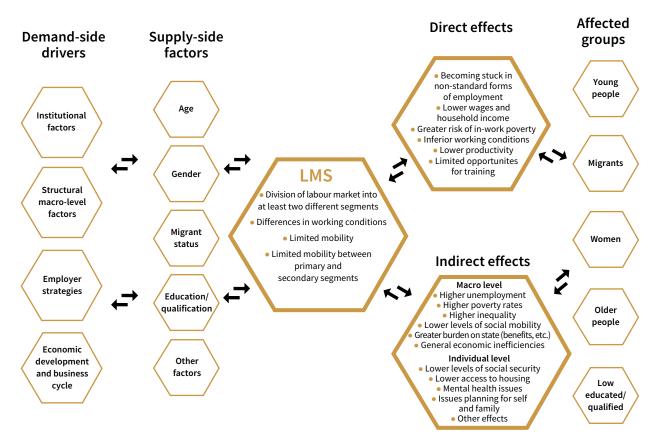
Conceptual framework

Following on from the theoretical understanding and the operational definition, Figure 1 introduces the framework used for the empirical and policy analyses of LMS.

Specifically, the conceptual framework presents the conceptualisation of LMS adopted for this study and delineates what aspects of the research questions can be addressed empirically and in policy terms. It includes a number of elements.

- Eurofound's **operational definition of LMS** is presented in the middle of Figure 1.
- demand-side drivers and labour supply-side factors, which are intrinsically intertwined and operate simultaneously in shaping labour market dynamics that can lead to LMS. Despite their key importance for LMS, the individual-level data used in the empirical analysis do not capture labour demand-side drivers generally, and the only variables partially used are company size and economic activity (and trade union representation when data were available). Most labour supply-side factors (which are linked to the affected groups on
- the right-hand side of the figure) are represented in the datasets used in the empirical analysis. Institutional and economic factors as well as specific target groups identified as needing support, willingness of governments and ability to finance as well as the influence of social partners are taken into account as contextual factors influencing a policy measure's effectiveness, while more detailed evidence is available on labour supply-side factors.
- conditions, less access to training, risk of in-work poverty) and indirect effects (some at the individual level such as less access to social benefits and some at the macroeconomic level, such as more employment turbulences, inequalities or underemployment). The effects of LMS captured in this study, in both the empirical and the policy analyses, refer mainly to some direct effects that overlap with the definition of LMS itself, such as becoming trapped in non-standard employment/contractual arrangements and lower earnings associated with those situations. The indirect effects are difficult to measure as they are not necessarily solely attributable to LMS.

Figure 1: Conceptual framework for LMS



Source: Authors

Novelty of the exploratory approach of this report

The **empirical approach** to measurement and analysis of LMS (Chapter 3) tries to overcome the limitations of previous works by applying an exhaustive and dynamic longitudinal approach to capture individuals' entire labour market trajectories. Moreover, it applies a multidimensional perspective which views working conditions not only in relation to whether workers hold a temporary or a permanent contract but also in terms of wider contractual arrangements, earnings and occupational category. These variables are combined to define a set of labour market states which are then used to map labour market trajectories. In this way, the study approaches the idea of labour market segments by identifying groups of individuals based on employment conditions and on how their careers develop, which leads to the identification of different trajectory groups based on similarities between how their individual careers unfold over time.

The novelty of the **policy approach** relates to the types of measure considered and the method used for their analysis. Given the lack of evaluations focusing specifically on LMS - especially when taking into account measures beyond EPL reforms - Chapter 4 restructures and analyses existing policy evidence under the lens of LMS. It attempts to disentangle the mechanisms by which the implementation of policy measures that are not of an EPL-type can affect different dimensions of LMS in specific contexts, focusing on identifying those aspects related to upward and downward mobility and changes in working conditions. It does so by following the realist evaluation approach known as the context-mechanisms-outcomes (CMO) model and proposing a theoretical framework specific to LMS (see Figure 24 in Chapter 4, p. 55).

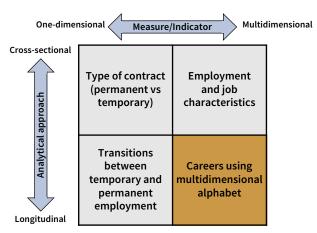
3 Results of the empirical analysis on four countries

This chapter presents the methodology and the main findings of the quantitative analysis of LMS in four selected countries: France, Germany, Spain and the UK. Given the complexity of taking a quantitative approach to the analysis of LMS, this chapter presents different types of analysis using different techniques, focused mainly on labour market mobility and which may be useful in illuminating some of the key aspects related to LMS. This study does not provide indicators to directly measure LMS, nor does it permit the identification of labour market segments as defined in LMS theory. Instead, it proposes a framework to explore the labour market careers of individuals that captures upward and downward transitions in the labour market and identifies different types of labour market trajectories based on similarities in the unfolding of individuals' careers over time.

Methodology

Given the conceptual ambiguity of LMS, approaching it empirically is challenging; this explains why the few previous attempts exhibit remarkable diversity and have not resulted in an agreed set of indicators. Thus, rather than providing a common approach to the study of LMS, the empirical literature consists of studies that deal with certain related aspects, such as: incidence of temporary employment, transition rates from temporary to permanent contracts or job quality of different types of worker. These existing empirical studies can be summarised along two dimensions (Figure 2).

Figure 2: Approaches in LMS studies



Notes: The empirical study conducted here is an example of a longitudinal multidimensional approach (indicated by the orange square). 'Alphabet' refers to a finite set of possible states (see Tables 4 and 5 below).

First, these studies are either one-dimensional or multidimensional, depending on whether just one or several measures/indicators are used to analyse employment factors. Second, the studies have a static cross-sectional or dynamic longitudinal approach. Cross-sectional approaches examine a single aspect at a given point in time (such as type of contract) or include other aspects of employment and job characteristics. Similarly, longitudinal approaches (Tolbert, 1982; Boje, 1986; Amuedo-Dorantes, 2000; Contini, 2001; Gimpelson, 2003; Leschke, 2009) capture one aspect (such as transitions between types of contracts held) or account for more factors. Four possible analytical approaches emerge from combining the two dimensions.

The empirical study conducted here falls within the longitudinal multidimensional set of approaches (represented by the orange square in Figure 2), where two methodologies are commonly found in previous empirical studies. The first branch of literature adopts event history analysis (Mayer and Tuma, 1987), which focuses on specific events like transitions from unemployment into employment and typically looks at the likelihood or speed of such an event occurring for the individual. The second approach uses sequence analysis in order to explore the mobility patterns of individuals across different labour market statuses over their whole careers, or at least a part of them (Fuller and Stecy-Hildebrandt, 2015; López-Andreu and Rubery, 2018). This latter approach is the one mainly followed here, and its objective is to identify distinct patterns of trajectories in the labour market and compare the relatively strong presence of certain trajectory typologies in some countries and among certain groups in the workforce (Scherer, 2001; Kalter and Kogan, 2014; Möhring, 2016).

The main features and added value of the analysis conducted here are as follows.

- The approach to measuring and analysing LMS in this report tries to overcome the limitations of previous works by combining a dynamic longitudinal approach with a multidimensional perspective in relation to employment states.
- This dynamic approach applies sequence analysis to monitor the careers of individuals.
- The multidimensional perspective captures working conditions not only in relation to whether workers hold a temporary or a permanent contract but also in terms of wider contractual arrangements (employee/self-employed;

- full-time/part-time employment), earnings (below/around/above median earnings) and occupational category (low/medium/high). Moreover, in addition to people who are in work, the analysis includes those who are unemployed or inactive. The analysis combines all these variables to identify a set of labour market states based on the data (typically called an 'alphabet'), which are then used to map the labour market trajectories of individuals.
- Even though several studies have already looked at mobility patterns and careers using the lens of LMS (Blossfeld and Meyer, 1988; Scherer, 2001), this study makes a valuable contribution to the literature because it approaches the idea of labour market segments by identifying groups of individuals based not only on employment conditions but also on how their careers develop.
- These different trajectory groups are defined according to similarities in the unfolding of individuals' careers over time. Four trajectory groups were identified in each country: a standard trajectory group representing the most stable careers, a non-standard one representing the least stable careers, and two other trajectory groups in between. These trajectory groups are not the same as the segments identified in the LMS theory, but can be regarded as proxies for them. Moreover, downward mobility and limited upward mobility from worse to better labour market states would suggest the existence of LMS.

The quantitative analysis conducted in the four selected countries consists of six steps, as illustrated in Figure 3. Step 2 is very important because the full range of information available in the datasets is used to identify the set of labour market states ('alphabets') in which individuals may be located at a given moment in time.

Figure 3: Methodological steps of the empirical analysis

Step 1

Identifying, accessing and preparing the data



Building the sequences: defining states and alphabets

2.1 Selecting states; 2.2 Construct alphabet A; Construct alphabet B



Calculating transition rates

3.1 Transitions between states in alphabet A; 3.2 Transitions between states in alphabet B



Step 4

Optimal matching, standardisation and clusters

4.1 Apply optimal matching analysis to sequences; 4.2 Build standardisation index; 4.3 Apply cluster analysis on sequences



Building synthetic career indicators

5.1 Standardisation; 5.2 Entropy; 5.3 Turbulence; 5.4 Complexity; 5.5 Volatility



Regression analysis

6.1 On transition probabilities; 6.2 On career standardisation index

The longitudinal analysis enters the picture from Step 3 onwards. Labour market transitions between the above-mentioned states are explored in Step 3, while Step 4 introduces the sequence analysis, looking at the trajectory of each individual and constructing different clusters depending on the typical paths followed by individuals. Step 5 calculates indicators that reflect a person's career and includes distance to the standard career, considered to be the open-ended, full-time job. Step 6 looks at the variables that explain why an individual's career is similar or dissimilar to the standard career.

A key challenge in this study was to identify a set of labour market states (alphabet) which could be applied in the four countries, given that their various datasets consist of different variables and have different specificities. The identification of alphabets is essential for the sequence analysis because they provide a simplified set of labour market states through which individuals may transition over their careers. Two alphabets were defined.

Alphabet A is the baseline alphabet which can be used in the four countries, and it covers information on type of contract and cause of leave from employment (see Table 4). The type of contract can range from the 'standard' contract (full-time, open-ended) to part-time and fixed-term employment or self-employment. The cause of leave indicates the employment states of leave of absence, unemployment (with or without benefits) and inactivity. The last column of Table 4 describes some of the country particularities in the availability of data necessary to construct alphabet A. Two main particularities are key to the interpretation of the results: the German dataset does not include those who are inactive; the Spanish register data are characterised by a very high presence of inactive people at the beginning of the period and subsequent progressive reduction of this group (for a more detailed explanation of the analysis and use of the alphabets, the reader should refer to the methodology, available in a working paper at http://eurofound.link/ef19033 (Eurofound, 2019a)).

Table 4: Labour market states taken into account for alphabet A

| Labour market status | Labour market states considered | Variables | Notes on differences across countries |
|-----------------------------------|---------------------------------|--|---|
| Employed | Full-time open-ended | | In France, open-ended includes both part-time and full-time, not disaggregated |
| | Full-time fixed-term | | In France, fixed-term includes both part-time and full-time, not disaggregated |
| | Part-time open-ended | Type of contract | |
| | Part-time fixed-term | - | |
| | Self-employed | - | |
| | Internship/training contracts | - | Only available for Spain |
| Leave of absence* | Leave of absence (general) | | |
| | Maternity leave | | Only available for the UK |
| | Family care | Cause of leave | Only available for the UK |
| Unemployed | Unemployment with benefits | cause of teave | |
| | Unemployment without benefits | | Not available in Spain (joint category with inactive; see the 'uninformed' category below) |
| Inactive/out of the labour market | Inactivity | Inactivity | Not available in Germany; in Spain available as a joint category with unemployment without benefits (see 'uninformed' category below) |
| | Full-time student | mactivity | Only available for the UK |
| | Sick/disabled | - | Only available for the UK |
| | Uninformed | Uninformed period between two informed periods (including leaving the labour market temporarily) | In Spain, where administrative data include periods unaccounted for, it is assumed that analysis includes unemployment without benefits and inactivity (unemployed and not seeking employment). |

Note: *Leave of absence refers to a period of time that an employee is away from the primary job (which can include paid or unpaid leave), whether for maternity/paternity or other care-related leave or other voluntary or involuntary leave. **Source:** Authors

Table 5: Labour market states taken into account for alphabet B (predominant employment profiles)

| Labour market state | Type of relationship | Part-time coefficient | Pay | Occupational status | Notes on differences across countries |
|---------------------------|---|--|-----------------|-----------------------|---|
| Α | Permanent | Full-time | High-medium pay | Highly skilled | Corresponds to the UK's A and B states |
| В | Permanent, temporary | Full-time and part-time | High-medium pay | Highly skilled | Corresponds to the UK's C and D states |
| С | Self-employed, permanent, training/apprenticeship | Full-time and part-time | High-medium pay | Medium-low skilled | Corresponds to the UK's E and F states |
| D | Temporary, self-employed, training/apprenticeship | Part-time, marginal part-time | Medium-low pay | Medium-low skilled | Corresponds to the UK's G (and partly H) states |
| E | Temporary, training/ apprenticeship | Part-time, marginal part-time | Low pay | Low skilled | Corresponds to the UK's H states |
| F | Unemployment (receiving ur | In the UK includes unemployed, maternity leave, student, sick/disabled and family care | | | |
| G | Unemployment (without une | In Germany, inactive people are not included | | | |

Source: Authors

Alphabet B provides more information (see Table 5). The main added value of this alphabet is that it goes beyond contractual arrangements and includes information on earnings and professional category, so that rich multidimensional information can be simplified into labour market states. Moreover, the analysis summarises this information by using states which can be ranked from better to worse (from A to G in Spain and Germany), which means the position of individuals in the labour market at a moment in time can be compared across the four countries as this indicates a certain level of working conditions (even though the analysis covers those who are unemployed and inactive as well as those in work). In Germany, Spain and the UK, sequences are built based on alphabet B, whereas in France the sequence is based on alphabet A. As was the case with alphabet A, the main cross-country difference is that inactive people are not included in the German sample, while the Spanish register data are characterised by a very high presence of inactive people at the beginning of the period with subsequent progressive reduction. The UK has more states because the richness of its data allowed for the identification of more employment states.

One of the main reasons for using these alphabets is that they allow for comparison of results across the four countries in spite of the national longitudinal datasets having different characteristics (these include the period covered, the variables included and the type of data).

Nevertheless, as has already been stated, the comparative findings presented here should be interpreted with care due to some factors. First, the data in France, Germany and the UK are survey based, whereas administrative records are used in Spain. Second, in the case of survey data, the sample used in the analysis resulted in some groups being underrepresented (for instance, in Germany, there were few observations for individuals under the age of 36). Third, the time periods covered in the different data sources varied (only the pre-crisis period is covered in the UK and the post-crisis period in France), and macroeconomic influences on the labour market structures and individual careers could not be controlled for. Fourth, the operationalisation of certain variables in the datasets and the ways in which they were reported differ markedly across countries: for instance, inactive people are not covered in Germany. More detailed information on these limitations is provided in the methodology (Eurofound, 2019a).

Apart from the difficulties posed by comparability of results across the selected countries, this analysis shares with previous studies the notable challenges and limitations of approaching LMS empirically, as outlined in Box 2.

Box 2: Main limitations to and challenges for the quantitative study of LMS

Approaching the study of LMS empirically is a difficult task due to two interrelated factors.

- The concept of LMS remains vague and its study is complicated by the lack of established approaches.
- The lack of adequate datasets poses considerable limitations to LMS studies. One of the factors limiting the quantitative analysis of LMS from a career perspective is that it requires access to longitudinal microdata. Even when data access is secured, developing an analytical and empirical strategy that can bridge all three elements of the operational definition of LMS used in this report constitutes a major challenge in itself due to data limitations. Data-driven limitations are particularly marked in the analysis of the causes/drivers of LMS and, more specifically, the impact of labour market demand-side variables (see Table 6); but the most important limitation is the scarcity of quality employer–employee matched data that allow for examination of the impact of employer strategies in relation to contractual arrangements and other aspects.

These important challenges explain why empirical studies on LMS are so few and why an agreed set of indicators to measure LMS does not exist.

Table 6: Challenges for the empirical study of LMS

| Problem | Why is it a problem? | How is it approached? |
|--|---|---|
| Difficulty accessing adequate data | Difficulty in accessing adequate data is a major issue for assessing the factors driving LMS, especially if one is to attempt comparison across countries. | Countries were selected for analysis based in large part on the availability of data in line with the parameters of this study. |
| Limited comparability of data between countries | Differences in the available longitudinal datasets make it difficult to obtain fully comparable results. These differences include period covered, variables included and type of data. | In order to enhance comparability, the longitudinal analysis has been based on a shared alphabet of employment states for all four countries. Moreover, a standard career trajectory has been defined, and it is possible to analyse how individual observations in all countries are distributed in relation to this standard. |
| Difficulties in identifying and assessing drivers | There is a lack of adequate databases integrating quantitative data on individual and demand-side variables (company-level variables and institutional and structural factors relating to the labour market). | The datasets used allow some information on demand-side variables – such as company size or sector – to be captured. Other drivers, including institutional characteristics, are assessed indirectly, to the extent possible, by contextualising the results in four countries with different institutional and regulatory contexts. |
| | Individual drivers of segmentation (or their specific combinations) may have diverging effects in different economic, institutional and production contexts. | |
| | There is a large number of, and diversity among, LMS drivers. | Different statistical models are used to test the influence and importance of some vis-à-vis other drivers. |
| Interaction between labour supply-side and labour demand-side drivers | Various elements of labour supply (education, age, skill set) and labour demand (employer strategies, structural factors, institutional framework) are intrinsically intertwined and operate simultaneously. For example, each employee represents multiple supply-side characteristics, and each of these on their own and in combination with other supply-and demand-side factors could be associated with better or worse labour market outcomes and opportunities for career advancement. | This interaction is reflected in the empirical quantitative analysis in two ways. First, by testing the influence of some labour demand and supply variables and then controlling for others in the regression models, this analysis attempts to disentangle their effects while assessing how they interact to influence careers. Second, the analysis of findings in the institutional and socioeconomic context contributes to understanding the ways in which these interactions occur and at what intensity. |

| Problem | Why is it a problem? | How is it approached? |
|--|---|--|
| Blurred lines between labour supply-side and labour demand-side drivers | Labour market supply-side characteristics do not operate in isolation – they interact with various demand-side factors, such as employer strategies, global economic trends, country-specific regulatory environments, among others (Rubery and Piasna, 2017). Specific combinations of the above-mentioned labour supply and demand factors often perpetuate the (initially) disadvantaged position of these groups in the labour market, thus limiting prospects for upward mobility. | In order to test the real influence of some supply-side drivers in relation to the affected groups, this study controls for some of them. This is particularly the case with educational level. When educational level is controlled for, many women or migrants are located in the primary segment and enjoy a good employment situation. In order to assess the role of age, the analysis used age cohorts in the analysis of careers and also used this variable as a control in regression analysis. |
| Blurred lines between drivers and effects | There may be a confusion between drivers and effects that complicates analytical differentiation between them. For example, non-standard forms of employment are sometimes considered as a reason for lack of mobility and as a cause of LMS (Giesecke and Groß, 2003; Leschke, 2009). Other LMS studies have taken type of contract as an effect of LMS (Cahuc et al, 2016). | This study examines a specific succession of employment states to represent the individual's career. At the same time, non-standard employment – including temporary employment, part-time and other atypical forms of employmen – is considered here as the effect of an interplay of factors (institutional, regulatory and economic), allowing for its extension and use by employers. |

Labour market structures in the four countries selected

An introductory picture of labour market structures and their change over time across the four countries selected is provided in Figure 4, which uses information on contractual arrangements only for the purpose of determining the labour market status of individuals (i.e. using alphabet A).

One aspect common to all countries is that the most frequent employment situation is the standard open-ended contract, typically in full-time employment, although the use of part-time permanent contracts is also significant in Germany and the UK – much more so than in Spain and more than in France (although the French data used here do not differentiate between full-time and part-time employment).

Beyond the prevalence of regular employment, there are important differences across the four countries. In Germany and the UK, there is a relatively small presence of non-permanent employment. In the case of Germany, the second-most important state is open-ended part-time employment, which expanded over the period due to labour market reforms extending small-scale employment: that is, mini and midi jobs (Fichtl, 2015). In the case of the UK, the relatively high importance of self-employment stands out.

On the other hand, France and Spain are characterised by a higher incidence of non-standard employment, and their labour market structures reflect a greater negative impact of the crisis. In Spain, temporary contracts are much more prevalent than in other countries, and unemployment became a significant feature during the years of the crisis. In France, the use of temporary or seasonal contracts (including temporary agency work) increased during the crisis years.

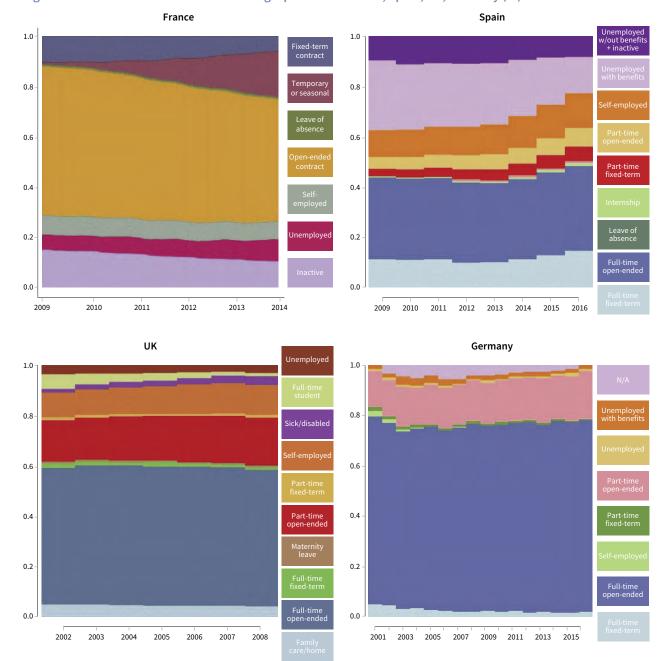


Figure 4: Share of labour market states using alphabet A - France, Spain, UK, Germany (%)

Note: N/A (Germany) refers to uninformed people (see Table 4).

Source: Authors, using the Formation et Qualification Professionnelle (FQP) (France 2009–2014), the Muestra Contínua de Vidas Laborales (MCVL) (Spain 2009–2016), the British Household Panel Survey (BHPS) (UK 2002–2008), and the German Socio-Economic Panel (GSOEP) (Germany 2001–2016).

Figures 5 and 6 present a more nuanced picture of the labour market states and their change over time in the pre-crisis and crisis periods respectively. The labour market states, ranging from better to worse conditions, are in this case the result of combining information on contractual arrangements, working time, pay and occupational category (i.e. using alphabet B, which is not available for France).

Two sub-periods characterised by different labour market trends clearly emerge. During the years of economic expansion up to 2008, a trend towards the expansion of better states can be observed in all three countries (Figure 5): the UK, Germany and, in particular, Spain (although in the Spanish case, the large proportion of inactive people and the strong reduction over time of this group is due also to the characteristics of the register data used, as explained in detail in the methodology (Eurofound, 2019a)).

The economic crisis is a very relevant factor in explaining the flows that occurred between the different labour market states in the countries under study in the period that followed.

Spain suffered the largest negative impact of the crisis (see Figure 6), reflected in the significant rise in the proportion of people receiving unemployment benefits (state F) and certain states associated with employment with worse working conditions (states C and D) and by the stabilisation in the magnitude of states associated with the best working conditions (states A and B). The amount of unemployed people not receiving benefits and inactive people (state G) declined during the years of the crisis (even though more moderately than before the crisis), although many of them moved into employment positions characterised by poor

- working conditions. Nevertheless, this counterintuitive trend is due to a structural trend towards declining numbers of inactive people on the Spanish register data (see methodology for further details).
- Germany provides a contrary example to Spain regarding the impact of the crisis, since an expansion in the states associated with better working conditions continued between 2009 and 2016, probably due to the combined effect of a less volatile economic structure and institutional features such as short-time working schemes and active labour market policies (ALMPs) see Figure 6.
- In France (where only alphabet A is used and during the post-crisis period), the main trends during the period 2009–2014 are perhaps the reduction of individuals with open-ended contracts and some transitions to temporary contracts (fixed-term contracts via temporary agency work). There is also a visible decline in the number of inactive and unemployed people without unemployment benefits as well as in the number of individuals with fixed-term contracts, explained by downward flows from fixed-term into other seasonal contracts or even unemployment. The amount of unemployed people with access to benefits increased during the period, as expected.
- No data from 2008 are available for the UK, which means that the crisis period cannot be covered properly. Nevertheless, if we compare the years 2005 and 2008 (Figure 5), it seems an expansion of certain worse states had already taken place, which could reflect the early impact of the crisis in 2008 in the UK and the high flexibility of its labour market.

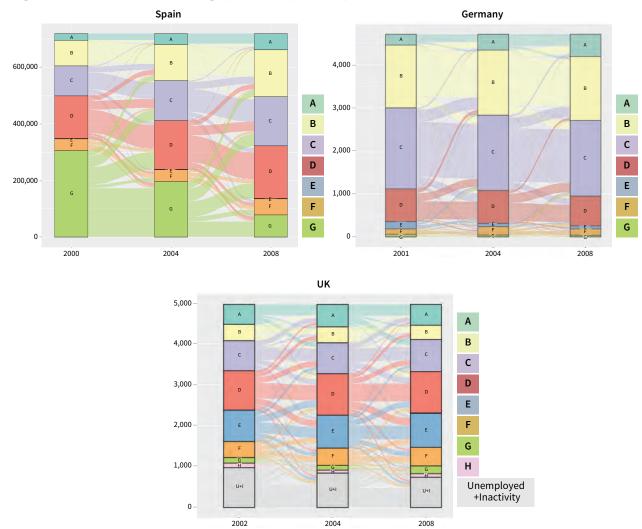


Figure 5: Labour market states using alphabet B - pre-crisis period

Notes: The figure illustrates labour market states at specific points in time and flows between them. The use of different data sources in each country means that the states are not fully comparable. A–G represents the best to least favourable states in the labour market, where G includes those who are unemployed and inactive, with the exception of the UK where the data permitted shows this category separately. For a more detailed description of states and their correspondence across countries, see methodology (Eurofound, 2019a). **Source:** Authors, using MCVL (Spain 2000–2008), GSOEP (Germany 2001–2008), BHPS (UK 2002–2008)

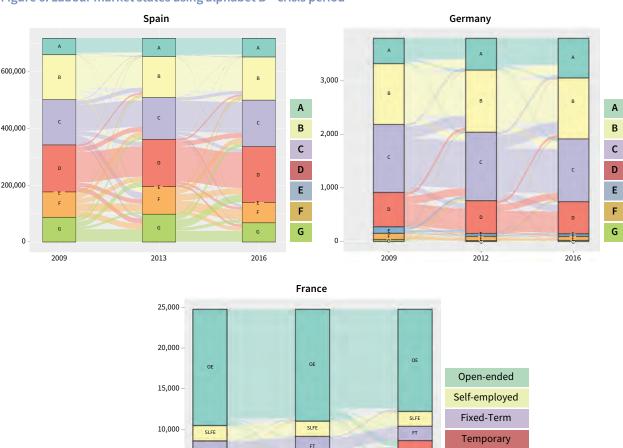


Figure 6: Labour market states using alphabet B - crisis period

Notes: The figure illustrates labour market states in specific points of time and flows between them. The use of different data sources in each country means that the states are not fully comparable. A–G represent the best to least favourable states in the labour market, where G includes those who are unemployed and inactive. For a more detailed description of states and their correspondence across countries, see methodology above.

2012

INT

Leave of Absence

Unemployed Inactivity

Source: Authors, using MCVL (Spain 2009–2016), GSOEP (Germany 2009–2016), FQP (France 2009–2014)

2009

5.000

0

Lessons learnt

Standard, open-ended contracts represent the most common employment relationship across the four countries. Nevertheless, clear divergences emerge between the labour market configurations of the selected countries, as reflected in the importance of the labour market states and their associated flows over time. When using only information on contractual arrangements, Germany and the UK have a lower incidence of non-standard employment (although small-scale employment in the form of open-ended part-time jobs, such as mini and midi jobs, is significant in Germany, and self-employment is important in the UK). France and Spain are characterised by a stronger presence of non-standard employment.

Contrasts also emerge when using richer information – combining contractual arrangements, pay and occupational categories – to define labour market states.

• On the one hand, Germany seems characterised by a less mobile labour market with fewer flows and, moreover, a predominance of upward flows: over the years considered here, there were many more people whose labour market state improved than those for whom it worsened. This is reflected by a pattern of greater stability in the upper groups of the labour market.

- On the other hand, the UK and Spain represent more mobile labour markets, with a greater degree of flows between states. The UK is the most flexible and mobile labour market (a lower share of people remain in the same state from year to year, particularly for the higher employment states, A and B), and upward and downward flows are stronger than in the other countries but seem equally important, with no clear pattern emerging.
- In contrast, upward labour mobility in Spain is limited and takes place from states that are already favourable (most individuals in the highest states, A and B, tend to remain there), while flows downward are very common but are concentrated among people in the worse states, especially during the crisis (those in the higher states are relatively protected against downward mobility). This would suggest a greater presence of LMS in Spain and conformity to the expected LMS pattern, in which those better off in the labour market are resilient to labour market demand-driven shocks like economic downturns.

Labour market transition rates

While the previous section presented a picture of the labour market structure and flows between states across the four countries, this section focuses on some of the most relevant transition rates between certain labour market states, as defined both by type of contracts only and by combining information on type of contracts, pay and occupational category. The transition rates show the proportion of people moving from one state to another over a two-year period (for instance, if half of those employees with temporary contracts in the year 2018 hold a permanent contract in 2019, this transition rate will equal a value of 0.5, meaning 50%).

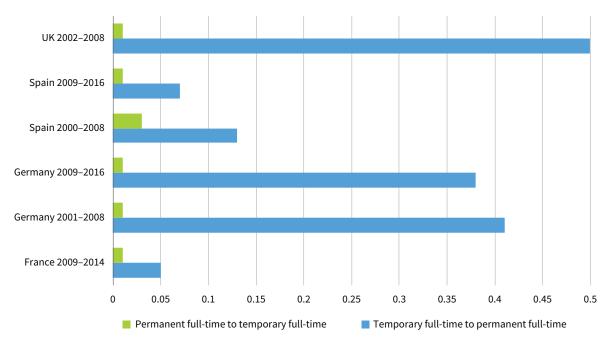
Transition rates based on contract type

When only information on contractual arrangements is used to build up the labour market states, there are data available for the four countries selected. Figures 7, 8, 9 and 10 introduce information on a few relevant transition rates reflecting a notable cross-country variation.

Transition rates from full-time temporary to full-time permanent employment are very relevant and have typically been regarded as an approximation to the LMS problematic (Figure 7). The UK has the largest transition rates, followed by Germany, with Spain and France being characterised by much lower transition rates. This is especially the case in France, while in Spain the opposite transition – from permanent to temporary contracts – is more relevant than in any of the other countries. Moreover, the crisis had a negative impact on these transitions, as reflected by data for the two countries where crisis and pre-crisis data are available (Germany and Spain).

- Transitions from and into unemployment are also very relevant when assessing LMS (Figures 8 and 9). Regarding transitions out of unemployment, Germany again shows the best labour market prospects due to its high transition rates from unemployment into (full-time permanent and full-time temporary) employment. Interestingly, in Germany and the UK, there are more transitions from unemployment into permanent jobs. France and Spain again offer a contrasting example with lower transition rates out of unemployment; moreover, temporary employment stands out as the main way out of unemployment in these two countries.
- Temporary employees are much more affected than their permanent counterparts by transitions into unemployment, again particularly in France and Spain (where the crisis took a heavier toll on these employees). This points to the trap to which temporary employees are prey, failing to transition to permanent contracts and experiencing unemployment spells (Figure 9).
- France and Spain exhibit high levels of stability in most of the states under consideration (Figure 10), but especially in unemployment and (full-time) temporary employment, indicating difficulties in moving out of these states. This contrasts again with Germany and the UK, where stability in each of these states is lower, thus pointing to greater upward mobility.

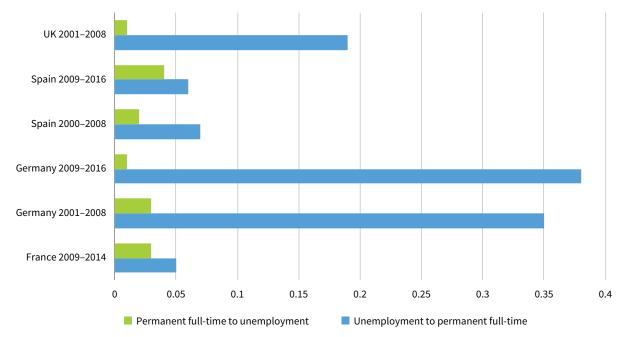
Figure 7: Average year-to-year transition rates between temporary (full-time) and permanent (full-time) employment (%)



Note: Transition rates show the proportion of people moving from one state to another over a two-year period (maximum value of 1, meaning 100%).

Source: Authors, using FQP (France 2009-2014), MCVL (Spain 2000-2016), BHPS (UK 2002-2008), GSOEP (Germany 2001-2016)

Figure 8: Average year-to-year transition rates between permanent (full-time) employment and unemployment (%)



Notes: Transition rates show the proportion of people moving from one state to another over a two-year period (maximum value of 1, meaning 100%). Unemployed refers to those receiving unemployment benefits.

Source: Authors, using FQP (France 2009–2014), MCVL (Spain 2000–2016), BHPS (UK 2002–2008), GSOEP (Germany 2001–2016)

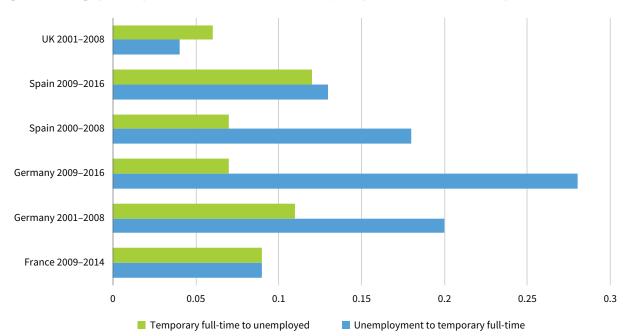


Figure 9: Average year-to-year transition rates between temporary (full-time) and unemployment (%)

Notes: Transition rates show the proportion of people moving from one state to another over a two-year period (maximum value of 1, meaning 100%). Unemployed refers to those receiving unemployment benefits.

Source: Authors, using FQP (France 2009-2014), MCVL (Spain 2000-2016), BHPS (UK 2002-2008), GSOEP (Germany 2001-2016)

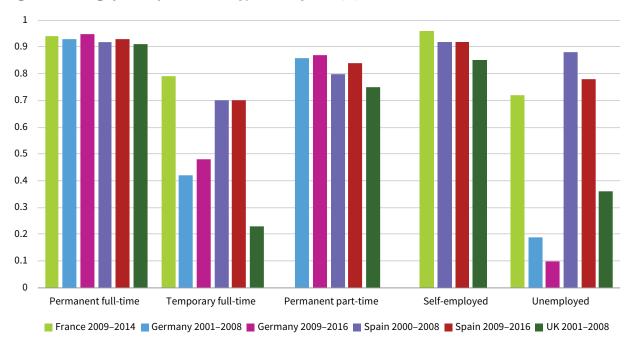


Figure 10: Average year-to-year contract type stability rates (%)

Note: Unemployed refers to those receiving unemployment benefits. In the case of the self-employed in Germany, there is no data due to an insufficient number of cases.

Source: Authors, using FQP (France 2009-2014), MCVL (Spain 2000-2016), BHPS (UK 2002-2008), GSOEP (Germany 2001-2016)

Lessons learnt

Clear differences emerge between countries when observing transition rates.

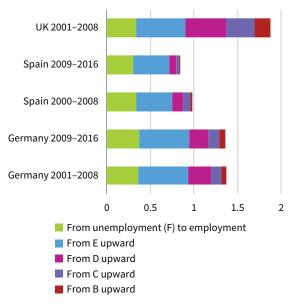
- Evidence for France and Spain suggests the stronger presence of an LMS pattern. They exhibit low transition rates from temporary to permanent contracts, high transition rates from temporary employment into unemployment and low transition rates from unemployment into employment, although for a significant proportion of those making the latter transition, the move is to temporary contracts. This points to the existence of a significant number of temporary employees who are trapped, because they fail to move to permanent contracts and experience unemployment spells which risk being relatively long with consequent scarring effects on their trajectories.
- The indication of LMS is clearly weaker in Germany and the UK. Temporary employment is less common in these countries, and workers enjoy higher transition into permanent contracts, while the most significant way out of unemployment is via permanent contracts.

Transition rates including occupational category and earnings

A more detailed picture of transitions is provided when the definition of labour market states takes into account not only contractual arrangements (as above), but also pay and occupational category (not available in France). This allows for a ranking of different states according to their associated working conditions. Several insights emerge from Figure 11 (upward transition rates), Figure 12 (downward transition rates) and Figure 13 (stability rates).

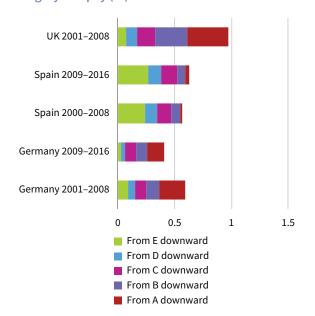
- Upward transitions (Figure 11) are significantly more common in Germany and, especially, the UK compared to Spain (particularly during the economic crisis).
- Downward transitions (Figure 12) are less common than upward transitions across all countries, although these are still very relevant. This is particularly so in Spain and the UK (especially during the crisis), although key divergences emerge: while downward transitions affect those in better states relatively more in the UK, they are found primarily among those in worse states in Spain, conforming again to an LMS pattern. In contrast, Germany has the lowest downward transitions rates during the most recent period, reflecting improvement in labour market conditions.
- Data on the stability of the different labour market states mirror those for transition rates across countries (Figure 13). Generally, stability rates decrease from better to worse labour market states, which means mobility (upward or downward) is higher among those in worse states.

Figure 11: Average year-to-year upward transition rates considering contract type, occupational category and pay (%)



Notes: The x axis represents transition rates, with only the most important ones depicted. Each transition can reach a maximum value of 1, meaning 100%. The colours represent transitions between states in alphabet B. Unemployed refers to those receiving unemployment benefits. For significance of A-G labour market states in alphabet B, please refer to Table 5 on p. 20. **Source:** Authors, using GSOEP (Germany 2001–2016), MCVL (Spain 2000–2016), BHPS (UK 2001–2008)

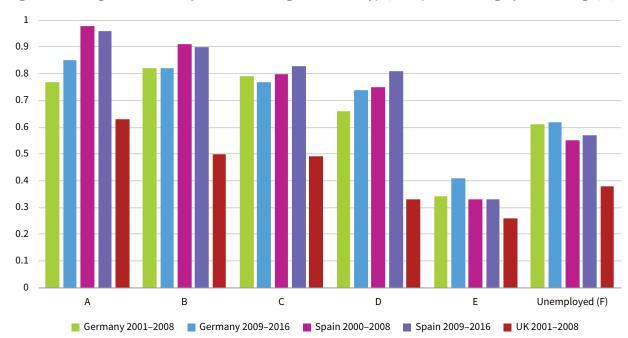
Figure 12: Average year-to-year downward transition rates considering contract type, occupational category and pay (%)



Notes: The x axis represents transition rates, with only the most important ones depicted. Each transition can reach a maximum value of 1, meaning 100%. Colours represent transitions between states in alphabet B.

Source: Authors, using MCVL (Spain 2000–2016), GSOEP (Germany 2001–2016), BHPS (UK 2001–2008)

Figure 13: Average career stability rates accounting for contract type, occupational category and earnings (%)



Notes: Columns represent the rate of stability in a given state over one year. The maximum value is 1, meaning 100%. Unemployed (F) refers to those receiving unemployment benefits.

Source: Authors, using GSOEP in Germany (2001–2016), MCVL in Spain (2000–2016), BHP in the UK (2001–2008)

Lessons learnt

Transition rates are an important indicator of LMS according to the definition used in this report, because they provide comparable evidence about upward and downward mobility, especially when using the rich information provided when earnings and occupations are incorporated into the definition of labour market states.

It should be highlighted that, for all countries, the most likely event over a two-year period is to remain in the same state. However, information on transition rates is significant and reveals important cross-country patterns.

- Germany is characterised by high upward mobility and relatively low downward mobility (at least in the period 2009–2016, which relates to a more favourable economic environment than during the crisis). The fall in downward transitions in the most recent period was more significant among individuals in the least favourable states.
- The UK emerges as a high-mobility country, characterised by the highest upward and downward transition rates and the lowest levels of stability in all labour market states.
- Spain demonstrates the most worrisome patterns in terms of LMS, since its labour market has the lowest levels of upward mobility as well as a relatively high risk of downward mobility, mainly for those experiencing unfavourable working conditions (among them, temporary employees transitioning into unemployment), in contrast to those who are at the top of the labour market structure and experience less mobility. Thus, stability of unemployment is highest in Spain moving out of unemployment is much less likely in Spain than in Germany or the UK which explains the comparatively high long-term unemployment rate.

Labour market trajectory groups

Besides looking at the labour market structure and the main transitions between the different labour market states, the main added value of this analysis lies in the application of a longitudinal perspective to capture the full extent of the individual's career trajectory. This complex and rich information can then be summarised by identifying different groups according to their labour market trajectories, which are made up of the different labour market states experienced by individuals over time (using alphabets A and B, as before).

The analysis starts by defining a standard labour market career, which is understood as one where the individual is in permanent, full-time, well-paid employment (Box 3). The methodology then proceeds to calculate the distance between this ideal situation and that of each individual across the four selected countries.

Based on this distance, it is possible to identify groups of workers that share similarities in their careers. The analysis identifies four clusters representing different labour market trajectories in each country in an attempt to reflect the heterogeneity found in their labour markets.

Nevertheless, it is important to have in mind some of the caveats in the methodology when interpreting the results (see Eurofound, 2019a for more details). For instance, those who are inactive are not included in Germany (the sample is made up of people in the workforce), while in Spain they are covered, but they are affected by specific characteristics of the register data used (which has a structural trend towards declining numbers of inactive people).

Box 3: Definition of a standard career

This study defines an ideal type of standard career as being employed under a permanent contract and in full-time employment, being relatively well paid and in a high occupational category. In spite of individual preferences for more flexible forms of employment, this is still considered to be the most desirable labour market participation form for most workers.

This ideal standard career, despite imposing somewhat restrictive criteria on the notion of 'standard', is applied in this study because it provides a yardstick for all countries in order to assess and analyse labour market careers. This must be taken into account when interpreting the results, which indicate a large cluster of non-standard careers and a relatively small proportion of individuals having standard careers over time – even though standard employment is still the dominant employment form in most EU countries, as shown earlier.

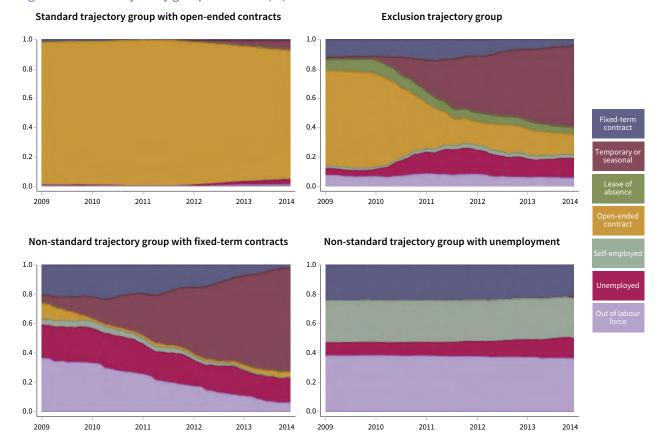
France

The trajectory groups in France are constructed on the basis of contracts held by individuals over time but, due to data limitations, they do not take account of pay and occupation type (that is, only alphabet A can be used). The groups emerging from the analysis can be ranked from more to less standard careers (Figure 14).

- The standard trajectory group is composed only of open-ended contract holders and characterised by low transition rates into and out of this state. They hold jobs with good working conditions and experience very little unemployment.
- The exclusion trajectory group is characterised by open-ended contracts followed by a rapid breakdown, switching from stable to more unstable jobs (temporary/seasonal or fixed-term) and to unemployment, indicating downward mobility.

- The non-standard trajectory group with fixed-term contracts is characterised by a high number of transitions from unemployment to fixed-term or temporary/seasonal jobs. Overall trajectories seem to be more diverse, with higher job turnover than in the previous group.
- o The non-standard trajectory group with unemployment has as its predominant states unemployment and being out of the labour force but also, at the other extreme, fixed-term contracts and self-employment. It may typically represent people either remaining long-term unemployed or alternating between unemployment and fixed-term contracts without getting a stable job. Overall, trajectories in this category are defined by the lack of prospects for a secure job. The limited mobility between unemployment and jobs is due to quite a low average number of employment spells.

Figure 14: Career trajectory groups in France (%)



Note: The y-axis represents the totality of the population, going from 0 to 100% (0 to 1).

Source: Authors, using FQP 2009-2014

Germany

As a result of the low impact of the Great Recession on the German labour market, there are almost no differences in findings between the analysed time periods of 2001–2008 and 2009–2016, so only data from the most recent period are presented here (Figure 15).

- The standard employment group is the secure and stable career group, where employees experience very few changes over time and are predominantly in open-ended, full-time, highly paid, high-status employment.
- In the early high status group, individuals are overall in the more favourable employment states and develop steadily towards even more stable forms of employment. It can be assumed that this upward mobility is not linked to business cycle effects but rather to the age-related transition of young adults settling in to the labour market.
- The early unstandardised group is characterised by changes over the course of the period of observation. These individuals experience transition towards more stable employment – although not steadily over time, but rather suddenly (see changes in 2014–2015).
- o The non-standardised career represents a large group of non-standardised employees where only a small fraction are in precarious employment. The majority are in less stable but relatively well-paid jobs of intermediate or higher occupational status. Employees in this group might experience job fluctuations, but only very few experience unemployment.

A key takeaway message is that while a significant share of the working population engages at some point in their professional careers (typically early on) in non-standard employment, non-standard careers are not necessarily associated with poor working conditions and very often incorporate stepping stones towards better jobs.

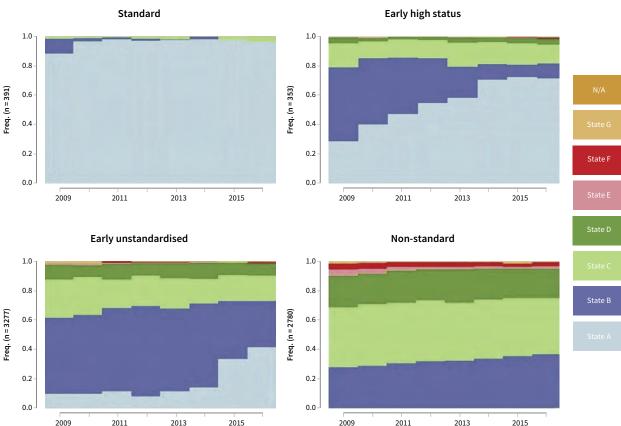


Figure 15: Career trajectory groups in Germany (%)

Notes: The y-axis represents the totality of the population, going from 0 to 100% (0 to 1). N/A (Germany) refers to uninformed people (see Table 4). Source: Authors, using GSOEP data (2009–2016)

Spain

Four career groups have been identified in the analysis for the two periods considered, although only the most recent period is presented in Figure 16.

- The **standard trajectory** group represents workers who almost always have an open-ended, full-time, high-pay employment state.
- In the case of **fast standardisation** careers, after some years of experiencing relatively poor employment conditions and unemployment, most individuals attain good employment states - that is, they transition from the lower states (C, D, E) to the higher labour market states (A, B).
- In the case of slow standardisation careers, the transition towards stable, high careers is more protracted; not all individuals are successful in completing the transition, and there remains a higher probability for some individuals to experience downward mobility.
- The non-standard career group is characterised by workers experiencing several states over their working lives, including unemployment, self-employment, temporary employment and low pay. In most cases, individuals do not experience standardisation - meaning their employment

trajectories do not incorporate what may be considered the ideal standard career. There is a predominance of states associated with poorer employment conditions in the non-standard trajectory group. Employees may experience high levels of job fluctuation. Temporary employment constitutes a stepping stone for some but not for others, who may remain in low-paid jobs with part-time contracts and temporary employment, pointing to limited upward mobility.

Spain and Germany provide contrasting examples. Although Germany suffered a deeper economic contraction than Spain in the year 2009, their labour markets adjusted in very different ways. In Germany, instead of resorting to dismissals, measures to encourage internal flexibility in the workforce (mainly, short-time working schemes) were implemented to adapt to fluctuations in the business cycle, and the economy quickly recovered while employment levels continued to expand (see Figure 15). On the contrary, the Spanish labour market adjusted to lower economic activity levels by means of external flexibility - that is, dismissals, which were heavily concentrated in the large pool of temporary employees, so that the incidence of unemployment and inactivity became very significant over the period (Figure 16). In this regard, the Spanish

Standard Fast standardisation 1.0 1.0 0.8 0.8 Freq. (n = 11517) Freq. (n = 50850) 0.6 0.6 0.4 State F 0.2 0.0 0.0 2009 2016 2009 2010 2011 2012 2013 2015 2010 2011 2012 2013 2015 Slow standardisation Non-standard 1.0 1.0 0.8 0.8 Freq. (n = 798637) req. (n = 20976) 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0

2010

2011

Figure 16: Career trajectory groups in Spain (%)

Note: The y-axis represents the totality of the population, going from 0 to 100% (0 to 1). **Source:** Authors, using MCVL data (2009–2016)

2013

2012

2014

2015

2016

2015

case provides an example of a segmented labour market where adjustments to changes in the business cycle generate much higher labour market turbulences, heavily concentrated among employees at the bottom of the labour market, who typically transition between temporary contracts and unemployment spells.

UK

In the UK, only the period before the crisis is covered, and the four career groups identified are shown, from better to worse, in Figure 17.

- The high-level career group includes people predominantly in high-level employment, meaning high earnings, high occupational categories and stability. However, at the onset of the financial crisis in 2008, there was a significant decrease in the top labour market state (A) and a corresponding increase in those states immediately below (B and C), reinforcing the finding that the UK has a very flexible labour market, where even those in the best positions were affected from 2008.
- o The mid-level career group is similar to the high-level career group in that it is dominated mainly by employment, but with a lower likelihood of being in the very best employment that is, people may have lower earnings and experience less stability. The significant drop at the onset of the financial crisis in individuals in the best employment is seen here too.
- The low-level career group is dominated by low-level employment states and relatively low levels of high-quality jobs. This cluster also includes many people just leaving full-time education and at the start of their careers.
- o The non-standard career group is dominated by low-level employment and non-employment spells, including unemployment, education and caring, with a relatively large proportion of sickness/disability events, suggesting that this cluster contains those who are more vulnerable to economic shocks. This cluster also has significant numbers of students transitioning into employment and women who are predominantly in domestic roles.

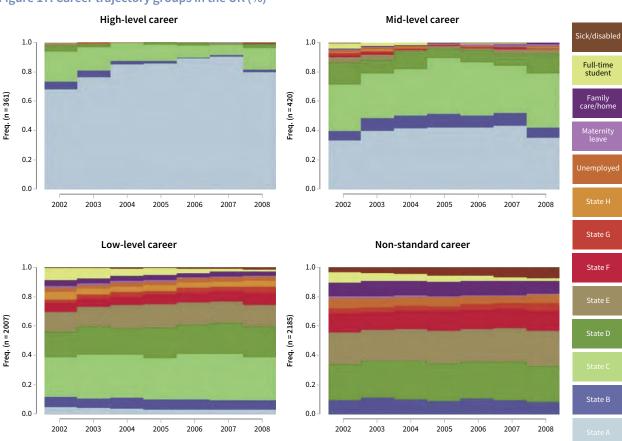


Figure 17: Career trajectory groups in the UK (%)

Notes: The y-axis represents the totality of the population, going from 0 to 100% (0 to 1). The richness of the BHPS data in relation to diversity of labour market states facilitated the identification of a wider range of such states than in the other countries. **Source:** Authors, using BHPS data (2002–2008)

Overview picture of trajectory groups

After presenting the main characteristics of each of the four trajectory groups across the selected countries, the relative size of each cluster is presented in Table 7. The main insights that emerge from the analysis are summarised below.

In all countries, there are groups of workers whose careers have developed close to or under the standard employment relationship, with good employment conditions and minimal incidence of unemployment throughout the period of observation. In most cases, these careers are characterised by employment in the best employment states or very quick transition towards them. These clusters represent the **upper careers** subject to the best working conditions.

Table 7 shows there are two clusters representing these upper careers in each country except France, which has one such cluster; in France only alphabet A, based on contract type alone, could be used. The composition of groups experiencing standard careers is by definition rather homogenous within countries and very similar across countries other than France. This group represents around 55% of the population in France, whereas in the other countries the standard career groups are small, amounting to 19.6% in Germany during the most recent period, 15.6% in the UK and 7.1% in Spain, also during the most recent period.

In those countries where pre-crisis and crisis data are available (Germany and Spain), the main difference between the two periods is the increase in the share of standard careers during the crisis period (see Table 7). In Germany, this is linked to an improvement in economic conditions in the most recent period. In Spain, the surprising increase in the share of standard

career groups during the crisis is due to its register data including a very high incidence of inactivity in the earlier period and its subsequent progressive reduction (see Eurofound, 2019a for details).

The other groups represent lower careers, characterised by a predominance of non-standard states and poor employment conditions or unemployment/inactivity - that is, further from the standard career. There is more variance across countries in the groups corresponding to lower segment careers because they include not only workers experiencing poor employment but also those who move up and down, experiencing both better and worse labour market states. There are also groups of workers whose careers are characterised by precarious or poor employment conditions over the whole period considered. From an LMS perspective, the group of those in non-standard careers and experiencing low upward mobility is particularly relevant. This variance represents a high (and probably growing) level of heterogeneity in the lower labour market segments due to an increasing number of individuals experiencing non-standard employment and careers as a consequence of labour market transformations over the last four decades.

Table 7 shows that these groups represent 80% in Germany during the most recent period, 84% in the UK and above 90% in Spain (and 45% in France, although this is not comparable because alphabet A is used). As was mentioned before, the large magnitude of these clusters is due to methodological designs and should not be seen as contradicting the fact that regular employment is the most prevalent employment relationship in European countries, as shown earlier.

Table 7: Shares of the career trajectory groups in each country (%)

| | Upper careers | % | Lower careers | % |
|--------------------|----------------------|-----|--|------|
| | | | Exclusion trajectories | |
| France 2009–2014 | Standard career | 55 | Non-standard careers with transition from unemployment to fixed-term or temporary jobs | 15 |
| | | | Non-standard careers with prominence of unemployment | 24 |
| Carrage 2001 2000 | Standard career | 4 | Early unstandardised | 7 |
| Germany 2001–2008 | Early high status | 6 | Non-standard career | 83 |
| Cormony 2000, 2016 | Standard career | 10 | Early unstandardised | 7 |
| Germany 2009–2016 | Early high status | 9 | Non-standard career | 73 |
| Snain 2000, 2000 | Standard career | 3 | Slow standardisation | 1 |
| Spain 2000–2008 | Fast standardisation | 1 | Non-standard career | 95 |
| Sania 2000, 2016 | Standard career | 6 | Slow standardisation | 2 |
| Spain 2009-2016 | Fast standardisation | 1 | Non-standard career | 91 |
| UK 2001–2008 | High-level career | 7.2 | Low-level career | 40.3 |
| | Mid-level career | 8.4 | Non-standard career | 43.9 |

Note: Except for France (due to data limitations), alphabet B has been used.

Source: Authors, using FQP in France (2009–2014), GSOEP in Germany (2001–2016), MCVL in Spain (2001–2016), BHPS in the UK (2001–2008)

Lessons learnt

Given that dividing the labour market into just one upper and one lower segment would neglect the high heterogeneity found within it, four labour market trajectory groups have been defined: two belonging to an upper segment, where careers are characterised by employment in the best conditions or a very short upward transition to attain such status; and two belonging to a lower labour market segment, where careers are characterised more by the presence of non-standard employment situations – having worse employment conditions, unemployment or inactivity and typically greater job turnover.

The results for France are not comparable because only data on contractual arrangements are used and, as a result, the standard trajectory group is much larger. Among the other countries, the largest standard trajectory group (and the smallest non-standard group) is found in Germany. This seems to be the country where career standardisation is easier to attain for individuals. At the other extreme, Spain is characterised by the smallest standard trajectory group – and the largest non-standard group. Its labour market is characterised by limited upward mobility and more difficulty in reaching career standardisation for a large number of people transitioning between unemployment and non-standard forms of employment, with relatively poor working conditions (typically temporary contracts). The UK is somewhere in the middle, an example of a very flexible labour market where reaching career standardisation may be more difficult than in Germany but where upward mobility is intense (as is downward mobility, as illustrated by the impact of the crisis on even those workers with the best-quality employment positions).

Groups affected by labour market segmentation

Whereas the previous section identified and calculated the size of labour market trajectory groups across the selected countries, this section describes their composition mainly in terms of the sociodemographic characteristics of the individuals found in each of them.

Many of these sociodemographic variables, such as age or educational level, are key in LMS debates. For instance, it would be expected that young and lower-educated workers would experience some instability in their labour market integration, but when this process of integration persists over time, revealing difficulties in moving upward and standardising the career trajectory, this is an indication of LMS. However, it is important to remember that these sociodemographic characteristics per se do not cause LMS: it is their interplay with certain institutional and economic environment (labour demand-side) factors that results in LMS.

Figures 18 to 21 portray, for each country, the composition of the different career groups according to different variables. The main insights from the data are described below.

 Age emerges as a key sociodemographic variable.
 The composition of the clusters based on age show some common patterns but also differences across countries. In general, older age groups predominate

- in standard careers, and their presence decreases in non-standard career groups (and vice versa for younger individuals). However, the differences are more pronounced in some countries than others: the relative weight of the four career groups identified does not differ markedly across age groups in the UK, which means that age plays a weaker role in explaining career standardisation in this country compared to the others.
- Gender explains not only many of the differences in employment conditions observed, but also different opportunities to progress in the labour market. Results from the analysis confirm how, from a dynamic perspective, women's trajectories remain distinct from those of their male counterparts: in all countries, the percentage of women in trajectory groups that are at a greater remove from the standard career is higher, thus revealing difficulties for women in terms of moving upward or leaving non-standard employment states. Nevertheless, the differences between men and women are more marked in Germany (probably related to the higher incidence of part-time employment and mini jobs among women) and Spain (although differences narrowed down during the crisis, probably due to the stronger impact of the crisis on male-dominated sectors like construction). Differences are less marked in the UK and France (though findings for the latter are not directly comparable due to data limitations).

- Migrant people (non-natives) are much more prevalent in non-standard career groups and significantly less common in the standard career trajectories across all countries where this information is available (France, Germany and Spain). This may be explained by the fact that migrants tend to be employed in sectors where non-standard employment and poor working conditions are more widespread, while the barriers they face in terms of language or skill recognition may limit their chances of moving upward in the labour market and leaving non-standard employment.
- important variable as well. Individuals with higher levels of educational attainment are much more common in the more standard career trajectory groups in Germany, Spain and the UK (the only exception is France, which could be due to the above-mentioned data issues). Data for Germany and Spain show that this was reinforced during the most recent periods of observation, reflecting the fact that lower-educated individuals are typically more affected by economic downturns.
- Individuals in higher occupational categories are more likely to be in the standard trajectory groups, while those in lower occupational categories are relatively more common in the non-standard career groups. This occurs in Germany, the UK and, to a larger extent, Spain (data are not available in France).

- show how trajectories nearer the standard are associated with larger companies, while non-standard careers are more common in smaller companies. This may be linked to the operation of ILMs (internal labour markets), but it may also be due to the stronger presence of union workplace representation structures in larger companies. Moreover, the stronger financial position of larger companies compared to small and medium-sized enterprises would also explain the greater reliance on permanent contracts and higher wages, making it more likely that an employee in a large company would follow a standard career.
- When it comes to **economic sectors**, information for France, Germany and the UK (see Box 4 on pp. 46-47) shows public administration and higher added-value services (business services, financial, real estate) are relatively more associated with career trajectories closer to the standard. On the contrary, lower added value service activities (commerce, hospitality, administrative services) have a stronger relative weight among the bottom career trajectory groups, furthest from the standard. Nevertheless, some interesting divergences emerge between countries. In France, differences in sectoral composition across trajectory groups are less marked. In the case of Germany, health services (and transport) are relatively more common in the non-standard trajectory group, while in the UK, on the contrary, health services (as well as education) are more associated with upper career trajectory groups.

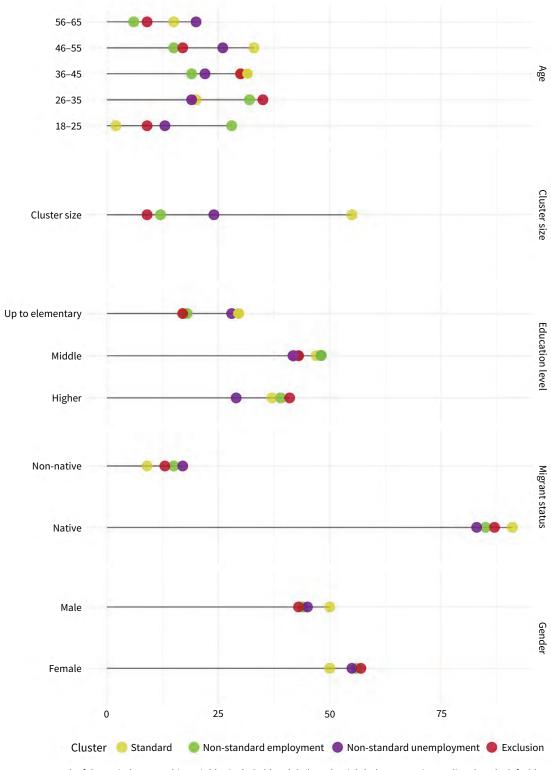


Figure 18: France – Career group composition, crisis period (2009–2014) (%)

Notes: For each of the sociodemographic variables included (see labels to the right), the categories are listed on the left side. For each category, the relative importance of each career group is shown by the coloured dots. **Source:** Authors, using FQP (2009–2014)

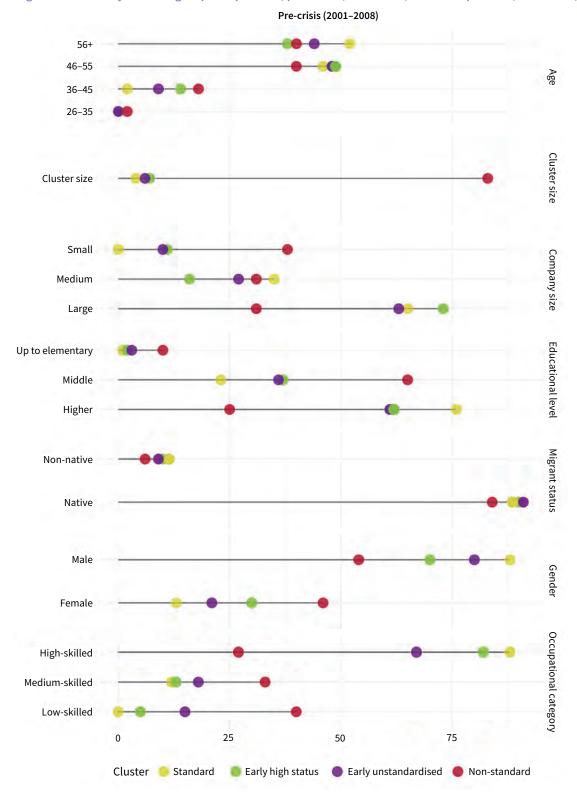
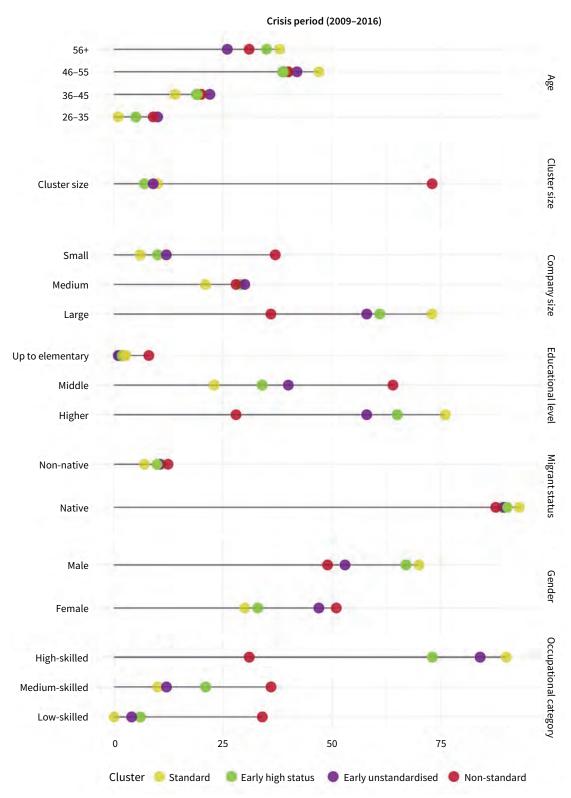


Figure 19: Germany – Career group composition, pre-crisis (2001–2008) and crisis periods (2009–2016) (%)



Note: There are no observations for 'standard' and 'early high status' groups in the 26–35 age bracket in the pre-crisis period. **Source:** Authors, using GSOEP (pre-crisis, 2001–2008; crisis, 2009–2016)

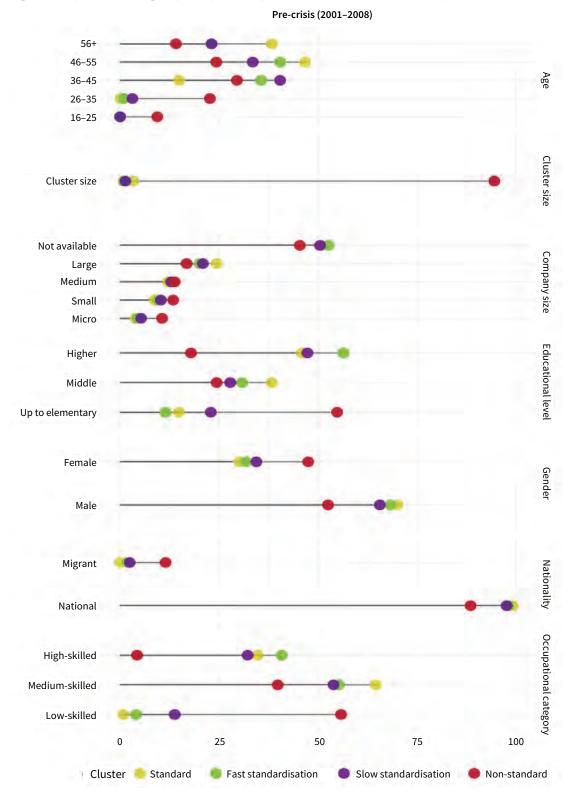
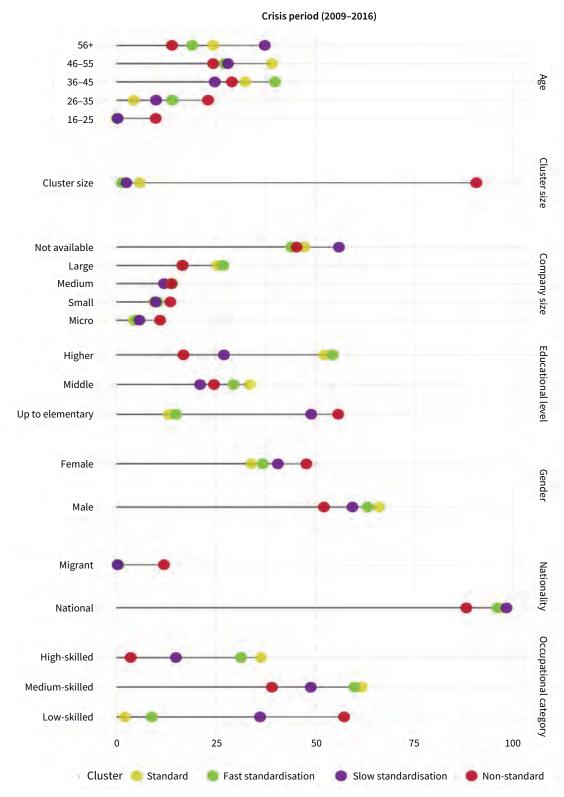


Figure 20: Spain – Career group composition, pre-crisis (2001–2008) and crisis periods (2009–2016) (%)



Note: For both periods, there are no observations for 'standard' and 'fast standardisation' for the 16–25 age bracket. **Source:** Authors, using MCVL (pre-crisis, 2001–2008; crisis, 2009–2016)

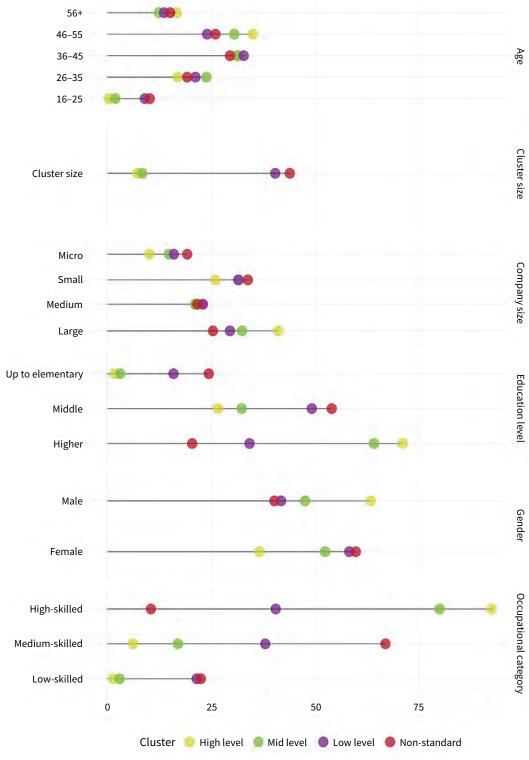


Figure 21: UK – Career group composition, pre-crisis (2001–2008) (%)

Source: Authors, using BHPS (2001–2008)

Box 4: Composition of career trajectory groups by economic sector

This analysis provides information on the relative presence of the different economic sectors in each of the trajectory groups. Data is provided for France, Germany and the UK (not for Spain, due to data limitations linked to the characteristics of its administrative data).

In France (top figure of Figure 22), public administration and financial and real estate activities emerge as those where standard careers are relatively more common. On the contrary, technical, administrative and other service activities are more associated with the less standard careers. In any case, France seems to be the country with the least marked differences in sectoral composition across trajectory groups.

In Germany (middle figure), public administration and business services are more associated with the upper standard careers. Commerce and hospitality, health services and transport are relatively more present in the non-standard trajectory group.

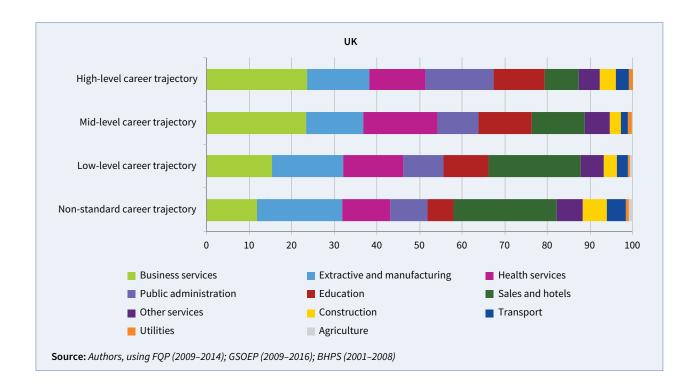
In the UK (bottom figure), business services and public administration (and health and education to a lower extent) are more associated with the upper career trajectory groups. Commerce and hospitality (and extractive and manufacturing sectors) have stronger weight among the bottom career trajectory groups, furthest from the standard.

France Standard trajectory **Exclusion trajectory** Non-standard with fixed-term contracts Non-standard with unemployment 0 10 20 30 40 50 60 70 100 80 90 Public administration Wholesale and retail trade Other service activities Scientific and technical activities, administrative services Construction ■ Agriculture, manufacturing, mining ■ Information, financial activities, real estate Germany Standard Early high status Early unstandardised Non-standard 0 10 20 30 40 50 60 70 80 90 100 Business services Public administration Construction ■ Sales and hotels/catering Education Health services ■ Transport services Supply/facilities Extractive and manufacturing

Other services

Figure 22: Career group composition in terms of economic sector for France, Germany and the UK (%)

Agriculture



Lessons learnt

- In all countries, some sociodemographic variables are related to fewer opportunities for progress in the labour market. Women, young people and immigrants are affected. Moreover, higher educational attainment is associated with more standard careers and faster standardisation in all countries. There are, however, differences across the four countries. For instance, in the UK, the role of age is less marked than in the other three countries.
- Other demand-side variables that are important in explaining careers are occupational category, company size and economic sector. Occupational category is positively associated with more standard careers in all countries. Similarly, the results show for all countries that a standard career is more likely in large firms compared to small ones. Lastly, public administration and higher added-value services are more associated with career trajectories closer to the standard, while lower added-value service activities (commerce and hospitality, administrative services) have stronger relative weight among the bottom career trajectory groups, furthest from the standard.

Likelihood of having a standard career

The study of the composition of the different labour market trajectory groups provides a first indication of the type of characteristics that are associated with certain labour market trajectories. Nevertheless, a more sophisticated approach is provided here by means of multivariate analysis using a logistic regression model

which determines the individual effect of different characteristics on the probability of having a standard career, while controlling for other factors.

Table 8 summarises the main results from the regression analysis (more detailed results can be found in Table A1 in the Annex).

Regression analysis

The dependent variable of the binomial logistic regression is a standardisation index calculated for each individual: this measures the similarity/dissimilarity of their trajectories with respect to the standard career trajectory. The index can take a value of 1 (standardised, for individuals with a level of standardisation in their careers equal to or greater than 95%) and 0 (non-standardised, for individuals with a level of standardisation lower than 95%).

The independent variables are different factors that may influence the likelihood of individuals having a standard or non-standard career. Most of the factors captured in the data refer to labour supply-side factors which largely coincide with the main affected groups covered in the previous section because, as explained earlier, the data do not properly capture demand-side drivers of LMS. It is important to keep in mind that this analysis allows for the detection of statistically significant correlations between career standardisation and each of these factors, while controlling for all the other factors considered. However, this does not mean that these factors cause LMS or, more specifically, lead to the experience of standard careers.

Table 8: Summary of results from the regression analysis

| | France | | Germany | | Spain | | UK | |
|--|------------------------------------|---|------------------------------------|---|-----------------------------------|---|------------------------------------|---|
| | Probability of standardisation | | Probability of standardisation | | Probability of standardisation | | Probability of standardisation | |
| Age group | 18-25 | - | 16-25 | | 16-25 | - | 16-25 | = |
| | 26-35 | = | 26-35 | = | 26–35 | - | 26-35 | = |
| | 36-45 | + | 36-45 | + | 36-45 | - | 36-45 | = |
| | 46-55 | + | 46-55 | + | 46-55 | - | 46-55 | = |
| | Ref: 56-65 | | Ref: 56-65 | | Ref: 56-65 | | Ref: 56-65 | |
| Gender | Female | - | Female | + | Female | - | Female | = |
| | Ref: Male | | Ref: Male | | Ref: Male | | Ref: Male | |
| Migrant status | Foreign born | - | Foreign born | - | Foreign born | - | Foreign born | |
| | Ref: Native | | Ref: Native | | Ref: Native | | Ref: Native | |
| Educational level (International | Secondary (2–3) | + | Secondary (2–4) | + | Primary (0–1) | = | Secondary education (2–3) | + |
| Standard Classification of Education (ISCED) | Vocational training (4) | + | | | Secondary (2–4) | + | Vocational training (4–5) | + |
| 2011) | University degree (5–6) | + | Higher (5–8) | + | | | University degree (6) | + |
| | Masters/PhD (7–8) | + | | | Higher (5–8) | + | Masters/PhD (7–8) | + |
| | Ref: No or primary education (0–1) | | Ref: No or primary education (0–1) | | Ref: No education (0) | | Ref: No or primary education (0–1) | |
| Dependent children | | | | | | | Having dependent children under 12 | - |
| | | | | | | | Ref: No dependent children | |
| Union | | | | | | | Being union member | = |
| membership | | | | | | | Ref: Not being union member | |

| | France | | Germany | | Spain | | UK | |
|--------|--|---|-----------------------------------|---|--|---|-----------------------------------|---|
| | Probability of standardisation | | Probability of standardisation | | Probability of standardisation | | Probability of standardisation | |
| Sector | Ref: Public administration, education, health | | Ref: Public administration | | Ref: Public administration | | Ref: Public administration | |
| | | | Agriculture | - | Agriculture | - | | |
| | Agriculture, manufacturing and extractive | - | Manufacture and extractive | - | Extractive industries | + | Agriculture | = |
| | | | | | Energy | + | Extractive and manufacturing | - |
| | | | | | Manufacture | + | | |
| | Construction | - | Construction | _ | Construction | - | Construction | _ |
| | Professional and technical activities | - | Supply facilities | - | Commerce and vehicle repair | - | | |
| | | | Sales and hotels | - | Catering and hotel business | - | Sales and hotels | = |
| | Retail, transport, catering and hotels | - | Transport | - | Transport | + | Transport | - |
| | Information, communication, financial, insurance activities | + | Business services | - | Information and communications | + | Business services | = |
| | | | | | Finance and insurance | + | | |
| | | | | | Professional and scientific activities | + | | |
| | | | | | Real estate | - | | |
| | | | | | Administrative and auxiliary services | - | | |
| | | | Other services | - | Other services | - | Other services | = |
| | | | Education | - | Education | - | Education | = |
| | | | Health | _ | Health and social services | + | Health | = |
| | | | | | Arts and leisure | - | | |

Notes: (–) significantly less likely; (+) significantly more likely; (=) no statistical difference; () category unavailable. Statistical significance at the 5% confidence level. Detailed results are presented in Table A1 in the Annex. The regression calculates the likelihood of one individual having a standardised career compared with another individual, which functions as a reference, depending on the variation in a specific characteristic – for instance, in terms of gender, the likelihood of a man having a standardised career compared with a woman. **Source:** Authors, using GSOEP in Germany (2001–2016), MCVL in Spain (2001–2016), FQP in France (2009–2014), BHPS in the UK (2002–2008)

For each of the variable categories the table shows whether it increases (+) or decreases (-) the likelihood of having a standard career in relation to the reference category of that same variable. In this case, the reference category has been defined as: male, over 55 years old, native, no education or incomplete primary education and working in public administration. Only the direction of the effect and whether it is statistically significant has been provided in Table 8 because, given the differences in datasets, the size of effects is not strictly comparable across the four countries.

As has been explained, LMS is the result of an interplay between labour market supply-side factors (such as age, gender, migrant status and educational attainment, well covered in the datasets) and labour demand-side factors. The latter are key to LMS theory but are not adequately covered in the datasets and not exploited in the regression analysis. The results from the regressions allow some common patterns in the four countries to be identified, but also point to important differences between them.

Age emerges as an important variable for explaining career standardisation in most countries. In France and Germany, younger groups are more likely to experience standard careers, as compared to their older counterparts above 55 years of age. By contrast, in Spain, younger generations have lower probabilities of

- experiencing a standard career. In the UK, age does not seem to be so important as a driver of standard careers.
- Gender is another important factor determining the probability of a standard career. The results show that, generally speaking, women are less likely to have standard careers than their male counterparts. Nevertheless, the results are not statistically significant in the UK and are reversed in Germany (women still have less standard careers in these countries, but the results suggest that this is not more likely when controlling for the other factors).
- Migrants (people born abroad) are less likely to have standard careers than nationals, and the results are very statistically significant in all countries (no information is available for the UK).
- Educational attainment also influences the probability of arriving at a standard career. More specifically, in all countries, a higher level of education is associated with a higher probability of career standardisation.
- Compared to the previous factors, that are attributes of the individual, the sector is an attribute of the work event and may change several times over the career. For this reason, the variable

- included in the regression refers to the predominant sector over the period considered. The results for France, Germany and Spain show how those working in the public sector and in business services exhibit standard trajectories to a greater extent compared to those in other sectors (especially lower added-value services such as commerce, hospitality and administrative services). The role of the sector in driving career standardisation seems to be less important in the UK.²
- The UK provides information on additional variables whose influence on career standardisation can be tested. On the one hand, the results suggest that being unionised at the workplace appears to have little impact on trajectories (the coefficient is not statistically significant), which is probably a reflection of trade union weakness in the UK. On the other hand, having a young dependent child is associated with fewer opportunities to have a standard career, which may be explained by the inevitable constraints posed by having young children on adult activities and on flexibility. This is in line with existing findings that childcare costs constitute a strong disincentive for women's employment and career improvement (Viitanen, 2005).

Lessons learnt

The results confirm for all countries a relationship between some supply-side factors and career standardisation. These include age, sex, migrant status and educational level. In particular, being young, a woman, a migrant and with low educational attainment is significantly associated with lower probabilities of experiencing a standard career, despite some differences across countries.

Testing the effect of demand-side factors on a variable that summarises longitudinal data (career standardisation) is problematic, as those are work event variables and therefore may involve several changes over the period being considered. For this reason, only sector has been included in the analysis. The results show that those working in the public sector and in high added-value business services are associated with standard trajectories to a greater extent, while the opposite applies for lower added-value services such as commerce, hospitality and administrative services.

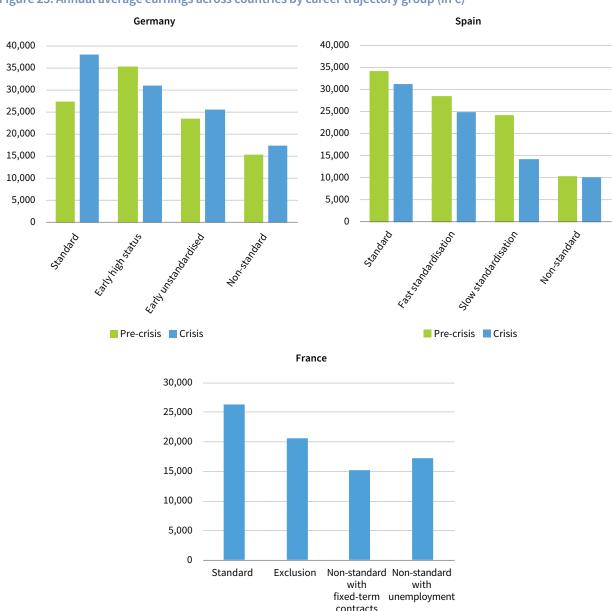
A demand-side driver of standard careers that was not included in the regression is company size. Similar to what has been said for sector, company size is not an attribute of the individual, but of the work event. However, compared to sector, company size is more variable along the career trajectory. Including company size would only make sense for people who have spent their entire career in the same company and, therefore, have only one piece of information to report. But even where the individual remains in the same company, the size of that company may vary.

Effects of labour market segmentation

The existence of LMS may have several labour market consequences (see analytical framework in Figure 1 on p. 14). In general, the available datasets across the four selected countries do not facilitate exploration of the effects of LMS in detail due to the very limited information on working conditions. Nevertheless, this section offers information on earnings (available in all countries apart from the UK). Figure 23 shows that

people in the standard trajectory group receive double or more the salaries of their counterparts in non-standard trajectory groups. Although it exists across all countries, the gap is especially marked in Spain. Moreover, data for Germany and Spain illustrate the different impact of the crisis in these two countries: while Spain suffered a strong economic impact resulting in a fall in earnings (especially for the slow standardisation group), Germany weathered the crisis and most labour market trajectory groups benefited from wage increases.

Figure 23: Annual average earnings across countries by career trajectory group (in €)



Note: Earnings levels in the UK data were not available for analysis. **Source:** Authors, using GSOEP in Germany (2001–2016), MCVL in Spain (2001–2016), FQP in France (2009–2014)

Other direct effects of LMS have been covered empirically in the previous sections by mapping via longitudinal data those individuals becoming trapped in non-standard forms of employment and/or in worse labour market states linked to inferior working conditions. Employment instability and barriers to enjoying upward mobility in the early career stage are very important from a policy perspective because they have been shown to have negative long-term effects on the career trajectory of individuals. The results show

that the situation is more worrying in France and Spain, where the transitions from worse to better labour market states were shown to be less smooth, as illustrated by the more limited role of temporary contracts in acting as stepping stones towards better quality and better-paid jobs. These effects appeared to be not so relevant in Germany and the UK, where the younger-older worker divide is not so marked and there is more upward mobility for young workers and those on temporary contracts.

4 Policies to tackle labour market segmentation

Methodology

Employment protection legislation (EPL) reforms have been the most common policy approach used to combat LMS in Europe. Nonetheless, as shown in the previous chapter, the multifaceted and context-specific nature of this phenomenon (characterised by a variety of causes, groups affected and forms of manifestation) suggests that there is scope for other types of interventions to contribute to tackling it.

In order to identify whether policies beyond EPL reforms can be effective in combating segmentation, the following exploratory methodology was applied.

- Overview of key policy developments and initiatives in the EU: This describes the overarching European policy framework and developments at Member State level to address LMS since the Great Recession, with some examples of national policies.
- o Theoretical framework: This presents hypotheses on how different policy measures may affect LMS within certain contexts. In line with the realist approach to public policy research, it links and structures the key elements of the analytical framework presented in Figure 1 on p. 14 (LMS characteristics, demand-side drivers, supply-side factors, effects and affected groups) around context, mechanisms and outcomes the key components of the context-mechanisms-outcomes (CMO) model.
- o Selection of policy measures: Going beyond EPL reforms, policy measures were selected to explore how other types of labour market-related policies have contributed to reducing LMS in France, Germany, Spain and the UK. Only measures that had been previously evaluated were included. Eleven were selected for in-depth analysis, following the principles of greatest variety and relevance to the characteristics of LMS in the respective country, as identified in the empirical analysis.
- In-depth analysis of 11 policy measures: Each case study describes the measure and analyses its effectiveness in the light of LMS, based on evaluation evidence, complementary desk research and expert interviews.

 Comparative analysis: Building on the case studies, this derives indicative lessons by type of measure on how to combat LMS.

This research does not set out to make broad generalisations. First, it tests the CMO methodology in the analysis of LMS. The CMO model allows for the creation of a common analytical framework to structure and process highly varied evidence on LMS. Also, it casts light on what policy measures and approaches – beyond the EPL reform type which is typically considered – can contribute to addressing LMS, or at least some of its drivers.

More detailed policy descriptions and analyses can be found in Eurofound's working paper related to this report (Eurofound, 2019b).

CMO model and its application to this study

Developed by Pawson and Tilley in the 1990s, realist evaluation is a form of theory-driven evaluation. The authors argue that to be useful for decision-makers, evaluations need to identify not only 'what works', but also 'for whom, how and in what circumstances'. Fundamental research tasks for the application of a realist logic include the creation of hypotheses on the key mechanisms, contexts and outcome patterns of a policy measure (Pawson and Tilley, 1997, 2004; De Souza, 2013).

Context

Context refers to external conditions that guide the selection of policy measures, favour or hinder the mechanisms in place and influence the scope of policy impacts.

Often interrelated, contexts inform what types of policy measures are expected to work, for whom and in what circumstances.

Generic context refers to demand- and supply-side drivers and causes of LMS, types of labour market divisions and affected groups, and broad policy frameworks. These external conditions guide policymakers' decisions on types of measures and their target groups and influence how this may affect LMS. Specific context refers to organisational conditions and target-group characteristics. While individual capabilities and institutional or political settings might affect the effectiveness of policy implementation, the sociodemographic characteristics and personal or cultural preferences of a target group can influence individual reactions to policy measures.

Mechanisms

Mechanisms are ways in which the measure's components, or a set of these, bring about change through subjects' reasoning and reactions.

The study covers regulatory and incentive-based policies related to employment/job stability, income security and flexicurity that have the potential to affect LMS. It takes into account mechanisms that empower, incentivise and support individuals affected by LMS and those obligating, incentivising and supporting employers. Disentangling these mechanisms helps to explain how individual policy actions bring outcomes within given contexts.

Mechanisms are often interrelated and influenced by specific contexts. They might be pre-existing but activated through policy measures, or they might be newly created. Some mechanisms might also be triggered unintentionally and lead to undesired outcomes.

Outcomes

Outcomes are practical effects produced by causal mechanisms, triggered by policy measures within given contexts.

This study looks at three levels of outcome.

- At micro/programme level, referred to as results:
 These encompass outcomes affecting some LMS direct effects (such as transitions from unemployment into employment or from temporary to permanent employment, raised awareness of career opportunities, improved skills, higher earnings or more flexible working hours).
- At macro level, referred to as expected impacts: These are macro effects affected by changes in labour market transitions and working conditions and correspond to the indirect effects of LMS as captured in Figure 1 on p. 14. They are usually influenced by a combination of factors rather than one single measure. Accordingly, it is not possible to identify a direct causal connection between a specific measure and an impact.
- Given different outcomes, the context of action may eventually undergo transformation, remain invariable or reproduce/reinforce existing institutional conditions, cultural norms and societal and economic factors concerning LMS.

Figure 24 illustrates the theoretical interplay between contexts, policy measures, mechanisms and outcomes that was analysed in this study. Policy measures can belong to more than one type, be intertwined and generate aggregated effects, and they might have positive impacts on LMS even if they do not explicitly aim to address it.

Policies targeting disadvantaged groups (inclusion opprooch), including: Low-skilled workers, the elderly, women, migrants and ethnic minorities, the disabled, self-employed, young people, Societal characteristics (related to labour supply) concerning: Awareness-raising campaigns to prevent discrimination and promote inclusive work employees with flexible contracts - Legislation and inspection schemes
- Incentives aimed at employe
to introduce work-sharing arrangements Schemes to support employ training/upskilling - Legislation on flexible parer Incentivising employers to introduce flexible working-t Related to flexicurity development on non-discrimination and inclusive work environme Regulations concerning collective bargaining and working-time, overtime, non-regular hours, etc. - Legislation to protect structures at firm level Regulations concerning - Labour market policies (passive and active)
- Institutional arrangements for collective action (e.g. gender equality) es; target groups; favour or hinder the mechanisms Initial institutional conditions concerning Regulatory or incentive-based measures to support equal employment conditions by type of contract - The share of largely stigmatised groups arrangements Affordable and quality childcare services
 Long-term care services for seniors, the disabled Social assistance schemes: Related to income security Reduction of taxation on low incomes
 Provision of 'insecurity - Regulations concerning Regulations concerning social insurance, transition to work benefits and short-time compensation schemes minimum wage (introduction/increase Intended outcomes Generic contexts Policy measures Cultural frameworks and social norms that influence individual decisions on training, labour market participation and mobility - Regulations to prevent false independent work - Regulations of paid training jobs and apprenticeship Schemes to expand employment opportunities for jobseekers and people outside the labour force: - Regulatory restrictions on the use of temporary or Introduction and development of placement sche Schemes to increase employability and help find suitable employment for jobseekers: - Improvement or expansion of public job offers - Employers' (partial) exemption from social insur contributions to hire disadvantaged persons Severance payments and similar alternatives
 Special requirements for collective dismissals/ - Mentoring/consultancy/career guidance servi Incentives for hiring on open-ended contracts Related to employment/job stability Other active labour market policy measures: Training schemes targeting the unemployed Characteristics of the production systems and path dependence Changes in business models, work organisation systems and HR Creation and upgrades of job retention sche Dismissal procedures (e.g. mandatory pre-- Rules favouring disadvantaged groups - Reduced bureaucratic costs of hiring Economic and business factors (related to labour dem notion of self-employment - Employment subsidy policies Regulations concerning hiring: Regulations concerning firing: Redundancy procedures layoffs to avoid abuses term contracts Structural change of the economy periods) centive-based (more flexible policy measures that affect the choice of employers and (potential) employees): economic, social partner support instruments, novel behavioural tools Regulatory (changes in labour law and employment protection legislation) practices Structure of a policy measure target group that might affect individual reactions to policy measures and so favour/hinder the personal or cultural preferences of a Unintended outcomes Mechanisms triggered unintentionally in a given context and leading to unintended outcomes Increased satisfaction with/legitimacy of democracy and political trust Improved demographics (a boost in Conditions that influence reasoning and actions of stakeholders involved in policy implementation; affect interpretations and reactions of potential beneficiarles LMS indicators based on aggregated macro-level data and related to: Increased social justice and social Working/employment conditions Improved efficiencies in resource allocation (productivity)
Boosted purchasing power and Expected impacts (macro-level) Potential multiplier Hire low-skilled, less-experienced, other disadvantaged persons Keep current employees Improve working conditions and well-being benefits, reputation concerns, costs of legal prosecution in cas Obligating, incentivising and - Building trust and fighting approach (financial and other effects - Increasing motivation to: economic demand Based on rational choice of law breaches, etc.) of employees birth rates) trust A (especially among the vulnerable (social, cognitive, emotional, etc Creating opportunities/settings for individuals to enter Providing education, improving Empowering, incentivising and self-confidence and social trust upporting individuals affected economic incentives)
Treating a sense of belonging Improved specific working/employment conditions (e.g. access to company-leve training, working-time flexibility, effective employee representation, etc.) incentive-based policy measures rather from non-standard employment temporary/fixed-term contracts measurable in the case of regulatory ones, and relate to: - Increasing motivation and advancement (including Suilding and developing Specific to the policy measure in ndirectly affect LMS)
- Developed skills/competences replaced by permanent ones) Improved awareness of career development opportunities Results (micro (programme) level) capabilities and institutional or political settings of k**eholders** olved, all of which ditions related to iffectiveness of lntended outcomes ndividual

Figure 24: Theoretical framework of labour market segmentation

Policies to address LMS in the EU and its Member States since the Great Recession

Although the reduction of labour market segmentation (LMS) is a broad-scope objective of EU policy, a comprehensive EU-level strategy to address LMS, encompassing all EU Member States, is not yet in place. Nonetheless, the Council and the Commission have consistently referred to LMS in country-specific recommendations (CSRs) and in relation to flexicurity policies. The EU institutions have outlined some drivers and negative impacts of LMS and invited Member States to introduce measures to combat LMS and to monitor and assess the effects of their labour market reforms on LMS. This approach, however, remains quite dispersed. As shown in Figure 25, the primary policy areas for reforms relevant to LMS are labour markets but also social protection and lifelong learning. Either as a reaction to the above or independently, several Member States have launched actions with potential to address LMS. The complexity of LMS required country-specific solutions, leading to a broad range of policies.

Horizontal policies addressing young people, disability, migration, older people, the less educated and gender may also have an indirect influence on LMS, as they target the groups more likely to be affected by LMS and to suffer its adverse effects.

Labour market policies relevant to labour market segmentation

EU actions

According to the Treaty on the Functioning of the European Union, Member States must view their economic and employment policies as 'matters of common concern' and coordinate these within the

Council. The Council adopts broad economic policy and employment guidelines, providing the basis for CSRs. These form the integrated guidelines for the Europe 2020 strategy and underpin the EU's joint employment reports, which present annual overviews of the main employment and social developments in the EU and Member States' reform actions in line with the employment guidelines.

As it also stems from the empirical analysis, it is necessary to consider the type of contract as regards LMS, along with other factors.

The common principles on flexicurity (Council of the European Union, 2007; European Commission, 2007) aimed to modernise labour markets and reduce LMS by promoting flexible and reliable contractual arrangements and supported comprehensive lifelong learning strategies, effective active labour market policies (ALMPs) and modern social security systems. Accordingly, since 2008, the employment guidelines have highlighted the need to promote flexibility and employment security to reduce LMS.

Since the introduction of the European Semester in 2010, the Commission has focused on deregulation, reducing the protection of workers with permanent contracts and integrating those left outside or at the margins of the labour market. EPL reforms were expected to revive job creation and address LMS (European Commission, 2010, 2012).

The Commission continued to support flexicurity through its guidelines (Bekker, 2018), although this was criticised as overwhelmingly deregulatory, failing to protect the groups most vulnerable to austerity measures and insufficiently anticipating risks of increased LMS (Rubery and Piasna, 2016; Eichhorst et al, 2017).

Figure 25: Key developments in EU policies relevant to LMS since 2008

Note: Colour codes correspond to labour markets, social protection and lifelong learning.

Source: Authors, based on Eurofound (2019b)

The proclamation of the European Pillar of Social Rights (EPSR) in 2017 marked a shift in the EU approach, with the focus more on workers' protection than on labour market liberalisation and flexicurity (European Commission, undated). The Pillar supports 'secure and adaptable employment' as one of its principles and refers to the right of all workers to fair and equal treatment regarding working conditions, social protection and training, regardless of the type and duration of their employment relationship. It also recommends fostering transitions towards open-ended employment and preventing employment relationships leading to precarious working conditions (European Commission, 2017a).

The 2018 Employment Guidelines (Council of the European Union, 2018) are aligned with the EPSR. Particularly relevant to LMS are Guidelines 6 'Enhancing labour supply and improving access to employment, skills and competences' and 7 'Enhancing the functioning of labour markets and the effectiveness of social dialogue', referring to the need to 'reduce and prevent segmentation within labour markets, fight undeclared work and foster the transition towards open-ended forms of employment'. They also invite Member States to work with the social partners on flexibility and security principles – prohibition of abuse of atypical contracts, creation of an impartial dispute resolution system, strengthening of ALMPs, improvement of public employment services (PES) and skills enhancement.

In addition, various EU directives adopted in the 1990s and 2000s helped to regulate Member States' labour markets on issues related to LMS. These include:

- Directive 97/81/EC on part-time work, curbing discrimination against part-time workers, boosting the quality of part-time work, facilitating the development of voluntary part-time work and contributing to working time flexibility.
- Directive 99/70/EC on fixed-term work, aiming to improve the quality of fixed-term work and prevent abuse arising from the use of successive fixed-term employment arrangements.
- Directive 2008/104/EC on temporary agency work, ensuring the protection of temporary agency workers and improving their work quality through equal treatment and by recognising temporary work agencies as employers.
- the 91/533/EEC Written Statement Directive, obliging employers to inform employees about the conditions applicable to the employment relationship or contract. The new Directive on Transparent and Predictable Working Conditions (2019) repeals this and responding to labour market challenges triggered by demographic developments, digitalisation and new forms of employment creates minimum standards so that

all workers, including atypical contract holders, benefit from more clarity regarding their working conditions.

The Commission also employs financial instruments to support employment, social affairs and social inclusion. The European Social Fund, the Employment and Social Innovation programme and the European Globalisation Adjustment Fund all play important roles with regard to job access, retention, return, employability, career progression and better working conditions – especially relevant for groups at higher risk of LMS – and also reflect some of the remarkable efforts of the European Commission to support ALMPs.

Examples of Member State actions

Key examples of labour market policy measures to combat segmentation at national level relate mainly to EPL reforms, ALMPs and internal flexibility.

Reforms of employment protection legislation

Various Member States have undertaken in-depth EPL reforms (European Commission, 2016a) as the main intervention to address segmentation deriving from two-tier reforms of EPL (allowing a more flexible use of temporary contracts while keeping unchanged the dismissal rules for permanent contracts) (ILO, 2013a, 2013b). Standardising employment protection across different contractual relations responds to the EU emphasis on reducing the overprotection of workers with permanent contracts and protecting those outside or at the margins of the labour market (European Commission, 2010, 2017e). EPL reforms addressing LMS mainly consist of the deregulation of permanent contracts to increase flexibility regarding the hiring and firing of permanent workers and re-regulation of temporary contracts to limit their use and improve protection for those in temporary employment.

In the aftermath of the economic crisis, countries such as France, Greece, Italy, Portugal, Slovenia and Spain launched EPL reforms and implemented substantial deregulation as part of austerity measures. High and increasing levels of LMS in European countries were also linked to discrepancies between strict EPL for regular workers with open-ended, full-time contracts versus comparatively weak protection for workers with temporary contracts – as highlighted in Chapter 3 in the case of Spain. Reforms were implemented to lower the costs of dismissing permanent workers and bring them closer to those in temporary employment. This happened by shortening notice periods, reducing severance payments, capping back pay, simplifying dismissal procedures, broadening the scope of justified dismissals, extending trial periods, reducing the scope of reinstatement, reducing compensation for unfair dismissal and making dispute resolution mechanisms quicker or more effective. As recent examples, new notice periods came into effect in Belgium in 2018.

These were designed to encourage the recruitment of new workers by reducing notice periods for employees with up to six months of service. The same year, the Netherlands submitted for public consultation a package of measures aiming at a better balance in employment protection law. It included the introduction of an additional basis for dismissal of permanent employees and the possibility to extend the probation period for workers with permanent contracts (European Commission, 2015, 2016b, 2017b, 2018a, 2018b).

Some Member States chose to restrict the use of temporary contracts (OECD, 2013, 2014; European Commission, 2015) or to expand the rights and protection for those in non-standard forms of employment. The goals were to make the use of temporary contracts more expensive for employers, incentivise hiring on open-ended contracts and encourage employers to convert temporary into permanent contracts. Reforms included prescribing stricter conditions for the use of temporary contracts, lowering the cumulative duration of fixed-term contracts, increasing severance pay for temporary workers, preventing abuses of temporary agency work, improving access to collective bargaining for fixed-term and temporary workers and raising employers' social insurance contributions for temporary jobs. As an example, a 2013 labour market reform in Slovenia raised employer unemployment insurance contributions for temporary contracts - but exempted employers from contributions for a limited time if the temporary contract was converted into a permanent one (Eichhorst et al, 2017; European Commission, 2018a).

Active labour market policies

Alongside EPL reforms, ALMPs have been used extensively across Europe to tackle concerns about LMS (European Commission, 2017c). Key target groups are those who are unemployed or inactive, but also those in work, the objectives for the latter being employment retention and training. Such an approach is meant to reduce discrimination in the labour market and increase employability and more stable, quality employment – facilitating upward and preventing downward mobility of specific groups who face barriers in entering, progressing or remaining in the labour market.

Key actions include training provision (see section on VET below) and the following.

Efforts to better support the unemployed with quality job search assistance (for instance, through PES reforms) to facilitate transitions into employment and to prevent people from moving into low-quality jobs. To guarantee employment security and quality, job search assistance must be combined with other ALMPs such as hiring incentives or training. An example of a recent

- measure is the Spanish Joint Action Programme to support the long-term unemployed. This programme finances the provision of personal tutors responsible for preparing individualised itineraries for each beneficiary and funds staff training to improve PES capacities (European Commission, 2017e).
- Incentives targeted at employers to support hiring, employee retention or conversion of temporary into permanent contracts. These forms of subsidised employment promote upward labour market mobility and prevent downward transitions into unemployment, and they have been used extensively in the last decade. Countries with segmented labour markets have subsidised employment predominantly through wage subsidies and reduced social security contributions (Eichhorst et al, 2017). Measures mainly target the most disadvantaged groups. As recent examples, in 2018 Spain reduced social security contributions for companies that transform training contracts into open-ended ones (applicable in the first three years after conversion only) and introduced new wage subsidies for young entrepreneurs who hire workers for the first time. As of 2017, employers in the Netherlands receive a subsidy for hiring typically low-paid workers in order to promote job creation, particularly full-time employment, for people on low incomes, and to facilitate transitions into employment for those who are out of work (European Commission, 2017d, 2017e, 2018a).

Promoting work-life balance

In recent years, work arrangements supporting better reconciliation between work and family life gained momentum in the reform agenda across the EU (European Commission, 2017b). A recent example is the EU Work-life balance initiative, a deliverable of the EPSR, addressing the work-life balance challenges faced by working parents and carers. Actions are particularly relevant to those with caring and/or parental responsibilities, who risk being trapped in lower labour market segments.

Such actions can relate to internal flexibility, intended as working-time adjustments and internal reorganisations. This usually depends on company-level practices and industrial relations and is often governed by collective agreements. Some Member States are also taking measures to boost work-life balance by enhancing the adaptability of working hours and working conditions, which may contribute to stabilising and boosting employment, avoiding job losses and encouraging transitions from inactivity into employment. For instance, in 2017 Belgium adopted a law on 'Workable and flexible work' to increase flexibility for employers and employees and simplify the combination of work and private life. Working time must be set on an annual basis (rather than more

frequently), and the use of overtime has been relaxed, the formalities for part-time work simplified and a legal framework for occasional telework created. Greater flexibility in terms of scheduling/entitlements to working hours, leave and working outside the firm's premises have also been fostered through amendments to the Czech Labour Code and the Italian 'Jobs Act on non-entrepreneurial self-employment and smart working', both valid from 2017 (Eichhorst et al, 2017; European Commission, 2017d).

Adjusting working life and hours to one's own preferences and responsibilities can also be achieved through the provision of high-quality yet accessible care services and by increasing incentives to work and encouraging (re-)entry to the labour market through reforms of tax and benefit systems (such as shorter duration of paid parental leave or childcare tax allowance schemes). These areas are highly influenced by public authorities, which have launched various actions to prevent part-time work as well as shorter and more disrupted careers. As an example, Bulgaria amended its Code of Social Insurance: from 2017, if a parent decides to return to work without fully using the paid parental leave after the 135th day of the leave, they are entitled to receive a partial financial compensation for the remaining period of the leave (European Commission, 2017b, 2017d).

Social protection policies relevant to labour market segmentation

EU actions

In 2007, the common principles on flexicurity mentioned the need for 'modern social security systems that provide adequate income support, encourage employment and facilitate labour market mobility' (European Commission, 2007). This includes broad coverage of social protection provisions (unemployment benefits, pensions and healthcare) helping people to combine work with private and family responsibilities such as childcare and, thus, also addressing LMS.

The Commission's 2013 Social Investment Package guiding Member States' policies towards social investment throughout life – fosters people's skills and opportunities to participate in society and labour markets (European Commission, 2013). A specific focus is on social investment in (child)care, education, training, ALMPs, rehabilitation and health services. When reporting on Guideline 8 'Promoting equal opportunities for all, fostering social inclusion and combating poverty', the Commission (2018b) also draws attention to persistent differences between the upper and lower segments when it comes to access to social protection: this is insufficient for non-standard workers such as platform, casual, seasonal, on-call and temporary agency workers and those who are self-employed.

Accordingly, the Social Fairness Package (2018) includes a proposal for a Council recommendation on access to social protection for employees and the self-employed. This supports people who, due to their employment status, are insufficiently covered by social security and exposed to economic uncertainty and segmentation. Extending social protection would improve job quality for non-standard workers and bring them closer to those in upper labour market segments.

Examples of Member State actions

After the economic crisis, reforms turned to the longer-term structural challenges, including the emergence of new forms of work and the need to ensure effective social protection for a more diverse workforce (European Commission, 2017d).

EU Member States have extended social protection to non-standard workers by: integrating categories of non-standard workers who previously had no or just partial social security coverage into the general social security system; reducing the scope of non-standard employment by curbing incentives for employers to attenuate labour costs at the expense of workers' social security; and redefining dependent self-employment under more regular labour law, also applying the social security rights of salaried workers (Spasova et al, 2017; Eurofound, 2017b). Examples can be found in Croatia (2017 tax reform extending the obligation to pay social security contributions to some non-standard workers) and Latvia (as of 2017, taxi drivers are considered to be employees and enjoy stronger social rights and stricter requirements for social security contributions).

Two key types of reform were promoted as regards those who are self-employed: changes in the parameters of a scheme without modifying the institutional system; and paradigmatic reforms aimed at extensive integration of self-employment into social security. The first type includes granting full access to maternity/paternity benefits and to the relevant services offered in connection with childbirth, greater flexibility to take up maternity leave, increasing the minimum insurance base, favourable tax reforms or reducing social contributions for the self-employed. The second type includes the creation of new statuses, an all-encompassing harmonisation of the self-employed status and the creation of new social benefit schemes in favour of the self-employed. Both types are relevant to combating dependent self-employment and disguised employment (Eurofound, 2017b; Spasova et al, 2017). Examples are the Italian 'Jobs Act' (2017), which awards non-entrepreneurial self-employed workers with new social rights, or the French modification of the unemployment scheme (2014) to introduce 'refillable rights', which allows unemployed persons re-entering employment to keep their unemployment rights as an incentive to re-enter the labour market (ILO, 2016; European Commission, 2017b, 2017d).

Lifelong learning policies relevant to labour market segmentation

EU actions

Developing skills and supporting labour market matching and integration is one of the key priorities across the EU. The Common principles on flexicurity adopted in 2007 included 'Comprehensive lifelong learning strategies' to ensure the continuous adaptability and employability of (vulnerable) workers. Training and lifelong learning can improve labour market outcomes for the unemployed and workers at higher risk of redundancy. Moreover, as highlighted in Chapter 3, higher levels of educational attainment and skills are linked to greater likelihood of being in the more standard career trajectory groups. Therefore, lifelong learning policies are relevant for LMS as they support the transition towards better-quality and better-paid jobs, especially when targeting people with low or obsolete skills, and prevent downward transitions.

The Agenda for New Skills and Jobs (2010) stresses the need to adopt flexicurity policies to reduce segmentation and to support labour market transitions, to equip people with the right skills for employment, to improve the quality of work and working conditions and to support job creation. The Commission proposed measures such as creating flexible and reliable contractual arrangements, modernising social security systems, conducting ALMPs and implementing comprehensive lifelong learning programmes.

A 2010 European Parliament Resolution on atypical contracts, secured professional paths, flexicurity and new forms of social dialogue and the 2012 Employment Package highlight skills support and lifelong learning as key tools to counteract LMS. This includes actions to cope with skills mismatches, ensure better recognition of skills and qualifications, anticipate skills needs and improve synergies between the worlds of education and work. Such investments increase the employability of low-qualified workers and encourage their upward transitions into or within the labour market.

Since 2016, the agenda of ALMPs pays more attention to training (European Commission, 2017d). The New Skills Agenda for Europe (2016) launched 10 actions aimed at making the right training, skills and support available to people in the EU. The initiative 'Upskilling pathways: New opportunities for adults' helps low-skilled adults acquire a minimum level of skills and reduce their risk of unemployment, poverty and social exclusion.

The 'EU Skills Profile Tool' supports the early profiling of the skills of refugees, migrants and other third-country nationals, facilitating their integration into the EU labour market.

Examples of Member State actions

Lifelong learning measures adopted by Member States include back-to-education allowances, upskilling measures, expansion of training offers, introduction of individual training accounts, passports and vouchers, assisted contracts for training, introduction of skills assessment and individual learning plans and support for the recognition and validation of degrees and skills. Examples can be found in Spain - reform of adult learning programmes, introducing training vouchers for jobseekers, and training accounts to document past training and guide future training offers (2017); France personal training accounts allowing beneficiaries to acquire training hours and covering the fees of certain courses (2015); Denmark – skills assessment for learners to identify their existing skills in order to tailor training programmes and avoid duplication (2015); and Germany – law on the recognition of foreign degrees regardless of one's citizenship and residency status (2012) (European Commission, 2017d).

Effectiveness of policies: Illustrative cases from four Member States

Specific measures identified as candidates for the case studies in this project cover both regulatory and incentive-based policies related to employment/job stability (EPL reforms – deregulation of permanent, re-regulation of temporary contracts and ALMPs), income security (legal provisions regarding minimum wage and social insurance, and social benefits such as sickness, unemployment, retirement and parental benefits) and flexicurity (changes in labour law and incentives to employers to improve working conditions).

Eleven policy measures were selected for in-depth analysis based on their relevance to the characteristics of LMS in the four countries as identified in Chapter 3 and the availability of evaluation evidence and to explore a variety of types of intervention. They were also complemented by evidence from similar measures. They can be classified as: packages of ALMPs, assisted contracts, self-employment promotion, minimum wage regulations, VET and family policies (Table 9).

Table 9: Measures analysed by type, country and reasons for selection

| Measure type | Title | Reasons for selection |
|---|--|--|
| Packages of ALMPs | UK: • Lift Programme • Access to Work Germany: • Perspective 50plus | High relevance of groups of workers in lower careers in the UK and Germany Difficulties in achieving career standardisation in the UK |
| Assisted contracts | Spain: Hiring incentives programme for open-ended contracts Employment maintenance subsidy for older workers France: System of assisted contracts | Significant number of temporary employees who are trapped/have limited upward transitions in both France and Spain High relevance of groups of workers in lower careers in Spain |
| Promoting self-employment | France: • Scheme for auto-entrepreneurs | Significant number of temporary employees who are trapped/have limited upward transitions in France |
| Minimum wage regulations | Germany: Industry-specific minimum wages (IMWs) UK: National Living Wage (NLW) | High relevance of groups of workers in lower careers in the UK and Germany Difficulties in achieving career standardisation in the UK Existence of economic sectors with a higher incidence of LMS |
| Vocational education and training (VET) | Spain: Redefinition of the training and apprenticeship contract | High relevance of groups of workers in lower careers in Spain Individuals with a lower educational attainment are more present in the least standard career trajectory groups in Spain |
| Family policies | Germany: • Parental allowance and parental leave law of 2007 | Particularly strong differences between men and women in the German labour market |

Source: Authors, based on Eurofound (2019b)

These measures aim to reduce or prevent unemployment, boost job creation, tackle poverty or low pay, or support the reintegration into the labour market of specific groups such as young people, the elderly, women or people with disabilities. They are relevant to LMS as they influence labour market transitions (into stable and secure jobs rather than precarious non-standard employment and from inactivity/unemployment to employment, and limiting those in the opposite direction) or aim to narrow the gap between working conditions (such as earnings) of upper and lower segments.

As of 2019, eight of the measures are still being implemented. With adjustments, five have been running for a few decades. Most measures target specific groups, mainly young people, older people, the long-term unemployed, low-paid workers, low-qualified people, women and people with disabilities – those more likely to be affected by LMS.

Primarily, governments fund the initiatives, although direct cost-sharing with employers is observable in two of the cases. The central government is often responsible for implementation, yet a few measures rely on the support of regional or local actors. The involvement of social partners differs across cases but is

often limited to a strictly advisory role, except for the industry-specific minimum wages (IMWs) in Germany. Most of the measures selected have no sectoral focus.

Following the CMO model, the sections below outline the characteristics of each type of measure along with the key factors influencing their effectiveness regarding LMS.

Packages of ALMPs tailored to specific groups

PES provide assistance with job searches, often offering a 'package' of ALMPs to help the unemployed, but also target disadvantaged groups already in employment. ALMPs are relevant to LMS as they support transitions from inactivity/unemployment into work. Effective job search and work-related assistance, combined with training, may help to prevent people from getting trapped in a cycle of transitions between precarious non-standard jobs and unemployment. ALMPs often focus on groups facing higher risks of falling into lower labour market segments. This is reflected in the measures selected for the UK and Germany – countries characterised by a relatively high relevance of groups of workers in lower careers and, in the case of the UK, by difficulties in achieving career standardisation, as discussed in Chapter 3 (see Table 10).

Table 10: Case studies on ALMPs

| Measure | Lift Programme (UK) | Access to Work (UK) | Perspective 50plus (Germany) |
|--------------------------------------|---|---|---|
| Context | Wales has a higher proportion of workless households than in the rest of the UK; relevance of worklessness in the political agenda | Large disability employment gap in the UK; numerous barriers for people with disabilities to enter the labour market, including employers' belief that they are costlier | Low employment/high unemployment of older people; support to strengthen the flexibility onewly founded job centres in the provision of services; youth culture in German companies |
| Objectives | Get individuals from workless households (back) into employment; prevent/mitigate the impacts of poverty; help people in poverty to improve their skills | Help people with disabilities to access the labour market and overcome work-related obstacles | Boost the employability of long-term unemployed aged 50+; support their reintegration into stable employment reduce the number of claims for unemployment benefit II (jobseeker's allowance for long-term unemployed who are no longer eligible for standard unemployment benefits) |
| Expected outcomes in relation to LMS | Supporting transitions from unemployment to employment | Supporting transitions of people with disabilities from inactivity/unemployment to employment | Supporting older people's transitions from unemployment to stable employment |
| Time frame | 2013-2017 | 1994-present | 2005–2007, 2008–2010, 2012–2015 |
| Target groups | Working-age members of workless households (all family members unemployed for more than six months) | People with disabilities or long-term health conditions | Long-term unemployed aged 50+ and receiving unemployment benefit II |
| Delivery methods | Personalised 'wrap-around support' for individuals from workless households: identifying needs coaching and advice from mentors action plan building skills improving health | Package of support and guidance for people with disabilities and their employers: discretionary grants to assist individuals with travel, special aids, equipment, support workers non-financial support to individuals and their employers | Job centres develop regional employment pacts, apply for funding and implement activation measures for the target group; Ministry of Labour and Social Affairs selects applications and grants funding |

Source: Authors, based on Eurofound (2019b)

Context

The ALMPs analysed were adopted in contexts characterised by higher unemployment and obstacles to labour market access for specific disadvantaged groups (high disability or older workers' employment gaps; related resistance of employers to hire people from those groups).

As they are usually implemented by manifold actors, geographically spread across the country, their success is dependent on the quality of the governance mechanisms in place and of the services provided. Appropriate governance arrangements, partnerships and collaborations are needed to successfully implement packages of ALMPs.

Mechanisms

Packages of ALMPs support labour market progressions by addressing individual challenges to labour market transitions through specific work paths, changing perceptions of jobseekers and employers regarding their involvement in work, providing training and removing labour market barriers.

The empowerment and enablement of the unemployed is a key mechanism for ALMPs in terms of changing their labour market outcomes and encouraging upward transitions into work. Tools include coaching, skills development and addressing psychological and physical barriers. A complementary approach is to incentivise employers to hire and retain workers who are typically disadvantaged in the labour market. Combined with efforts to empower and enable jobseekers, financial and non-financial assistance may contribute to reducing the labour costs for companies and to addressing employers' negative perceptions of certain groups.

Outcomes

Applying personally tailored approaches and allowing for a flexible choice of delivery modes was key for the Lift Programme (UK), which provides 'wrap-around

Lessons learnt: How ALMPs contribute to tackling LMS

- ALMPs support labour market transitions from inactivity or unemployment into work. This is particularly important given that inactivity and unemployment are among the statuses which experience the lowest upward mobility, as shown in Chapter 3 for France and Spain. When combined with training and job search and work-related assistance, they can also prevent people from getting trapped in a cycle of transitions between precarious non-standard jobs and unemployment.
- ALMPs address LMS by enabling individuals for instance, by increasing their preparedness for the labour market through coaching and by incentivising employers to hire or retain disadvantaged workers.
- ALMPs work better when allowing for flexible and personalised approaches in terms of the support offered
 and the governance systems in place. An offer combining different services can be more effective. This
 flexibility in approaches and service provision needs to be sufficiently structured, coordinated and
 monitored.

support' for individuals in workless households. Giving mentors time to build trust with participants allowed for the effective change of the beneficiaries' perceptions and attitudes, mainly through coaching. Mentors would then design action plans tailored to each beneficiary, selecting the most appropriate course of action to strengthen their skills through training, volunteering or work placements (Wavehill, 2016, 2018). This helped one-third of programme participants to transition into employment.

Similarly, personalised services for older people were a key part of the support provided in the German 'Perspective 50 plus' programme. Job centres developed regional strategies in cooperation with each other, providing the freedom and funds for each centre to build a tailored solution for each beneficiary. This was more effective than standard PES procedures in terms of transitions of older workers from unemployment to employment (Knuth et al, 2014).

The UK 'Access to Work' programme addressed various barriers that people with disabilities face when entering the labour market. It enabled them by minimising obstacles to travel to work and by providing them with individualised support and guidance, setting the necessary conditions to perform well at work. This reduced sickness absenteeism and decreased labour costs for their potential employers – acting as an incentive for employers to hire and retain people with disabilities and tackling discrimination. This curbed LMS by supporting upward transitions into employment and preventing those downward into unemployment.

Packages of ALMPs with flexible formats can best address the needs of those affected by LMS. This relates to the availability of different tools to meet the beneficiaries' needs, the implementing actors' freedom to choose the most relevant approaches for each target group and the application of individualised solutions. Success is conditional on the effective targeting and reach of participants.

Assisted contracts

Assisted contracts are employment contracts of any type that benefit the employer through financial aid in the form of the following delivery methods (generally a mix is applied): a one-off payment at the time of signing the contract; yearly financial support in fixed amounts; monthly financial assistance to supplement the remuneration of employees; partial or full exemption from rebates on social security contributions; and aid for training.

Although costly, they have been widely used in some Member States, such as Spain and France, to reduce unemployment, support stable employment, limit the use of non-standard work and encourage the retention of workers. Indeed, the results from Chapter 3 indicate that both Spain and France have significant numbers of temporary employees who are trapped or have limited upward transitions. Spain, moreover, is characterised by a high proportion of groups of workers in low-level careers

Assisted contracts usually target groups who are more prone to fall victim to LMS. Such contracts mainly consist of the following.

- Hiring incentives, which support job creation, either as stable employment (transitions from unemployment into permanent work) or, more broadly, as transitions into stable or temporary employment. These could, therefore, have a mixed influence on LMS.
- Conversion incentives, which support the conversion of temporary contracts into permanent ones, thus diminishing the incidence of fixed-term work. These encourage upward transitions into stable employment with a high potential to reduce LMS.
- Employment incentives, which support the retention of employees, especially those with a high risk of dismissal. These can prevent downward transitions from stable employment to unemployment or inactivity.

Table 11: Case studies on assisted contracts

| Measure | Hiring incentives programme for open-ended contracts (Spain) | Employment maintenance subsidy for older workers (Spain) | System of assisted contracts (France) | | |
|--|---|--|---|--|--|
| Context | High youth and female unemployment rates; high share of older workers among long-term unemployed; wide-ranging labour market reforms, including EPL reforms (mid-1990s, to reduce the strictness of EPL; mid-2000s, to limit successive and abusive temporary hiring) | Population ageing and negative impacts on public accounts; effective retirement rate lower than statutory retirement age; employment and participation of older workers lower than those of prime-age workers; higher long-term unemployment of older workers; hiring rates lower than average | Persistently high unemployment rates; ageing society and skills mismatches; limited resources to meet social needs; political support for subsidised employment | | |
| Objectives | Contribute to firms' competitiveness; fight unemployment and LMS; reduce temporary work and labour turnover; promote stable employment of disadvantaged groups | Support the retention of older workers; reduce their risk of long-term unemployment and early withdrawal from the labour force; curb LMS | Boost employment; reduce unemployment; address social needs requiring state support | | |
| Expected outcomes in relation to LMS | Supporting transitions from unemployment/temporary employment to permanent jobs; preventing people from becoming trapped in the cycle of transitions between temporary employment and unemployment | Preventing older workers from downward mobility into inactivity/unemployment | Supporting transitions from unemployment to employment | | |
| Time frame | 1994–present (focus on 1997 and 2006 programmes) | 2006–2012 | 1984–present | | |
| Target groups | Women, young people, unemployed older workers, specific groups such as people with disabilities | Workers aged 60–64, hired on a permanent contract, at least five years within the same company | Young people, low-skilled workers, long-term unemployed, older workers people with disabilities | | |
| Delivery methods | Financial incentives to employers: bonuses, rebates or partial exemption from social security contributions additional financial incentives for the conversion of temporary into permanent contracts or for targeting low-qualified, low-paid people within eligible groups | Financial incentives to employers: • partial exemption from social security contributions | Financial incentives to employers: exemption from social security contributions, one-off employment subsidy, monthly financial assistance to supplement remuneration of employees, training aid non-financial support and training to employees | | |

Source: Authors, based on Eurofound (2019b)

Evidence of their effectiveness is mixed and context-dependent. Table 11 summarises the measures selected for this study.

Context

The measures analysed here were launched in contexts of high unemployment and low labour market participation of disadvantaged groups, accompanied by broader issues such as population ageing and skills mismatches, and in parallel to wide-ranging labour market reforms and the need for political support for subsidised employment. Therefore, a country's economic model is relevant here, as some governments may be more prone than others to invest large public spending in these measures.

The economic context also plays a role: economic expansion makes companies more prone to hiring unemployed people, hence improving the situation of the most disadvantaged workers, as observed in the

Spanish hiring incentives programme for open-ended contracts. France, in contrast, successfully used such a measure in times of crisis to fight unemployment (albeit by promoting non-standard employment). Employment incentives for older workers in Spain worked equally well in times of growth and worsening economic conditions.

From a sectoral perspective, assisted contracts might not be suited to sectors where low labour costs are key to competitiveness: companies benefiting from such assistance might gain a competitive edge (in terms of labour costs) over their counterparts who do not receive support.

Moreover, the net effects of hiring, conversion and employment incentives are intertwined with the perceived cost of dismissals. Thus, the stricter the EPL, the larger the financial support required and the lower the net effects of the incentives. The Spanish case on employment maintenance subsidies for older workers

reveals that high dismissal costs embedded in EPL already encouraged employers to retain older workers, thus reducing the net effects of employment incentives (Font et al, 2017). Similarly, if EPL is very rigid, employers might not be encouraged to hire new permanent workers even when offered significant financial support.

Assisted contracts work better if aligned with VET policies, as employers are more willing to hire and retain workers whose skills are high and match the company's needs.

Mechanisms

Financial support to employers is expected to reduce their reluctance to hire or retain workers by lowering labour costs. This was the rationale behind the financial assistance provided through the Spanish hiring incentives programme, which aimed to increase employers' motivation to hire certain groups of workers under open-ended contracts, and the French system of assisted contracts, which aimed to stimulate the recruitment of disadvantaged employees. The high cost of the assisted contracts was partly offset by enabling and empowering individuals affected by LMS and removing their dependence on social benefits, even if for a limited period.

Similarly, the Spanish measure for older workers was intended to address age-based discrimination and stereotypes and the productivity-wage gap by offering important financial aid to retain elderly workers. This influenced workers' decisions to participate in the labour market and companies' willingness to retain them thanks to reduced social security contributions.

Nevertheless, unexpected reactions might also be triggered – for instance, employers trying to abuse the system just to get the financial benefits. It is crucial to take into account the risk of substitution effects. Willing to benefit from the state's financial support, employers might substitute regular contracts with the assisted contracts, encouraging downward transitions of regular workers into unemployment as well as upward transitions of assisted groups into employment. If a policy measure supports only permanent hires, the two types of transitions should result in a null net effect on employment and on LMS. However, in the case of assisted fixed-term employment, employers might dismiss regular permanent workers and replace them with new assisted fixed-term employees. In the long run, this would increase non-standard employment (and possibly unemployment) and even perpetuate LMS through the cycle of transitions between unemployment and non-standard employment. Such substitution effects substantially increase deadweight losses and imply inefficiencies.

Moreover, sustaining the positive effects of assisted contracts is a challenge. If no conditions are set, employers might hire workers on assisted contracts but

dismiss them at the end of the subsidy. To mitigate these risks, Spain imposed requirements on employers to maintain employment for a longer period.

Outcomes

The potential of assisted contracts to alleviate some of the negative consequences of LMS is greater if financial support is conditional on the permanent nature of the new jobs created - for instance, supporting open-ended employment of the currently unemployed or the conversion of fixed-term into permanent contracts. Nevertheless, financial subsidies have also been used to subsidise fixed-term employment with the aim of curbing unemployment quickly and supporting subsequent transitions into permanent jobs. However, such a 'stepping stone' rationale does not always work (Benoteau, 2015). The economic and labour market cycle would be a key factor in employers deciding to hire. Moreover, the measures would need to be combined with EPL reforms, skills support to assisted workers while in temporary employment, obligations for employers to provide career advice and training, and monitoring of employees and employers receiving assistance to ensure full compliance.

Central to the effectiveness and efficiency of the assisted contracts are the scope and duration of the financial support. Financial incentives must cover the right share of labour costs to trigger the expected reactions, without resulting in a waste of resources.

The French and Spanish cases show that if provided in fixed amounts, financial incentives cover a larger share of labour costs for lower-paid groups, making employers more willing to hire people from these groups to save on such expenses. Assisted contracts are most cost-efficient if they have narrow objectives and target very specific groups that have proven to be the most reactive to similar initiatives. Supporting very broad groups may result in increased costs, lower effectiveness of incentives and higher deadweight losses.

Longer duration of financial assistance is expected to help sustain new permanent hires. Nonetheless, in the Spanish employment maintenance subsidies for older workers, a longer duration of financial support for the retention of employees prolonged employment for some of the workers but scarcely influenced the sustainability of these effects after the end of the subsidies (Font et al, 2017).

Assisted contracts may be better suited to supporting stable employment if they target private employers rather than non-profit organisations and public authorities, as the latter may struggle more to ensure employment prospects to the beneficiaries once the public support ends. Involvement of social partners in the design of assisted contracts boosts their effectiveness through dissemination, implementation support and early identification of unintended negative outcomes.

Lessons learnt: How assisted contracts contribute to tackling LMS

- Assisted contracts have more potential to curb LMS when financial support is targeted at permanent hires, the conversion of temporary into permanent contracts or employee retention – especially given that, as shown in Chapter 3, a sequence of temporary contracts may result in being trapped in lower career trajectories.
- Their effects on LMS can be sustainable when they are conditional on the employer's commitment to ensure net employment creation and to keep subsidised workers after the end of the aid. Monitoring mechanisms should be included to ensure this.
- They are most cost-efficient if they target specific groups. Mechanisms are needed to avoid substitution effects and to reach workers in the lower segments.
- Assisted contracts may be better suited to supporting stable employment when targeting private employers in the commercial sector, as they can more easily ensure the continuation of the contracts after the support ends. They can be more attractive for employers if complemented with skills support and matching.
- They are not suited to countries with strict EPL and sectors where low labour costs are key to competitiveness.

Measures to promote self-employment

Measures promoting self-employment were among the policies adopted by Member States to counteract the effects of the economic crisis, aiming to reduce unemployment and, in the long run, boost entrepreneurship, employment and the revival of the economy.

They provide incentives to individuals to create employment opportunities for themselves. Some target very specific groups; others are universal. Some are intertwined with policies promoting entrepreneurship and business start-up support; others are integral to

active labour market policies (ALMPs). If properly designed, they can help to combat LMS by enabling individuals to transition from inactivity or unemployment to employment, or to a secure additional income. They can be relevant in countries like France which, as shown in the empirical analysis, have many temporary employees who are low-earners and have limited opportunities for upward transitions.

But in the opposite case, the risk is they may accentuate labour market divisions if they encourage downward transitions from standard employment to dependent or precarious self-employment. Table 12 summarises the measure studied here.

Table 12: Case study on self-employment promotion

| Measure | Scheme for auto-entrepreneurs (France) | | | |
|--------------------------------------|--|--|--|--|
| Context | Economic and financial crisis, growing unemployment, contribution of high-growth small and medium-sized enterprises to job creation and economic growth | | | |
| Objectives | Stimulate the economy by supporting people to create their own jobs | | | |
| Expected outcomes in relation to LMS | nes in Supporting transitions from unemployment to stable and secure self-employment | | | |
| Time frame | e 2008–present | | | |
| Target groups | Any person willing to become fully or partly self-employed | | | |
| Delivery methods | Financial and non-financial incentives for the self-employed: simplification of rules governing self-employment reduction of social security contributions/ceiling used to limit them financial assistance for micro-enterprise start-ups launched by the former unemployed | | | |

Source: Authors, based on Eurofound (2019b)

Evidence from the case study is complemented with findings on the Spanish 'Flat rate for young self-employed workers'.

Context

Both measures were launched during the economic crisis. Such policies could potentially work better in a context of economic growth, when people are more confident about the future and more willing to take the risk to invest into their own business. They would therefore act as anticipatory measures, allowing broader target groups to be reached and to prepare for future threats to employment.

Complementary policies are important, including regulatory measures concerning the status of the self-employed (aiming to improve their working conditions and access to social protection systems) as well as training and coaching to support entrepreneurial skills. A well-developed entrepreneurial culture and high social capital in a country or sector might boost the long-term effects on LMS of self-employment support, as high educational levels can contribute to achieving a more gainful self-employment (European Commission, 2015).

Mechanisms

Both measures were expected to incentivise individuals (young people in Spain and the unemployed and low-earners in France) to create employment opportunities for themselves. They focused mainly on job creation rather than on supporting the entrepreneurial spirit or pushing self-employment as a good employment option. In France, the strong incentives to become an auto-entrepreneur were based on universality (workers with a broad range of profiles can become auto-entrepreneurs) and simplicity (free and immediate registration) rather than on non-financial support such as training, mentoring and advice in business development and management.

Outcomes

In the short term, both policy measures boosted self-employment. Nevertheless, the French case reveals that increasing the numbers of auto-entrepreneurs does not necessarily correspond to job creation: joining the scheme was also seen as an opportunity to complement income deriving from a main economic activity or to test a business idea (IGAS, 2013).

Both measures failed to achieve their objectives fully. Although they encouraged the transition from unemployment into employment, most jobs created were neither stable nor secure. On the contrary, they were precarious due to low and volatile earnings, inadequate social security coverage and other poor working conditions such as limited access to training and representation. Their long-term impacts are barely known and reveal inefficiencies. In Spain, financial incentives (partial exemption from social security contributions) had no significant effect on the survival rates of new businesses (Cueto et al, 2017); success also depended on previous self-employment experience. In France, one-third of auto-entrepreneurs did not generate turnover in 2017 (ACOSS, 2018), suggesting a large share of 'ghost' companies. Moreover, only a small share of newly launched businesses grew enough to reach the legal status of companies governed by common law (IGAS, 2013). Being an auto-entrepreneur was rarely sufficient to make a decent living in France and helped to improve income security only for those who had launched their business alongside dependent employment. On the other hand, it had the effect of moving some former standard employees downward into disguised employment/dependent self-employment, thus increasing LMS.

For self-employment to improve labour market outcomes effectively (such as with higher earnings), the newly established businesses must achieve effective growth, and the sole proprietorship should be the main rather than a complementary activity of a person. Measures with higher potential for success are those tailored to specific groups and with strict conditions of eligibility for financial support: for instance, targeting business ideas with strong growth potential.

To boost business survival and sustain positive impacts on LMS, financial incentives would need to be complemented with non-financial support. Neither on its own (Spanish case) nor coupled with a simplification of administrative procedures (French case) did financial support prove fully effective. The lack of knowledge and skills among the self-employed on planning investment, conducting market research, making connections and attracting customers could have hindered positive policy impacts.

Lessons learnt: How measures promoting self-employment contribute to tackling LMS

- Promoting self-employment helps to combat LMS only if it ensures transitions into stable, secure
 employment in the long run. If such measures encourage mobility from unemployment/standard
 employment into less stable and less secure self-employment, they trigger LMS.
- The following are required to avoid inefficiencies and boost positive impacts on LMS:
 - Self-employment measures should be tailored to specific groups and have strict eligibility conditions for financial support for instance, be reserved to business ideas with a potential for strong growth.
 - Non-financial support (business mentoring, advice and training) should complement financial incentives, especially when targeting those lacking prior experience in entrepreneurship.
- Self-employment promotion may ensure higher take-up and business survival if implemented in the following contexts: strong economic growth; high levels of entrepreneurial culture and a large share of people with business/management skills; an economy focused on service provision; and the presence of complementary policies (such as social protection). With these characteristics, it would represent a good anticipatory measure to prepare for future threats to employment.

Minimum wage regulations

In 2019, 22 EU Member States applied a statutory minimum wage. In some cases, this was universal; in others, it was tailored to specific groups. All minimum wage regulations aim to increase the wages of those on low pay and to combat income inequality. While they do not explicitly address LMS, they can improve income security and working conditions for the low-paid and bring them closer to those in the upper segments of the labour market.

They can be valuable in countries such as Germany and the UK which, as shown in Chapter 3, have a high prevalence of groups of workers in low-level careers and also (in the UK), where workers experience difficulties in terms of reaching career standardisation.

With a long tradition of social dialogue, Germany sets minimum wage rates through sectoral collective agreements at national level, and different rates apply depending on the industry. Since 1997, if agreed by social partners, the German federal government can declare industry-specific minimum wages (IMWs) generally applicable and binding. Meanwhile, in 1999 the UK launched the National Minimum Wage (NMW), a statutory minimum wage applicable to all sectors. In 2015, it introduced the National Living Wage (NLW),³ ensuring a premium on top of the NMW rates for workers aged 25 and over, with the application of different rates for different age groups with predefined growth targets. Table 13 summarises the selected measures.

Not to be confused with the non-binding Living Wage ('Real' Living Wage), an hourly rate based on the basic cost of living in the UK. The rate of this voluntary payment by employers is higher than the NLW and applies to all workers over 18.

Table 13: Case studies on minimum wage

| Measure | Industry-specific minimum wage (Germany) | National Living Wage (UK) Existence of a statutory minimum wage (NMW); broad political support for NMW; little impact of NMW on low pay in the UK; 'political appetite' for the living wage | | | |
|--------------------------------------|--|---|--|--|--|
| Context | Privatisation of public services; change in corporate strategies towards competition (wage dumping, outsourcing); declining coverage of collective agreements; decreasing pay at the bottom end of the earnings distribution; increasing pay differentials between industries and companies; growing low-wage sector; absence of a statutory minimum wage (introduced in 2015) | | | | |
| Objectives | Upgrade low-paid jobs; level the playing field for fair competition between companies; maintain socially insured employment and support self-regulation through collective bargaining | Increase wages of the low-paid and combat the growing wage inequality | | | |
| Expected outcomes in relation to LMS | Wage progressions for the low-paid; narrowing the gap in earnings between upper and lower labour market segments | Wage progressions for the low-paid; narrowing the gap in earnings between upper and lower labour market segments | | | |
| Time frame | 1996-present | 2016–present | | | |
| Target groups | Companies in industries with high shares of posted workers/low-paid workers; posted/low-paid workers themselves | People aged 25 and over (with some exceptions) | | | |
| Delivery methods | Social partners in a given industry voluntarily negotiate an agreement; Ministry of Labour checks and confirms agreement and helps to enforce those in place | Low-paid workers aged 25 and over receive a premium or top of the legal wage floor; the government sets the NLW rate and helps to enforce it; employers pay the correct rate of the NLW to their staff | | | |

Source: Authors, based on Eurofound (2019b)

Context

Minimum wages are expected to protect workers experiencing exploitation, in-work poverty and a fall below basic living standards by creating a labour market that can get people out of poverty and provide them with a firmer foundation for progression in employment.

The following factors can positively influence the effectiveness of minimum wages: A tradition of social partnership, the good reputation of stakeholders involved in setting minimum wage rates, a favourable political climate and complementarities with other policies (training and skills recognition, awarenessraising on the need to fight low pay, and non-financial business assistance). In Germany, IMWs require widespread industry coverage by collective agreements, high capacities of trade unions and employer organisations and the willingness of the state to enforce them and to sanction non-compliance. Meanwhile, the implementation of the NLW in the UK was facilitated by a tradition of minimum wages fostered since 1999 and by the parallel Living Wage initiative, which had increased businesses' awareness of the need for adequate pay.

Increasing minimum wage rates may be more effective against LMS in times of rapid economic recovery or growth. The Spanish experience with a significant increase in the statutory minimum wage since 2004 reveals that, at the aggregate level, favourable economic conditions may dilute the negative effects of

minimum wage regulations on employment. This may relate to increased labour demand, coupled with changes in labour supply (higher numbers of university graduates, women's labour market participation and immigration flows) (Cebrián et al, 2010).

Mechanisms

Minimum wage regulations aim to alter the behaviour of employers. Employers' reactions depend on the magnitude of the increase in labour costs and on the available options to adapt business operations. Adjustment mechanisms are also conditioned by the business sector, company size and human resource practices.

Reactions differ, as the costs can be borne by employers (reduction in their own profits), employees (reduced working hours) or consumers (increased prices). The responses of businesses in the UK and Germany point to a mixture of the above. In the UK, businesses tended most often to raise prices, cut profits, reduce non-wage benefits and restructure the workforce by reducing middle management and supervisory roles. Less frequently, they diminished working hours and training for lower-waged employees and tried to boost productivity. Many companies in Germany reacted to IMWs by improving work organisation and training their employees, compensating for increased labour costs by higher productivity and, thus, contributing to reduce LMS. They also increased prices, and this was well accepted by customers (Boockmann et al, 2011).

Minimum wage rates may affect the wage structures within companies through squeezed pay differentials (Eurofound, 2018c), but they may also incentivise businesses to raise wages to retain workers or motivate employees to negotiate better salaries. This ripple effect was observed in western Germany, where LMS was generally lower and reduced even further.

Compliance with minimum wage regulations may be less challenging in times of economic growth, which allow businesses to adjust to increased labour costs without significant cuts in profits. Non-compliance can worsen employees' working conditions and encourage downward transitions into precarious non-standard jobs through the use of zero-hours contracts or bogus self-employment, as observed in the UK and more sporadically in Germany. Well-functioning mechanisms to enforce statutory minimum wages and to ensure compliance with the rates are important and are likely to be more effective if supported by the social partners (as in Germany).

Outcomes

The establishment of minimum wage levels contributes to increasing the earnings of people who are in work but who have low pay. This happened with the NLW in the UK (LPC, 2018) and also in Germany between 1997 and 2010 in a number of industries. The IMWs also helped to reduce the pay gap between eastern Germany and western Germany.

In both cases, the minimum wage pushed companies to keep employees' pay above the minimum levels, either to attract workers through a premium over the wage floor or to keep differentials within their workforce structure. With the introduction of the NLW, the number of jobs paying just above the NLW rate grew significantly in the UK. In Germany, this happened with the introduction of the national statutory minimum wage rate in 2015, as the IMWs tended to be set at a marginally higher rate than the national one.

There is not much evidence available on the impact of the two measures on transitions, but there are indications that they can help to combat LMS. First, they address the needs of low earners, typically at a higher risk of LMS. Second, they resulted in wage compressions in eastern Germany and squeezed pay differentials in the UK. Although in the long run such developments might disincentivise low-paid workers to take up more responsibilities and to progress in their companies, in the short term both measures brought lower and upper labour market segments closer. Third, they may empower and enable the low-paid to transition into better jobs.

Risks of counter-effects exist too. While minimum wage regulations are intended to improve income for low-paid workers, they also risk encouraging downward transitions from employment into unemployment or inactivity. The increased labour costs might prevent employers from retaining employees while still making a profit. Although the overall net effect on employment was neutral in the cases analysed, the Spanish experience with increasing minimum wages suggests that this does not necessarily correspond to all people being able to stay in their jobs. In that case, an increase in statutory minimum wage raised the probability, especially for young and older workers, of becoming unemployed (Galán and Puente, 2015).

The potential negative impacts on employment must be considered when setting minimum wage rates. The German and UK experiences suggest that negative effects may be prevented through dialogue with social partners on specific rates (to anticipate employers' reactions), rates tailored to specific groups (lower for those at higher risk of dismissal), evidence-based rate setting, and a cautious, long-term definition and gradual increase of rates (allowing for progressive adjustments over longer periods).

Some other characteristics of the design of these measures influence policy impacts on LMS.

- Applying the same rates across the economy helps to reduce issues of social justice, sectoral/regional coverage and lack of enforcement. However, universal minimum wage rates might be less effective than tailored ones if not adjusted to different costs of living or pay levels. Minimum wages tailored to specific groups, sectors or regions may narrow the gap between higher and lower earners but may deepen divisions between lower segments. If too high, they might drive negative employment effects; if too low, they might fail to tackle poverty and low pay.
- Making the rise of the legal minimum wage floor conditional on economic growth can boost its political feasibility by reducing employers' aversion to change.
- If the focus of minimum wage policies was extended from low income and wage inequalities to mobility and wage progressions, they would contribute more clearly to fighting LMS. This would require a more integrated approach towards low pay and a combination with other measures (training, awareness-raising, skills recognition, assistance to businesses with cost reallocation).

Lessons learnt: How minimum wage regulations contribute to tackling LMS

- If properly designed and enforced, minimum wages can help to boost the earnings of the low-paid without negative aggregate effects on employment (net job destruction). They can positively affect LMS by reducing the gap in working conditions (earnings) between the upper and lower segments without triggering transitions downward into unemployment.
- The following are required for statutory minimum wages to be effective and contribute to reducing LMS.
 - Rates should be evidence-based, agreed upon by the social partners, and increased gradually and only if
 economic conditions allow.
 - Employers should be consulted and entitled to non-financial assistance to adjust to increased labour costs.
 - Compliance should be ensured.
 - A tradition of social partnership, good reputations of implementing stakeholders, a favourable political climate and complementarities with other policies are key to narrowing the gap between labour market segments.
 - Extending the focus from low income and wage inequalities to mobility and wage progressions would better contribute to fighting LMS. This would require a more integrated approach towards low pay and a combination with other measures (skills support and business assistance).

Vocational education and training (VET)

VET policies encompass measures aiming to enable transitions into stable employment, to encourage career and income progressions and to safeguard people at a high risk of LMS.

Different VET approaches can contribute to curbing LMS, including:

- measures facilitating upward labour market transitions of the low-skilled by including them in mainstream education and qualification systems
- personal training accounts, improving individual access to training by providing entitlements to training hours and coverage of training expenses
- training and retraining schemes especially effective if using long-term certificate programmes, focusing on occupations with higher shares of vacancies, providing support to improve the labour market outcomes of those from lower added-value service activities (generally characterised by less standard trajectories, as highlighted in Chapter 3) and combining vocational and general training to better reach low-skilled workers

 the recognition of skills and experience, which can support transitions from part-time into full-time employment and from lower-qualified to higher-qualified jobs

If properly designed, VET policies may help to curb LMS by increasing individuals' wages or employability, therefore supporting labour market upward mobility. Individualised approaches are key in this respect. Nevertheless, if provided only to those in the better labour market segments, training may also reinforce LMS.

Such measures can be of special relevance to combat LMS in countries like Spain, where – as shown in the empirical analysis (Chapter 3) – individuals with a lower educational attainment are more present in the least standard career trajectory groups. Table 14 summarises the selected measure.

Table 14: Case study on VET

| Measure | Redefinition of the training and apprenticeship contract (Spain) | | | | |
|--------------------------------------|---|--|--|--|--|
| Context | Great Recession; increasing unemployment of 16- to 19-year-olds; massive destruction of jobs occupied by low-educated workers | | | | |
| Objectives | Increase the professional qualification of low-educated young people, improving their employability and labour market integration | | | | |
| Expected outcomes in relation to LMS | Facilitating transitions from unemployment to stable employment; preventing young people from becoming trapped in the cycle of transitions between precarious non-standard employment and unemployment | | | | |
| Time frame | 1984–present (focus on revisions implemented in 2010–2012) | | | | |
| Target groups | Individuals aged 16–24 with only primary or secondary education (registered as jobseekers in the PES) | | | | |
| Delivery methods | Financial incentives to employers: rebates on social security contributions (full coverage of costs) reimbursing the costs of formal training and (partly) of tutors assigned to apprentices additional yearly financial incentives for the conversion of apprenticeships into permanent contracts | | | | |

Source: Authors, based on Eurofound (2019b)

Context

The training and apprenticeship contract analysed in this study was launched in a context of high youth unemployment in Spain during the crisis. Overall, poor economic conditions and prospects hinder the effectiveness of VET-focused measures. Excess labour supply may discourage employers from engaging in further education or training due to the higher potential for finding staff with suitable skills in the external labour market.

For this reason, other conditions less dependent on business cycles are needed to enhance the effectiveness of these measures. The commitment of social partners and training support are important, especially in cases of cost-sharing between public authorities and employers.

Mechanisms

The aim of the Spanish training and apprenticeship contract is to increase professional qualifications among low-qualified young people by alternating training with work activity in a company, thus increasing their transitions into stable employment.

The design of the contract and its financial incentives also aim at altering the hiring preferences of employers. The companies receive a monetary amount to cover the cost of the tutor and the training programme. In parallel to the acquisition of training, this contract also implies saving labour costs for employers, as it entitles them to compensation for social security contributions and to set lower wages.

Crucial to their success is the visibility of VET measures. The gender-sensitivity of VET policies should also be considered to avoid an unbalanced uptake of training between women and men, which would further perpetuate LMS.

Outcomes

The results of the Spanish measure strongly depend on the duration of the apprenticeship contracts. Long-term contracts significantly improve access to an open-ended contract for entrants to the labour market, regardless of their previous educational experience. Nonetheless, many of the contracts offered were of short duration and did not produce significant improvements to beneficiaries' labour stability in comparison to other temporary contracts of the same duration. The positive results achieved in the short term, therefore, were not sustained in the long run (Jansen and Troncoso-Ponce, 2018). Experience from the application of this type of contract in other countries, such as the 'professionalisation contract' in France and the 'in-company entry-level vocational qualification' in Germany, seem to have been effective in terms of transition into stable employment - but not equally well for all (Popp et al, 2012; DARES, 2018). The elements for success are: reaching the most vulnerable young people; ensuring the high quality and relevance of training provided; incentivising the conversion of such contracts into permanent ones and upward transitions after the end of the training; and supporting contracts of longer duration.

Clear governance and a successful collaboration of the different stakeholders involved (such as employers and public authorities) is key to boosting the policy impact. Moreover, in order to be more sustainable and effective, VET policies should have a longer-term vision and act as anticipatory interventions, enhancing the quality of the labour force and its preparedness to face declining phases of the economic cycle.

Lessons learnt: How VET policies contribute to tackling LMS

- VET policies may improve jobseekers' employability, support their transitions into employment and encourage the progression of those at work towards better positions or jobs. They are especially relevant when low educational attainment is associated with lower probabilities of experiencing a standard career (Chapter 3).
- To be effective, they need to be aligned with local labour market needs, be tailored to specific groups, focused on awarding certifications, supportive of quality training, incentivise transitions after training, be sufficiently known, have a long-term vision and be anticipatory in nature.
- Success could be improved through the combination of incentives for workers and employers and clear governance and good implementation by capable stakeholders.

Family policies

Across the EU, a wide range of family policies have been launched to facilitate work–life balance and to support gender equality and women's (re)integration into the labour market. They often relate to legal provisions on parental leave, rights to part-time work for parents due to family responsibilities and changes in benefit systems to tailor income support.

They often target the groups more exposed to segmentation (young or single parents and especially women) and can alter their incentives to stay in or re-enter the labour market. Family policies are gender-sensitive. If successful, they can support the labour market attachment of women, prevent their downward mobility into inactivity and boost their upward transitions from inactivity into part-time or full-time jobs. They can be particularly relevant in cases such as Germany, where segmentation is related (among other elements) to labour market differences between men and women, as highlighted in Chapter 3. Table 15 summarises the selected measure.

Context

A long tradition of gender-based division of family responsibilities may hinder the implementation of family policies supporting women's active participation in the labour market and more equal sharing of childcare between parents. Embedded gender roles and related social barriers may prevent men from taking parental leave and women from re-entering work soon after childbirth. Therefore, this would perpetuate LMS for women, hampering their opportunities for upward transition. High educational levels among women and growing dissatisfaction with the traditional male breadwinner family model are likely to favour more progressive family policies, as evidenced by the German case (Holst and Wieber, 2014).

Consistently, employers' behaviour plays a key role – through their perceptions of gender roles and company-level practices.

For family measures to work, complementary policies must be in place. Beyond coordination with existing benefit schemes, particularly important is the expansion of public (high-quality and affordable) childcare services and all-day schools.

Table 15: Case study on family policies

| Measure | Parental allowance and parental leave law of 2007 (Germany) | | | | | |
|--------------------------------------|---|--|--|--|--|--|
| Context | Dissatisfaction with the traditional male 'breadwinner' model; pressure to reform traditional family policy; example of Nordic countries; expansion of public childcare | | | | | |
| Objectives | Reduce labour market risks for parents, especially young mothers; support women's employment and equal opportunities for women and men | | | | | |
| Expected outcomes in relation to LMS | Support women's transitions from inactivity to employment and their progressions towards better jobs | | | | | |
| Time frame | 2007-present | | | | | |
| Target groups | Parents of young children | | | | | |
| Delivery methods | Parents apply for and receive the allowance; relevant ministry provides advice and funding; offices in charge of parental allowance provide advice and manage the measure | | | | | |

Source: Authors, based on Eurofound (2019b)

Mechanisms

Family policies typically target parents and prospective parents, and also employers. Although the latter may be reluctant to embrace policy changes favouring a better work–life balance, they are obliged to respect workers' rights and may even change their own sociocultural attitudes.

Measures seem to work mostly as intended, but unexpected effects also occur. In the German case study, although the net income of families with children in their first year increased, a few households were negatively affected by the reform and ended up having less income after the launch of the policy (Wrohlich et al, 2012). These were mainly recipients of the means-tested unemployment allowance. Contrary to the former 'child-raising allowance', the new one is treated as income and deducted from the welfare allowance. This negative effect on some families' income derived from the lack of coordination between labour market reforms and family policies. Thus, the interactions between different benefits (including parental and unemployment benefits) need to be considered before launching policy actions. This was done in the UK case by providing those no longer eligible for income support with opportunities to apply for other jobseeker allowances.

Unintended effects also manifest themselves in other family policies. In Spain, following the introduction of the two-week paid parental leave to fathers, among parents eligible for the new leave, there was a lower desire to have more children compared to those not eligible. The increased labour market attachment of women and a higher involvement of parents in childcare can make both parents less willing to have more children (Farré and González, 2017).

Also, the right in Spain for parents with children under seven years of age to work part time increased LMS among some groups – for instance, causing a higher likelihood for some women to have a fixed-term rather than a permanent job. Furthermore, evidence reveals that employers preferred permanent hires of males aged 23–45 and women over 45 compared to women of childbearing age (Fernández-Kranz and Rodríguez-Planas, 2011).

Outcomes

The German reform of 2007 introduced a salary-based parental leave allowance for working parents and incentives to share parental leave between parents. The results were positive for mothers of newly born children: more women returned to work, and the employment rate of women in marginal and small part-time work also decreased, while it increased in longer part-time and full-time work. Guaranteeing women the return to their previous or comparable job within the company after their parental leave helped to prevent downward transitions in the labour market and avoid young mothers getting trapped in marginal

part-time work with limited progression opportunities. Supporting shared parental leave and introducing financial incentives for both parents to work part-time encouraged more fathers to share childcare responsibilities and helped to reduce the discrimination of women in the labour market (Matteazzi et al, 2014).

Nonetheless, the measure did not benefit all parents equally. By making the amount of parental allowance dependent on income before the leave, it incentivised women to work more hours before having children. This mostly benefited women with higher educational attainment and was of less benefit to lower-skilled women. Income-related parental allowances proved to be especially effective for higher-income groups, risking the perpetuation of LMS given that those in lower labour market segments did not get the same advantage.

The Spanish measures mentioned above were effective in a similar manner. By awarding workers with children up to seven years of age the right to work part-time, they increased the part-time employment rate almost twofold among women who had permanent contracts but were in danger of losing them. This implied the prevention of transitions downward into unemployment, better reconciliation between work and family life and sustained income security for female workers. The extension of paid parental leave for fathers in 2007 also resulted in a significantly higher uptake of paternity leave. Mothers' labour market attachment increased, resulting in higher employment rates for women after childbirth. Childcare sharing became more popular and lowered the motherhood penalty for women. However, the positive policy impacts were not equally strong for all in these cases: paternity leave and sharing of childcare uptakes were higher among men in stable and secure employment (Fernández-Kranz and Rodríguez-Planas, 2011; Farré and González, 2017).

The Lone Parents Obligations initiative in the UK aimed at moving lone parents into work by narrowing eligibility for income support solely on the grounds of being a lone parent. It had a greater impact on transitions into work than other programmes aimed at this group of claimants. Nevertheless, transitions were not necessarily into quality jobs, and impacts were lower for people furthest from the labour market. Above all, those with recent work experience, higher qualifications, access to a vehicle, access to childcare and favourable attitudes towards work were more likely to move into work (Avram et al, 2013).

The effectiveness of the above family policies is conditional on the individual/family preferences regarding work-life balance. Beyond this, essential for their success have been the mandatory nature of some initiatives (such as Lone Parents Obligations), the awareness of eligible people of the incentives and the flexibility of the solutions offered to parents (such as in the German example).

Lessons learnt: How family policies contribute to tackling LMS

- Family policies can positively affect female employment, the sharing of childcare, and family incomes and planning, and can reduce the risk of women getting trapped in lower labour market segments. In light of the empirical results showing that females are less likely to have standard careers than their male counterparts (Chapter 3), these policies have particular relevance.
- Nonetheless, this does not happen equally throughout the workforce, often failing to reach the most vulnerable groups. When favouring only those who are better off in terms of income, education and job quality, they even perpetuate LMS.
- These policies alone are not sufficient to reduce LMS. They need to be aligned with other benefits systems (such as unemployment benefits) and policies (such as childcare services).
- Sociocultural norms on gender roles and family responsibilities, the work-life balance preferences of the groups targeted, employers' perceptions/reactions and related company practices all influence the effectiveness of family policies and must be considered when using them to address LMS.

Policy summary: Key factors influencing the effectiveness of measures

Looking at the different policy types, stand-alone measures are not sufficient to tackle such a complex phenomenon - and some may even accentuate LMS if not implemented as part of a broader policy package. Although generalisation cannot be derived from the case studies, the analysis suggests that the different types of policy measures considered could contribute to curbing LMS, but specific conditions are needed to achieve this effect. VET, minimum wage regulations and packages of active labour market policies (ALMPs) have a particularly high potential for tackling LMS. On the other hand, assisted contracts, self-employment promotion and family policies seem to have less visible effects, and would need to be steered more to curb LMS. Including the reduction of LMS as an explicit objective of the measures would ensure a good starting point, to give visibility to this phenomenon and to put in place the right tools to combat it.

Overall, evidence from the policy analysis allowed for the identification of several aspects that support implementation of the measures, effectiveness against their own objectives and contribution to the reduction of LMS (regardless of their type). These include:

- consulting the social partners before launching/revising a measure
- ensuring clarity and awareness of a policy among stakeholders and target groups

- ensuring the internal and external coherence of the measure
- tailoring the measure to specific groups and providing additional incentives for the most vulnerable individuals
- encouraging transitions into stable and secure employment rather than non-standard work/precarious jobs, as well as focusing on retention/preventing downward transitions
- where financial support is involved, designing incentives in such a way as to avoid deadweight losses
- ensuring the coordination of measures across policy fields
- adopting a longer-term vision and launching the measures during positive phases of the business cycle, with an anticipatory function, to better prepare the workforce and strengthen the resilience of the economy
- ensuring the sustainability of policy impacts, for instance by imposing conditions on financial assistance

In parallel to the above, contextual factors such as economic growth, political and public support and well-functioning social partnerships also play a key role as regards policy effectiveness. They often have a stronger influence than the internal mechanisms of the measures, such as employers' behavioural change.

5 Conclusions and policy pointers

Conclusions

Labour market segmentation (LMS) broadly refers to a situation where a divergence in working conditions exists between different groups of workers that is not only attributable to differentials in human capital levels. This divergence is persistent over time in terms of the individual having substantial difficulties in overcoming them by moving towards 'better' employment. However, the typical understanding of LMS focuses narrowly on discussions about temporary contracts and disregards the importance of other institutional settings and of adopting a career perspective when assessing LMS. Therefore, this study proposes three concurring conditions for the existence of LMS:

- a division of the labour force into two or more segments
- differences in working conditions not only attributable to differences in workers' productivity
- limited mobility between segments, with differences persisting over time and not only characteristic of first labour market entry or re-entry

Due to the vagueness of the LMS concept and the lack of adequate data and indicators to measure it, comprehensive empirical analyses of LMS and policy approaches to tackle it do not exist. In both empirical research and policy, what exists are rather piecemeal approaches to dealing with some of the labour-market-related aspects of LMS (such as precariousness, proliferation of non-standard employment forms or transition rates from temporary to permanent contracts).

Approaching LMS in a more comprehensive way is a very challenging exercise, but it is deemed important in order to adequately address its full complexity as a labour market distortion. This report tries to do so by developing innovative frameworks that improve the empirical and policy approaches to LMS. Both should be seen as exploratory analyses to better understand this complex phenomenon and open new ways for future research.

Main findings from the empirical analysis

Given the characteristics of LMS, static indicators alone (such as the extent of non-standard employment or the labour market structures at a given point in time) are insufficient to measure it. A longitudinal microdata approach is required to capture whether inequalities persist for the individuals in the labour market, leaving some of them trapped in low-quality jobs over long periods of time.

Regarding labour market structures and the flows between the different possible labour market states (the position of an individual in the labour market at a given moment, depending on the quality of the employment relationship), clear divergences emerge between the countries studied in this report. Germany seems characterised by a less mobile labour market with fewer flows and a higher presence of upward than downward mobility. The UK and Spain represent more mobile labour markets with more flows between states, but they diverge markedly. The UK has a much more mobile labour market, characterised by the highest upward and downward transition rates of the four countries selected. Spain has the lowest levels of upward mobility and a high risk of downward mobility, which mainly affects people in the worse employment states and much less so those individuals who are at the top of the labour market structure, reflecting the expected patterns of a segmented labour market.

This divergence between the selected countries is mirrored when looking at specific labour market transitions. Evidence for Spain and France suggests more features of an LMS pattern: they exhibit low transition rates from temporary to permanent contracts, high transition rates from temporary employment into unemployment and low transition rates from unemployment back into employment, mainly via temporary contracts. In these two countries, data point to the existence of a significant number of temporary employees who may become trapped because they face more difficulties in moving to permanent contracts and experience unemployment spells, which risk being relatively long and may result in scarring effects on their career trajectories. Conversely, temporary employment is less common in Germany and the UK, where those in temporary employment have a higher chance of transitioning into permanent contracts, while the most significant way out of unemployment is via permanent contracts.

One of the main added values of this study emerges from the observation of the **labour market trajectories** of individuals and the calculation of a measure of career standardisation for each individual (measuring the distance from the standard career – that is, full-time and permanent employment in a high-paying job with high occupational position). The analysis classifies individuals depending on how their careers develop over time and clusters them in four labour market trajectory groups in each country: two belonging to an upper segment, where careers are characterised by employment in the best conditions or a very short upward transition to attain such status, and two belonging to a lower labour market segment, where

careers are characterised by a relatively stronger presence of non-standard employment with worse working conditions, where there is also unemployment or inactivity and typically more job turnover.

The findings across countries show some differences in the size and types of career groups. The largest standard trajectory group (and the smallest non-standard group) is found in Germany. This seems to be the country where career standardisation is easiest to attain. At the other extreme, Spain is characterised by the smallest standard trajectory group (and the largest non-standard group), since its labour market is characterised by limited upward mobility and more difficulties in reaching career standardisation for the large number of people transitioning between unemployment and non-standard forms of employment, with worse working conditions (notably temporary contracts). The UK is somewhere in the middle, an example of a very flexible labour market where reaching career standardisation may be more difficult than in Germany but where upward mobility is intense. The results for France are not comparable because only information on contractual arrangements is available and, as a result, the standard trajectory group is much larger than in the other three countries.

The analysis of the composition of career groups reveals the importance of certain labour supply-side factors, as reflected by the higher predominance of women, lower-educated, younger people and migrants in the non-standard career groups characterised by worse working conditions and the least standardised labour market trajectories. Moreover, some labour demand-side drivers are captured as well: careers further from the standard are more likely to be in smaller firms than larger ones and in low added-value service activities (such as commerce and hospitality or administrative services) as compared to public administration and higher added-value services. This association between career standardisation and labour supply-side factors and some labour demand-side drivers is confirmed by a regression analysis. Nevertheless, the lack of data means that an adequate coverage of labour demand-side drivers, which are very important for understanding the phenomenon of LMS, was not possible.

The analysis also gives some indications of the effects of LMS, although again data availability issues mean that coverage is limited. On the one hand, the analysis captures workers who are trapped in worse labour market states, where individuals are affected by lower rates of permanence due to higher contractual instability and downward mobility. It is more difficult for people in worse labour market states to improve their position in Spain and France than in Germany and the UK. On the other hand, differences in the levels of earnings across the four labour market trajectory groups are marked across all four countries, especially in Spain.

Main findings from the policy analysis

Fighting LMS is a broad-scope objective of EU policy. The EU has mainly attempted to curb it by focusing on contractual arrangements and has promoted measures to reduce LMS in several Member States. EU guidelines emphasise the need to make employment protection homogenous across different contractual relations by reducing the overprotection of workers with permanent contracts and protecting those outside or at the margins of the labour market. National actions have been taken mainly on these lines. Nonetheless, policies in the Member States tend to be scattered rather than constituting frameworks built to comprehensively address LMS. Therefore, policy evaluation evidence regarding the effectiveness of public measures in tackling LMS also tends to be diffused.

Focusing on policy developments since the Great Recession, it can be noted that various Member States have undertaken in-depth employment protection legislation (EPL) reforms as the main intervention to address LMS. These mainly consist of deregulation of permanent contracts to increase flexibility over the hiring and firing of permanent workers and reregulation of temporary contracts to limit their use and improve the protection of those in temporary employment.

Given the complexity of the phenomenon, there is room to hypothesise that broader approaches, beyond policies exclusively focusing on contractual arrangements, could contribute to curb LMS. Policy measures can reduce LMS if they:

- encourage upward transitions from inactivity, unemployment or precarious non-standard employment
- prevent involuntary downward mobility into inactivity/unemployment or precarious non-standard employment
- narrow the gap in working conditions (such as earnings, social security) between upper and lower labour market segments

This could potentially be supported with different policies in the labour market area (and beyond).

LMS research so far has mainly focused on EPL reforms. To avoid overlaps and complement existing policy evidence on LMS, this study explores how other actions, beyond EPL reforms, can anticipate and/or reduce LMS in France, Germany, Spain and the UK.

It pilots the application of the realist approach context-mechanisms-outcomes (CMO) model for the analysis of heterogeneous evaluation evidence related to LMS. The context takes into account the demand- and supply-side factors and the characteristics of LMS in the country where the policy measure was adopted. The mechanisms disentangle how the implementation of the policy measure can affect

different dimensions of LMS. This sets the basis for exploration of the outcomes in terms of whether, and how, the measure contributes to alleviating the direct and indirect effects of LMS on the affected groups. The nature of this model is suited for in-depth analyses of changes induced by measures in complex systems, and it does not aim to generalise findings. It could be applied more systematically in the future to a wider set of measures.

Key evidence is summarised below by measure type.

- Active labour market policies (ALMPs) provided in packages and tailored to specific groups at risk of LMS can encourage upward transitions by increasing the preparedness of individuals in relation to the labour market for instance, through coaching and training. In strengthening workers' profiles, they also curb the risk of downward transitions. Other mechanisms include incentivising employers to hire or retain disadvantaged workers for instance, by tackling stereotypes and enabling workers to perform better. Content flexibility, individualised approaches and good governance arrangements are key for both access to and retention in the labour market.
- Assisted contracts, such as hiring incentives and subsidies, work well if they are aligned with business cycles, EPL provisions and vocational education and training (VET) policies. They have higher potential to reduce LMS when financial support is reserved for permanent hires, conversion of temporary into permanent contracts or employee retention. To be effective, they must be generous, last long enough to take account of employers' reactions, include provisions to prevent substitution effects and support employment maintenance after the subsidies. They are not suitable for sectors where low labour costs are key to competitiveness.
- Promoting self-employment helps to combat LMS if it ensures transitions into stable and secure employment in the long run. This can be enhanced by reserving financial incentives for business ideas with a growth potential, providing non-financial support such as entrepreneurship mentoring and advice, and addressing specific groups. Nontargeted actions may lead to substitution of standard employment with less stable and less secure self-employment, thus increasing LMS.
- Minimum wage regulations may attenuate LMS by reducing the gap in working conditions (earnings) between the upper and lower segments without triggering transitions downward into unemployment. Extending the focus of these policies from low income and wage inequalities to mobility and wage progressions would better contribute to fighting LMS.

- employability, support their transitions into employment and encourage the progression of those at work, therefore preventing downward transitions. They are especially relevant in light of the fact that the low educated are identified as being among the groups most vulnerable to LMS. To tackle LMS, training must be relevant to the labour market needs, tailored, provide certification, incorporate agile governance structures, be properly advertised and incentivise transitions after its provision. The combination of incentives for both workers and employers and good administration are key for success.
- Family policies can reduce women's risk of sliding into and getting trapped in lower labour market segments. These policies are especially relevant given that women are among the groups most vulnerable to LMS. Nonetheless, these policies often fail to reach the most vulnerable groups and, when favouring only those who are in better labour market states, they even perpetuate LMS. Their effectiveness is influenced by their design, sociocultural norms on gender roles, work-life balance preferences, company practices and alignment with other benefits systems (unemployment benefits) and policies (childcare services).

Analysing the effectiveness of policy measures in reducing LMS has proved complex. As evaluation evidence of policy impacts on mobility, progressions and transitions within labour markets is very scarce, this prevents the formation of strong conclusions on the causal relations between individual policy measures and LMS.

Nonetheless, several elements that are likely to support the effectiveness of measures in reducing LMS were identified in all the measures analysed, including:

- consulting the social partners before launching/revising a measure
- ensuring clarity and awareness of a policy among stakeholders and target groups
- ensuring the measure's internal and external coherence
- tailoring the measure to specific groups
- encouraging transitions into stable and secure employment rather than non-standard work/precarious jobs, as well as focusing on retention/preventing downward transitions
- designing financial incentives in such a way as to avoid deadweight losses
- ensuring coordination of measures across policy fields

- adopting a longer-term vision and launching the measures during positive phases of the business cycle, and with an anticipatory function, in order to better prepare and strengthen the resilience of the economy
- ensuring the sustainability of policy impacts for instance, by imposing conditions on financial assistance

Research findings therefore reveal that broadening the scope for policy actions beyond EPL reforms could tackle LMS more comprehensively. It is nonetheless important to bear in mind that the effectiveness of any policy tackling LMS will be affected by the existing economic conditions and institutional settings (labour demand, political and public support and the functioning of social partnerships).

Policy pointers

- To fully capture LMS, a combination of data-driven and policy-based approaches is essential. Similarly, an alignment in the understanding of LMS in the academic and policy debates is needed, starting with the adoption of a common operational definition and an agreed set of indicators to measure LMS and support the identification of relevant policy evidence on solutions.
- LMS should be understood as a complex phenomenon that is not only related to contractual arrangements, but also influenced by other institutional factors, and one that needs to be analysed following a career perspective.
- Better data are needed for relevant empirical analyses of LMS in Europe. Accessible longitudinal microdata covering the whole EU are essential. Moreover, analysing LMS would require datasets covering labour demand-side variables and matched employer–employee data at the individual level in order to explore aspects such as the impact of employer strategies in relation to contractual arrangements and other drivers and effects of LMS. Better comparable data would allow more insightful quantitative analyses and provide better evidence for policy recommendations.
- To ensure relevant public interventions, awareness and knowledge of the complexity of LMS need to be raised among policymakers. The policy approach to LMS needs to be comprehensive (to tackle all the relevant dimensions of LMS), agile (to follow and adapt to the developments of LMS, its drivers and manifestations, which are context- and timespecific) and reflected in the whole policy cycle (from the design to the evaluation of the measures).

- As LMS can be seen as a system's failure to ensure equality of opportunity, its complexity cannot be tackled with scattered, individual interventions. Policy responses need to follow a package approach. They should, therefore, ensure collaboration/consultation with key relevant stakeholders (such as social partners) in policy design. Integrated, context-sensitive policies combining financial incentives, regulation, monitoring and access to quality public services should be fostered to combat LMS. Their effectiveness is likely to be greater when they are anticipatory in nature, contributing to better resilience and preparedness to face recession phases of the economy.
- o To follow up on the developments in and effectiveness of policies addressing LMS, relevant monitoring and evaluation tools should be put in place and appropriately tracked. This would include relevant indicators capturing the dimensions of LMS, as well as evaluation approaches focused on transitions, progressions, sustainability of the results and potential unintended side effects.
- o Policy actions should tackle LMS not only by addressing barriers to accessing the upper labour market segments, but also by preventing downward mobility and unjustified differences in working conditions. Examples include making financial support conditional on an employer's commitment to retain subsidised workers after the end of the assistance, or complementing financial assistance with non-financial measures to better support the individuals that are at higher risk of LMS (for instance, building managerial skills for self-employed people to support the survival/growth of their business idea and preserve their employment).
- o Understanding how different (sub)groups are affected is fundamental for policy action, as blanket solutions are unlikely to effectively reach all vulnerable groups. Heterogeneity within and across segments calls for tailored policy approaches and mechanisms, adapted to the specific target group to ensure efficiency. Flexible approaches should also be incorporated to target specific disadvantaged groups and subgroups.

References

Eurofound publications are available at www.eurofound.europa.eu

Acemoglu, D. and Autor, D. (2011), 'Skills, tasks, and technologies: Implications for employment and earnings', in Ashenfelter, O. and Card, D. (eds.), *Handbook of labour economics*, Vol. 4B, North-Holland, San Diego, pp. 1043–1171.

ACOSS (Agence centrale des organismes de sécurité sociale) (2018), *Les micro-entrepreneurs fin décembre 2017*, Paris.

Amuedo-Dorantes, C. (2000), 'Work transitions into and out of involuntary temporary employment in a segmented market: Evidence from Spain', *Industrial and Labour Relations Review*, Vol. 53, No. 2, pp. 309–325.

Anderson, K. H., Butler, J. S. and Sloan, F. A. (1987), 'Labour market segmentation: A cluster analysis of job groupings and barriers to entry', *Southern Economic Journal*, Vol. 53, No. 3, pp. 571–590.

Arrow, K. (1973), 'Higher education as a filter', *Journal of Public Economics*, Vol. 2, No. 3, pp. 193–216.

Arulampalam, W. (2001), 'Is unemployment really scarring? Effects of unemployment experiences on wages', *The Economic Journal*, Vol. 111, No. 475, pp. 585–606.

Autor, D. H. (2013), 'The 'task approach' to labour markets: An overview', *Journal for Labour Market Research*, Vol. 46, No. 3, pp. 185–199.

Autor, D. H. and Houseman, S. N. (2010), 'Do temporary-help jobs improve labour market outcomes for low-skilled workers? Evidence from "Work First", *American Economic Journal: Applied Economics*, Vol. 2, No. 3, pp. 96–128.

Avram, S., Brewer, M. and Salvatori, A. (2013), *Lone parent obligations: An impact assessment*, Department for Work and Pensions, London.

Becker, G. S. (1964), *Human capital: A theoretical and empirical analysis, with special reference to education*, National Bureau of Economic Research, Cambridge, USA.

Bekker, S. (2018), 'Flexicurity in the European Semester: Still a relevant policy concept?', *Journal of European Public Policy*, Vol. 25, No. 2, pp. 175–192.

Benoteau, I. (2015), 'Quels effets du recrutement en contrat aidé sur la trajectoire professionnelle?: Une évaluation à partir du Panel 2008', *Economie et Statistique*, Vol. 477, pp. 85–129.

Berger, S. and Piore, M. (1980), *Dualism and discontinuity in industrial society*, Cambridge University Press, Cambridge, USA.

Berndt, C. (2017), 'Labour market segmentation', in Richardson, D., Castree, N., Goodchild, M. F., Kobayashi, A., Liu, W. and Marston, R. A. (eds.), *International encyclopaedia of geography: People, the earth, environment and technology*, Wiley, London.

Blanchard, O. (2006), 'European unemployment: The evolution of facts and ideas', *Economic Policy*, Vol. 21, No. 45, pp. 6–59.

Blossfeld, H.-P. and Mayer, K. U. (1988), 'Labor market segmentation in the Federal Republic of Germany: An empirical study of segmentation theories from a life course perspective', *European Sociological Review*, Vol. 4, No. 2, pp. 123–140.

Boeri, T. (2011), 'Institutional reforms and dualism in European labour markets', in Card, D. and Ashenfelter, O. (eds.), *Handbook of labour economics*, Vol. 4B, North-Holland, San Diego, pp. 1173–1236.

Boeri, T. and Garibaldi, P. (2007), 'Two tier reforms of employment protection: A honeymoon effect?', *The Economic Journal*, Vol. 117, No. 521, pp. F357–F385.

Boje, T. P. (1986), 'Segmentation and mobility: An analysis of labour market flows on the Danish labour market', *Acta Sociologica*, Vol. 29, No. 2, pp. 171–178.

Boockmann, B., Harsch, K., Kirchmann, A., Klee, G., Kleimann, R., Klempt, C. et al (2011), *Evaluation bestehender Mindestlohnregelungen – Branche: Malerund Lackiererhandwerk*, Institut für Angewandte Wirtschaftsforschung, Tübingen, Germany.

Bosch, G. (2004), 'Towards a new standard employment relationship in Western Europe', *British Journal of Industrial Relations*, Vol. 42, No. 4, pp. 617–636.

Cahuc, P., Charlot, O. and Malherbet, F. (2016), 'Explaining the spread of temporary jobs and its impact on labour turnover', *International Economic Review*, Vol. 57, No. 2, pp. 533–572.

Card, D. and Di Nardo, J. E. (2002), 'Skill-biased technological change and rising wage inequality: Some problems and puzzles', *Journal of Labour Economics*, Vol. 20, No. 4, pp. 733–783.

Cebrian, I. C., Pitarch, J., Rodríguez, C. and Toharia, L. (2010), El salario mínimo y sus efectos sobre el mercado de trabajo, Ministerio de Trabajo e Inmigración, Madrid.

Contini, B. (2001), Earnings mobility and labour market segmentation in Europe and USA: Preliminary explorations, University of Turin, Turin.

Council of the European Union (2007), *Council conclusions: Towards common principles of flexicurity*, 16201/07, Brussels.

Council of the European Union (2018), 'Council Decision (EU) 2018/1215 of 16 July 2018 on guidelines for the employment policies of the Member States', Official Journal of the European Union, L 224/4, 5 September.

Cregan, C., Kulik, C. T. and Bainbridge, H. T. J. (2017), 'Differences in well-being among people with disabilities in paid employment: Level of restriction, gender and labour market context', *Social Policy & Administration*, Vol. 51, No. 7, pp. 1210–1230.

Cueto, B., Mayor, M. and Suárez, P. (2017), 'Evaluation of the Spanish flat rate for young self-employed workers', *Small Business Economics*, Vol. 49, No. 4, pp. 937–951.

DARES (Direction de l'animation de la recherche, des études et des statistiques) (2018), Réalisation d'une étude qualitative à partir de 2 régions sur le compte personnel de formation: Tome 1 – Rapport final, Paris.

Davidsson, J. and Naczyk, M. (2009), *The ins and outs of dualisation: A literature review*, Dissemination and Dialogue Centre, Edinburgh.

Delsen, L. (1995), *Atypical employment: An international perspective: Causes, consequences, and policy*, WoltersNoordhoff, Groningen, Netherlands.

De Souza, D. E. (2013), 'Elaborating the context-mechanism-outcome configuration (CMO) in realist evaluation: A critical realist perspective', *Evaluation*, Vol. 19, No. 2, pp. 141–154.

Doeringer, P. B. and Piore, M. J. (1971), *Internal labor* markets and manpower analysis, D. C. Heath, Lexington, USA

Dunlop, J. T. (1957), 'The task of contemporary wage theory', in Taylor, G. W. and Pierson, F. C. (eds.), *New concepts in wage discrimination*, McGraw-Hill, New York, pp. 117–139.

Edwards, R. C., Reich, M. and Gordon, D. M. (1975), Labour market segmentation, D. C. Heath, Lexington, USA.

Eichhorst, W., Marx, P. and Wehner, C. (2017), 'Labor market reforms in Europe: Towards more flexicure labor markets?', *Journal for Labour Market Research*, Vol. 51, No. 1, pp. 1–17.

Emmenegger, P., Häusermann, S., Palier, B. and Seeleib-Kaiser, M. (eds.) (2012), *The age of dualization: The changing face of inequality in deindustrializing societies*, Oxford University Press, New York.

Esping-Andersen, G. (1990), *The three worlds of welfare capitalism*, Princeton University Press, Princeton.

Eurofound (2014a), *Drivers of recent job polarisation and upgrading in Europe: European Jobs Monitor 2014*, Publications Office of the European Union, Luxembourg.

Eurofound (2014b), *Young people and temporary employment in Europe*, Publications Office of the European Union, Luxembourg.

Eurofound (2015), *New forms of employment*, Publications Office of the European Union, Luxembourg.

Eurofound (2016), What do Europeans do at work? A task-based analysis: European Jobs Monitor 2016, Publications Office of the European Union, Luxembourg.

Eurofound (2017a), *Coordination by platforms: Literature review*, Dublin.

Eurofound (2017b), *Exploring self-employment in the European Union*, Publications Office of the European Union, Luxembourg.

Eurofound (2018a), *Employment and working conditions* of selected types of platform work, Publications Office of the European Union, Luxembourg.

Eurofound (2018b), Labour market change: State initiatives supporting the labour market integration of older workers, Dublin.

Eurofound (2018c), *Statutory minimum wages 2018*, Publication Office of the European Union, Luxembourg.

Eurofound (2019a), *Labour market segmentation: Piloting new empirical analyses – Methodology*, Working paper, Dublin.

Eurofound (2019b), Assessment of public interventions to combat labour market segmentation, Working paper, Dublin.

Eurofound (2019c), *Platform work: Maximising the potential while safeguarding standards?*, Publications Office of the European Union, Luxembourg.

European Commission (2007), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Towards common principles of flexicurity, COM(2007)359 final, Brussels.

European Commission (2010), *Annual growth survey: Advancing the EU's comprehensive response to the crisis*, COM(2011)11 final, Brussels.

European Commission (2012), *Labour market developments in Europe 2012*, Publications Office of the European Union, Luxembourg.

European Commission (2013), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Towards social investment for growth and cohesion – including implementing the European Social Fund 2014–2020, COM(2013)83 final, Brussels.

European Commission (2015), *Discussion paper for MLP Expert Workshop on Measures to Address Labour Market Segmentation*, Brussels.

European Commission (2016a), European Semester thematic factsheet: Employment protection legislation, Brussels.

European Commission (2016b), *Labour market and* wage developments in Europe: Annual review 2016, Publications Office of the European Union, Luxembourg.

European Commission (2017a), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Establishing a European Pillar of Social Rights, COM(2017)250 final, Brussels.

European Commission (2017b), *Draft Joint Employment Report from the Commission and the Council accompanying the Communication from the Commission on the Annual Growth Survey 2018*, COM(2017)674 final, Brussels.

European Commission (2017c), European Semester thematic factsheet: Active labour market policies, Brussels

European Commission (2017d), *Labour market and* wage developments in Europe: Annual review 2017, Publications Office of the European Union, Luxembourg.

European Commission (2017e), Labour market policy thematic review 2017: An in-depth analysis of the impact of reforms on inequality: Synthesis report, Publications Office of the European Union, Luxembourg.

European Commission (2018a), *Draft Joint Employment Report from the Commission and the Council accompanying the Communication from the Commission on the Annual Growth Survey 2019*, COM(2018)761 final, Brussels.

European Commission (2018b), *Labour market and* wage developments in Europe: Annual review 2018, Publications Office of the European Union, Luxembourg.

European Commission (undated), *The European Pillar of Social Rights in 20 principles*, web page, accessed 23 August 2019.

European Parliament (2018), *The impact of new technologies on the labour market and the social economy*, PE 614.539, Brussels.

Fabo, B., Karanovic, J. and Dukova, K. (2017), 'In search of an adequate European policy response to the platform economy', *European Review of Labour and Research*, Vol. 23, No. 2, pp. 163–175.

Fagan, C. and Rubery, J. (1996), 'The salience of the part-time divide in the European Union', *European Sociological Review*, Vol. 12, No. 3, pp. 227–250.

Farré, L. and González, L. (2017), *The effects of paternity leave on fertility and labor market outcomes*, IZA Discussion Paper No. 10865, Institute of Labor Economics, Bonn.

Fernández-Kranz, D. and Rodríguez-Planas, N. (2011), *Unintended effects of a family-friendly law in a segmented labor market*, IZA Discussion Paper No. 5709, Institute of Labor Economics, Bonn.

Fichtl, A. (2015), *Mini- and midi-jobs in Germany: Effects of marginal employment on unemployment*, FORES Policy Paper No. 2015:3, Stockholm.

Fitzenberger, B., Steffes, S. and Strittmatter, A. (2010), Return-to-job during and after maternity leave, ZEW Discussion Paper No. 10-103, Leibniz Centre for European Economic Research, Mannheim, Germany.

Font, P., Izquierdo, M. and Puente, S. (2017), Subsidising mature age employment or throwing coins into a wishing well: A quasi-experimental analysis, Banco de España, Madrid.

Forrier, A. and Sels, L. (2003), 'Temporary employment and employability: Training opportunities and efforts of temporary and permanent employees in Belgium', *Work, Employment and Society*, Vol. 17, No. 4, pp. 641–666.

Fuller, S. and Stecy-Hildebrandt, N. (2015), 'Career pathways for temporary workers: Exploring heterogeneous mobility dynamics with sequence analysis', *Social Science Research*, Vol. 50, pp. 76–99.

Galán, S. and Puente, S. (2015), 'Minimum wages: Do they really hurt young people?', *The B.E. Journal of Economic Analysis and Policy*, Vol. 15, No. 1, pp. 299–328.

Giesecke, J. and Groß, M. (2003), 'Temporary employment: Chance or risk?', *European Sociological Review*, Vol. 19, No. 2, pp. 161–177.

Gimpelson, V. (2003), 'The impact of labour markets: Social mobility, segmentation, and reranking', in Mikhalev, V. (ed.), *Inequality and social structure during the transition*, Palgrave Macmillan, Houndsmills, UK, pp. 46–74.

Gittleman, M. B. and Howell, D. R. (1993), *Job quality* and labour market segmentation in the 1980s: A new perspective on the effects of employment restructuring by race and gender, Working Paper No. 82, December, Levy Economics Institute of Bard College, Annandale-on-Hudson, USA.

Goos, M., Manning, A. and Salomons, A. (2014), 'Explaining job polarization: Routine-biased technological change and offshoring', *American Economic Review*, Vol. 104, No. 8, pp. 2509–2526.

Grimshaw, D., Fagan, C., Hebson, G. and Tavora, I. (eds.) (2017), *Making work more equal: A new labour market segmentation approach*, Manchester University Press, Manchester, UK.

Hardy, W., Keister, R. and Lewandowski, P. (2015), Redefining vs reallocating: Task-driven job segmentation in Poland, IBS Working Paper No. 10/2015, May, Institute for Structural Research, Warsaw.

Haskel, J. and Slaughter, M. J. (2002), 'Does the sector bias of skill-biased technical change explain changing skill premia?', *European Economic Review*, Vol. 46, No. 10, pp. 1757–1783.

Häusermann, S. (2012), 'The politics of old and new social policies', in Bonoli, G. and Natali, D. (eds.), *The politics of the new welfare state*, Oxford University Press, Oxford, UK, pp. 111–132.

Holst, E. and Wieber, A. (2014), 'Bei der Erwerbstätigkeit der Frauen liegt Ostdeutschland vorn', *DIW-Wochenbericht*, Vol. 81, No. 40, pp. 967–975.

IGAS (Inspection générale des affaires sociales) (2013), Evaluation du régime de l'auto-entrepreneur, Paris.

ILO (2013a), Beyond the contract type segmentation in Spain: Country case study on labour market segmentation, International Labour Office, Geneva.

ILO (2013b), Italy: A dual labour market in transition: Country case study on labour market segmentation, International Labour Office, Geneva.

ILO (2016), Non-standard employment around the world: Understanding challenges, shaping prospects, International Labour Office, Geneva.

Jansen, M. and Troncoso-Ponce, D. (2018), *El impacto de los contratos para la formación y el aprendizaje en la inserción laboral de los jóvenes*, Universidad Autónoma de Madrid and Fundación de Estudios de Economía Aplicada, Madrid.

Kahn, L. M. (2010), 'Employment protection reforms, employment and the incidence of temporary jobs in Europe: 1996–2001', *Labour Economics*, Vol. 17, No. 1, pp. 1–15.

Kalter, F. and Kogan, I. (2014), 'Migrant networks and labour market integration of immigrants from the former Soviet Union in Germany', *Social Forces*, Vol. 92, No. 4, pp. 1435–1456.

Kerr, C. (1954), 'The balkanization of labour markets', in Bakke, E. W., Hauser, P., Palmer, G., Myers, C., Yoder, D. and Kerr, C. (eds.), *Labour mobility and economic opportunity*, MIT Press, Cambridge, USA, pp. 92–110.

Knuth, M., Stegmann, T. and Zink, L. (2014), *Die Wirkungen des Bundesprogramms 'Perspektive 50plus': Chancen für ältere Langzeitarbeitslose*, IAQ-Report No. 2014-01, Institut Arbeit und Qualifikation, Duisburg, Germany.

Kremer, M., Went, R. and Knottnerus, A. (2017), For the sake of security: The future of flexible workers and the modern organisation of labour, The Netherlands Scientific Council for Government Policy, The Hague.

Lazear, E. P. and Oyer, P. (2004), 'Internal and external labour markets: A personnel economics approach', *Labour Economics*, Vol. 11, No. 5, pp. 527–554.

Leontaridi, M. (1998), 'Segmented labour markets: Theory and evidence', *Journal of Economic Surveys*, Vol. 12, No. 1, pp. 103–109.

Leschke, J. (2009), 'The segmentation potential of non-standard employment', *International Journal of Manpower*, Vol. 30, No. 7, pp. 692–715.

Leschke, J. (2012), Has the economic crisis contributed to more segmentation in labour market and welfare outcomes?, ETUI Working Paper No. 2012.02, European Trade Union Institute, Brussels.

Lindbeck, A. and Snower, D. J. (2001), 'Insiders versus outsiders', *Journal of Economic Perspectives*, Vol. 15, No. 1, pp. 165–188.

López-Andreu, M. and Rubery, J. (2018), 'Austerity and women's employment trajectories in Spain and the UK: A comparison of two flexible labour markets', *Economic and Industrial Democracy*, doi:10.1177/0143831X18760988.

LPC (Low Pay Commission) (2018), *National Minimum Wage: Low Pay Commission 2018 Report*, London.

Matteazzi, E., Pailhé, A. and Solaz, A. (2014), 'Part-time wage penalties for women in prime age: A matter of selection or segregation? Evidence from four European countries', *ILR Review*, Vol. 67, No. 3, pp. 955–985.

Mayer, K. U. and Tuma, N. B. (eds.) (1987), *Applications of event history analysis in life course research*, Max-Planck-Inst für Bildungsforschung, Berlin.

McKnight, A., Stewart, K., Himmelweit, S. M. and Palillo, M. (2016), *Low pay and in-work poverty: Preventative measures and preventative approaches*, European Commission, Brussels.

Michon, F. (1987), 'Segmentation, employment structures and productive structures', in Tarling, R. (ed.), *Flexibility in labour markets*, Academic Press, London, pp. 23–55.

Michon, F. (2013), 'What became of labour market segmentation in France: Its changing design', *Socio-économie du travail*, Vol. 28, pp. 999–1026.

Mincer, J. (1974), *Schooling, experience, and earnings*, National Bureau of Economic Research, Cambridge, USA.

Möhring, K. (2016), 'Life course regimes in Europe: Individual employment histories in comparative and historical perspective', *Journal of European Social Policy*, Vol. 26, No. 2, pp. 124–139.

Myant, M. and Piasna, A. (eds.) (2017), *Myths of employment deregulation: How it neither creates jobs nor reduces labour market segmentation*, European Trade Union Institute, Brussels.

OECD (2013), *OECD Employment Outlook 2013*, OECD Publishing, Paris.

OECD (2014), *OECD Employment Outlook 2014*, OECD Publishing, Paris.

O'Higgins, N. (2012), 'This time it's different? Youth labour markets during the Great Recession', *Comparative Economic Studies*, Vol. 54, No. 2, pp. 395–412.

Oliva, R. and Kallenberg, R. (2003), 'Managing the transition from products to services', *International Journal of Service Industry Management*, Vol. 14, No. 2, pp. 160–172.

Pawson, R. and Tilley, N. (1997), *Realist evaluation*, Sage Publications Ltd, London.

Pawson, R. and Tilley, N. (2004), *Realist evaluation*, British Cabinet Office, London.

Pettinicchio, D. and Maroto, M. (2017), 'Employment outcomes among men and women with disabilities: How the intersection of gender and disability status shapes labour market inequality', in Altman, B. M. (ed.), Factors in studying employment for persons with disability: How the picture can change, Emerald Publishing Limited, Bingley, UK, pp. 3–33.

Piasna, A. and Myant, M. (2017), *Myths of employment deregulation: How it neither creates jobs nor reduces labour market segmentation*, European Trade Union Institute, Brussels.

Picchio, M. and Van Ours, J. C. (2013), 'Retaining through training: Even for older workers', *Economics of Education Review*, Vol. 32, pp. 29–48.

Popp, S., Grebe, T., Becker, C. and Dietrich, H. (2012), Weiterführung der Begleitforschung zur Einstiegsqualifizierung (EQ), Institut für Arbeitsmarktund Berufsforschung and Gesellschaft für Innovationsforschung und Beratung, Berlin.

Pulignano, V., Meardi, G. and Doerflinger, N. (2015), 'Trade unions and labour market dualisation: A comparison of policies and attitudes towards agency and migrant workers in Germany and Belgium', *Work, Employment & Society*, Vol. 29, No. 5, pp. 808–825.

Reich, M., Gordon, D. M. and Edwards, R. C. (1973), 'Dual labour markets: A theory of labour market segmentation', *The American Economic Review*, Vol. 63, No. 2, pp. 359–365.

Rubery, J. (1978), 'Structured labour markets, worker organisation and low pay', *Cambridge Journal of Economics*, Vol. 2, No. 1, pp. 17–36.

Rubery, J. (1998), 'Working time in the UK', *Transfer: European Review of Labour and Research*, Vol. 4, No. 4, pp. 657–677.

Rubery, J. (2007), 'Developing segmentation theory: A thirty year perspective', *Économies et Sociétés*, Vol. 28, No. 6, pp. 941–964.

Rubery, J. and Piasna, A. (2016), *Labour market* segmentation and the EU reform agenda: Developing alternatives to the mainstream, ETUI Research Paper No. 2016.10, European Trade Union Institute, Brussels.

Rubery, J. and Piasna, A. (2017), 'Labour market segmentation and deregulation of employment protection in the EU', in Piasna, A. and Myant, M. (eds.), *Myths of employment deregulation: How it neither creates jobs nor reduces labour market segmentation*, European Trade Union Institute, Brussels, pp. 43–60.

Scherer, S. (2001), 'Early career patterns: A comparison of Great Britain and West Germany', *European Sociological Review*, Vol. 17, No. 2, pp. 119–144.

Spasova, S., Bouget, D., Ghailani, D. and Vanhercke, B. (2017), Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies, European Commission, Brussels.

Stevens, K. (2008), *Adverse economic conditions at labour market entry: Permanent scars or rapid catch-up?*, University of Sydney, Sydney.

Thurow, L. C. (1975), Generating inequality: Mechanisms of distribution in the U. S. economy, Basic Books, New York

Tilly, C. (1992), 'Dualism in part-time employment', *Industrial Relations: A Journal of Economy and Society*, Vol. 31, No. 2, pp. 330–347.

Tolbert, C. M., II (1982), 'Industrial segmentation and men's career mobility', *American Sociological Review*, Vol. 47, No. 4, pp. 457–477.

Viitanen, T. K. (2005), 'Cost of childcare and female employment in the UK', *Labour*, Vol. 19, No. s1, pp. 149–170.

Wavehill (2016), Evidence review: Evaluation of the Lift Programme – Phase 1: The logic of the Lift model, Welsh Government Social Research, Cardiff.

Wavehill (2018), Evaluation of the Lift Programme: Final evaluation report, Welsh Government Social Research, Cardiff.

Wrohlich, K., Berger, E., Geyer, J., Haan, P., Sengül, D., Spieß, C. K. et al (2012), *Elterngeld Monitor*, DIW Politikberatung kompakt No. 61, Deutsches Institut für Wirtschaftsforschung, Berlin.

Annex: Regression results

Table A1: Detailed results of the regression analysis

| | France | | Germany | | Spain | | UK | |
|-----------------------------|--|----------|------------------------------------|----------|-----------------------------------|----------|--|-----------|
| Age group | 18-25 | -1.61*** | 16-25 | | 16-25 | -0.56*** | 16-25 | -0.251 |
| | 26-35 | 0.00* | 26-35 | 0.10 | 26-35 | -2.96*** | 26-35 | -0.012 |
| | 36-45 | 0.35*** | 36-45 | 0.33** | 36-45 | -0.83*** | 36-45 | 0.137 |
| | 46-55 | 0.33*** | 46-55 | 0.25*** | 46-55 | -0.38*** | 46-55 | -0.061 |
| | Ref: 56-65 | | Ref: 56-65 | | Ref: 56-65 | | Ref: 56–65 | |
| Gender | Female | -0.17*** | Female | 0.16* | Female | -0.71*** | Female | -0.143 |
| | Ref: Male | | Ref: Male | | Ref: Male | | Ref: Male | |
| Migrant status | Foreign born | -0.67*** | Foreign born | -0.41*** | Foreign born | -0.90*** | Foreign born | |
| | Ref: Native | | Ref: Native | | Ref: Native | | Ref: Native | |
| Educational level (ISCED | Secondary (2–3) | 0.38*** | Secondary (2–4) | 0.54*** | Primary (0–1) | 0.02*** | Secondary education (2–3) | 0.202* |
| 2011) | Vocational training (4) | 0.43*** | | | Secondary (2–4) | 1.08*** | Vocational training (4–5) | 0.586*** |
| | University degree (5–6) | 0.67*** | Higher (5–8) | 0.586*** | | | University degree (6) | 0.820*** |
| | Masters/PhD (7–8) | 0.34*** | | | Higher (5–8) | 2.21*** | Masters/PhD (7–8) | 1.750*** |
| | Ref: No or primary education (0–1) | | Ref: No or primary education (0–1) | | Ref: No education (0) | | Ref: No or primary education (0–1) | |
| Dependent children | | | | | | | Having dependent children under 12 | -0.578*** |
| | | | | | | | Ref: No dependent children | |
| Union membership | | | | | | | Being union member | -0.090 |
| | | | | | | | Ref: Not being union member | |
| Sector | Ref: Public administration, education, health | | Ref: Public administration | | Ref: Public administration | | Ref: Public administration | |
| | | | Agriculture | -2.72*** | Agriculture | -1.06*** | Agriculture | -0.366 |
| | Agriculture, manufacturing and extractive | -0.14** | Manufacture and extractive | -1.58*** | Extractive industries | 0.57*** | Extractive and manufacturing | -0.296* |
| | | | | | Energy | 2.17*** | | |
| | | | | | Manufacture | 0.58*** | | |
| | Construction | -0.13* | Construction | -0.69*** | Construction | -0.18*** | Construction | -0.472* |
| | Professional and technical activities | -0.64*** | Supply facilities | -1.81*** | Commerce and vehicle repair | -0.20*** | | |
| | | | Sales and hotels | -0.85*** | Catering and hotel business | -0.77*** | Sales and hotels | -0.237 |

| | Franc | France | | Germany | | Spain | | UK | |
|----------|---|--------|----------------------------|----------|--|----------|-------------------------------|----------|--|
| Sector | Ref: Public administration, education, health | | Ref: Public administration | | Ref: Public administration | | Ref: Public administration | | |
| | Retail, transportation, catering and hotel | -0.04 | Transport | -1.07*** | Transport | 0.15*** | Transport | -0.557** | |
| | Information, communication, financial, insurance activities | 0.22** | Business services | -0.57*** | Information and communications | 0.91*** | Business services | 0.181 | |
| | | | | | Finance and insurance | 1.22*** | Utilities | -0.570 | |
| | | | | | Professional and scientific activities | 0.20*** | | | |
| | | | | | Real estate | -0.21*** | | | |
| | | | | | Administrative and auxiliary services | -0.35*** | | | |
| | | | Other services | -3.28*** | Other services | -0.87*** | | | |
| | | | Education | -0.64*** | Education | -0.42*** | Education | 0.245 | |
| | | | Health | -0.71*** | Health and social services | 0.37*** | Health | 0.170 | |
| | | | | | Art and leisure | -0.67*** | Other services | -0.311 | |
| Constant | | 1.51 | | 0.05 | | -2.71 | | 0.35* | |

Notes: The regression analysis calculates the likelihood (expressed as the marginal effects of the estimated regression coefficients) of one individual having a standardised career compared with another individual, which functions as a reference, depending on the variation in a specific characteristic – for instance, in terms of gender, the likelihood of a man having a standardised career compared with a woman. Statistically significant results may be at the 5% level (*), 1% level (**) or 0.1% level (***).

Source: Authors, using GSOEP in Germany (2001–2016), MCVL in Spain (2000–2016), FQP in France (2009–2014), BHPS in the UK (2002–2008)

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This report sets out to describe what labour market segmentation is and why it is problematic for the labour market and society, as well as disadvantaged groups. It takes a broad view of the term to examine the situation that arises when the divergence in working conditions between different groups of workers is attributable to factors other than differentials in human capital levels. The report explores which policies or instruments are most effective in combating labour market segmentation, taking into account specific situational characteristics. The report offers a novel approach to the study of labour market segmentation that combines a quantitative empirical analysis with a policy analysis.

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