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Dependent self-employment: Trends, challenges and policy responses in the EU

Colin C Williams
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Development
and Investment
Branch,
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Preface

The primary goal of the ILO is to work with member States towards achieving full and productive employment and decent work for all. This goal is elaborated in the ILO Declaration 2008 on Social Justice for a Fair Globalization,¹ which has been widely adopted by the international community. Comprehensive and integrated perspectives to achieve this goal are embedded in the Employment Policy Convention of 1964 (No. 122), the Global Employment Agenda (2003) and – in response to the 2008 global economic crisis – the Global Jobs Pact (2009) and the conclusions of the Recurrent Discussion Reports on Employment (2010 and 2014).

The Employment Policy Department (EMPLOYMENT) is engaged in global advocacy and in supporting member States in placing more and better jobs at the centre of economic and social policies and growth and development strategies. Policy research and knowledge generation and dissemination are essential components of the Employment Policy Department's activities. The resulting publications include books, country policy reviews, policy and research briefs, and working papers.²

The Employment Policy Working Paper series is designed to disseminate the main findings of research on a broad range of topics undertaken by the branches of the Department. The working papers are intended to encourage the exchange of ideas and to stimulate debate. The views expressed within them are the responsibility of the authors and do not necessarily represent those of the ILO.

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¹ See http://www.ilo.org/public/english/bureau/dgo/download/dg_announce_en.pdf

² See <http://www.ilo.org/employment>.

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Executive summary

Across the EU28, there is not only a significant ‘jobs gap’ with only 70.1 per cent of the working age population in jobs but also concerns over the quality of jobs. One particular concern is that employees are being falsely classified as self-employed by employers in order to circumvent collective agreements, labour laws (e.g., minimum wages, working time legislation), employment tax and other employer liabilities implied in the standard contract of employment, and that the emergent ‘gig’ or ‘platform’ economy is accelerating this trend.

This report evaluates this emergent employment relationship, here termed ‘dependent’ self-employment, which covers those classified as self-employed who do not meet one or more of the following criteria: (1) they have more than one client; (2) they have the authority to hire staff, and/or (3) they have the authority to make important strategic decisions about how to run the business.

Analysing the 2015 European Working Conditions Survey, the finding is that 4.3 per cent of total employment in the EU28 is dependent self-employment (1.4 per cent comply with fewer than two of the three criteria, and 2.9 per cent with only two of the three criteria), declining from 5.3 per cent in 2010. Just 53 per cent (compared with 49 per cent in 2010) of the self-employed without employees are thus ‘genuine’ independent self-employed (fulfilling all three criteria), while 47 per cent (51 per cent in 2010) were dependent self-employed, with 15 per cent (12 per cent in 2010) meeting less than two and 32 per cent (39 per cent in 2010) only two of the three criteria.

The prevalence of dependent self-employment ranges from 9per cent of total employment in Portugal, and 8per cent in Italy, Greece and Romania, to one per cent in Denmark and Sweden, and two per cent in Belgium, Estonia, France and Germany. Although it is not significantly associated with specific demographic and socio-economic groups (e.g., genders, age groups, educational levels), it is significantly associated with various organisations, occupations and sectors:

- Workers in the public sector are significantly less likely to be dependent self-employed than workers in the private sector.
- Professionals, and skilled agricultural, forestry and fishing workers are significantly more likely than managers to be dependent self-employed, and clerical support workers significantly less likely.
- It is significantly over-represented in the agricultural, forestry and fishing sector (i.e., 22 per cent of all dependent self-employment is in this sector), suggesting that dependent self-employment is not notably related to the digital economy.

Decent work deficits, however, are not significantly worse among the dependent self-employed than for others in employment in relation to the physical environment, work intensity, working time quality, skills and discretion, and job and career prospects. Only the social environment in their workplace is significantly poorer.

Tackling dependent self-employment purely by developing effective mechanisms to detect and reclassify this work as standard employment, without at the same time tackling the decent work deficits attached to other employment relationships, might for instance simply lead to greater sub-contracting and outsourcing to genuine self-employment. Hence, the issue is not so much about making this work standard but more about making all work decent. Although the misclassification of dependent self-employment needs to be urgently addressed, either by reclassifying it as dependent employment or recognising a new hybrid category and attaching rights and protection to such work, at the same time, decent work deficits across all employment relationships need to be tackled. This requires firstly, collective responses, including the strengthening collective bargaining, and secondly, adapting social protection to better reflect the demise of the standard employment relationship of permanent full-

time dependent employment, and a world in which the quantity of jobs mean that 30 per cent of the working age population will not be in employment.

1. Introduction

Over the past few decades, there has been recognition that the ‘standard employment relationship’ (SER) of formal, full-time and permanent waged employment is becoming ever less the standard relationship. Given that the SER has been the key vehicle for allocating rights and social protection, its diminution poses challenges for the operation of regulatory frameworks and raises issues regarding working conditions, rights and benefits. This challenge to the SER is coming from not only non-standard forms of employment (NSEs) such as part-time, fixed-term and agency employment (Hatfield, 2015; Eichhorst *et al.*, 2013; Pedersini and Coletto, 2010), but also a growth in participation in not only undeclared work but also self-employment, neither of which are usually covered by the umbrella of protective rights for the worker and responsibilities for the employer. Although protective rights are being gradually extended in many countries to employees in NSE (ILO, 2016), this has not been the case usually for the ‘self-employed’ who have been treated as a residual group largely outside of the purview of labour standards and regulation. This is because they are not perceived to have an employment relationship with their clients but rather, a contract for services or civil contract with those to whom they supply their labour.

However, the growth of self-employment in general, and ‘dependent’ self-employment more particularly, whereby workers are self-employed but have a *de facto* employment relationship, if not *de jure*, not least because they only work for one employer, has led to a burgeoning literature on dependent self-employment (Kautonen *et al.*, 2010; Thörnquist, 2014, 2015). This has highlighted both the growing prevalence of such dependent self-employment and the potentially precarious working conditions of those in such an employment relationship. The aim of this report is to contribute to this small but rapidly expanding literature by charting not only the trends in dependent self-employment in the EU but also the challenges that result from its emergence and the potential policy responses that might be taken.

Technological changes, that is, are transforming the nature and quality of existing and new jobs. *The expansion of work organised through online platforms and mobile device applications (apps), such as Uber and Lyft, has provoked a debate over whether the dependent self-employed often found in these realms need to be reclassified as dependent employees or whether there is a need for a new, third category of workers, somewhere between dependent employment and self-employment, so that such workers enjoy protections typically associated with traditional employment relationships. In short, this is a debate not about making all work standard but all work decent. It is about securing decent work* that is productive and delivers a fair income, that ensures security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives, and equality of opportunity and treatment for all women and men (ILO, 2016).

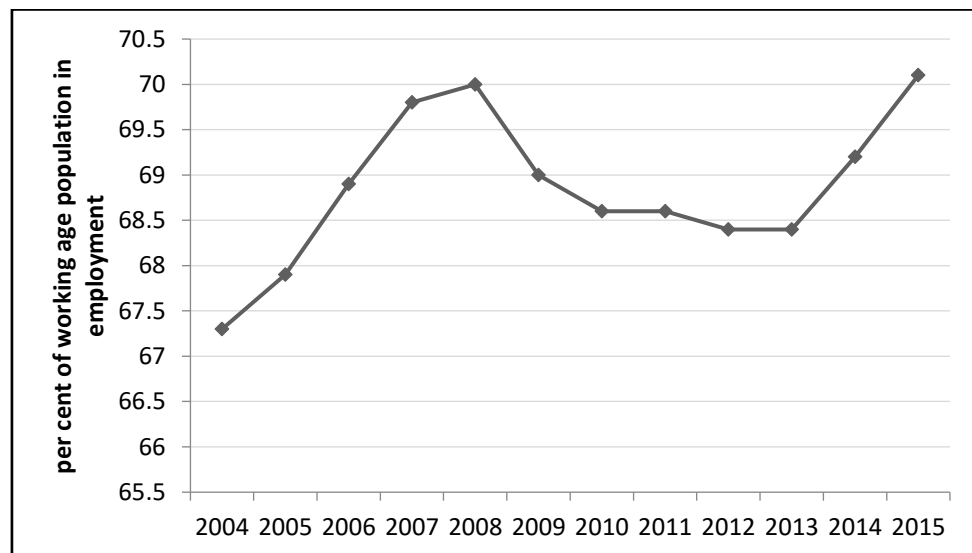
To commence, therefore, the next section reviews trends in employment in the European Union in terms of employment participation rates, and the changing nature of employment relationships, especially with regard to the growth of self-employment. Section 3 then reports the evidence from the 2015 European Working Conditions Survey on the prevalence and nature of dependent self-employment in the EU, including the job quality and working conditions of workers in this form of employment relationship. The fourth section then turns attention to what can be done about dependent self-employment and the fifth and final section to the implications for the future of work.

2. Employment trends in the European Union

2.1. Employment participation rates

Across the EU, social inclusion is largely equated with insertion into employment. The problem for the achievement of social inclusion, however, is that there is a significant gap between the employment participation rate and full-employment. Figure 1 displays that in 2015, 70.1 per cent of the working age population (aged 20-64 years old) in the EU28 were in jobs. For all working age citizens to be employed in the EU28, therefore, there would need to be a 43 per cent increase in the number of jobs (i.e., one additional job would be required for every 3.3 jobs that currently exist). However, the Europe 2020 strategy seeks only to achieve a 75 per cent employment participation rate for people aged 20 to 64 by 2020. How the 1 in 4 working age people who are to remain jobless are to be socially included has been little discussed.¹

Figure 1. Employment rate of population in EU28, aged 20-64



Source: Eurostat

It is not only the quantity of jobs (i.e., the ‘jobs gap’) that is problematic in the EU28. So too is the type and quality of employment being created, exemplified by the emergence of new forms of NSE and the growth of the ‘working poor’, meaning that not all are equally ‘socially included’ through their insertion into employment (ILO, 2016).

¹ This will require consideration of not only the distribution of employment across the population (e.g., issues such as the six-hour day or lifetime hours of employment) but also whether income and employment should continue to be inextricably tied together, or whether a guaranteed basic income independent of one’s economic activity might be a way forward (van Parijs, 2004).

2.2. Beyond the standard employment relationship (SER)

The 'standard employment relationship' generally refers to an employment relationship that is full-time, open-ended, and based on a direct subordinate and bilateral employment relationship between an employee and employer (ILO, 2016). Non-standard forms of employment (hereinafter 'non-standard employment', or 'NSE') thus comprise four alternative employment arrangements, namely:

1. Temporary employment: fixed-term contracts including project- or task-based contracts; seasonal work; and casual work, including daily work;
2. Part-time and on-call employment: normal working hours fewer than full-time equivalents, and includes part-time employment and on-call work, including zero-hour contracts;
3. Multi-party employment relationships, also known as 'dispatch', 'brokerage' and 'labour hire', which covers temporary agency work and subcontracted labour, and
4. Disguised employment, also known as 'dependent', 'sham', 'bogus' or 'misclassified' self-employment.

These, however, are all different forms of formal dependent waged employment. Besides these, two other forms of work that are not the SER exist, namely:

5. Undeclared work, which covers 'any paid activities that are lawful as regards their nature but not declared to public authorities, taking account differences in the regulatory systems of the Member States' (European Commission, 2007: 2), for tax, social security and/or labour law purposes when it should be declared, and
6. Self-employment. In the European Labour Force Survey (ELFS), self-employed persons are defined as working in their own business, farm or professional practice and who meet one of the following criteria: works for the purpose of earning profit; spends time on the operation of a business; or is currently establishing a business. A self-employed person is the sole or joint owner of the unincorporated enterprise (one that has not been incorporated, i.e. formed into a legal corporation) in which he/she works, unless they are also in paid employment as their main activity (in which case they are considered employees in the ELFS).

The emergence of NSE is problematic because working conditions and rights have been conventionally based on the SER. The SER in principle provides workers with high security in the labour market (due to its open duration), social benefits (i.e., social protection, unemployment benefits) and rights (i.e., representation rights) (Eurofound, 2012a). Workers in NSE, in terms of either the existence or duration of a contract, working hours, or type of employer, have conventionally had fewer rights and benefits. As such, NSE poses risks for workers, firms, labour markets and society.

For workers, NSE, especially when involuntary, is more likely to be deleterious compared with the SER in relation to job security, earnings due to wage penalties, limited control over hours, occupational health and safety risks (e.g., due to poor induction, training and supervision), social security inclusion (since short hours may lead to limited benefits during unemployment or retirement), on-the-job training, and less representation and voice. For firms, over-reliance on NSE can gradually erode firm-specific skills, limiting its ability to respond to changing market demand. While there may be some short-term cost and flexibility gains from NSE, in the long run, these may be outweighed by productivity losses. There is evidence that firms using NSE more, tend to underinvest in training, both for temporary and permanent employees, as well as in productivity-enhancing technologies and innovation. For labour markets and society, meanwhile, the widespread use of NSE leads to labour market segmentation and greater volatility in employment with consequences for economic stability (ILO, 2016).

NSE, therefore, is characterised by a higher degree of decent work deficits including lower earnings, reduced social security coverage and poorer working conditions, fewer prospects for personal development, and less voice (ILO, 2016). It is thus important to understand whether there is a demise of the SER and growth in NSE in the EU28.

Examining the trends using the EU Labour Force Survey, the following conclusions can be reached:

- In 2015, although 70.1per cent of the working age population (aged 20-64 years old) in the EU28 were in jobs, the *full-time equivalent (FTE) employment participation rate* for the working age population was just 64per cent, suggesting that one FTE job is required for every two currently in existence for all working age citizens for the 'FTE jobs gap' in the EU28 to be eradicated.

Part-time employment has steadily grown from 18per cent of total employment in the EU in 2005 to 20per cent in 2015, and this growth has occurred among both men (rising from 7per cent to 10per cent) as well as women (rising from 31per cent to 33per cent);

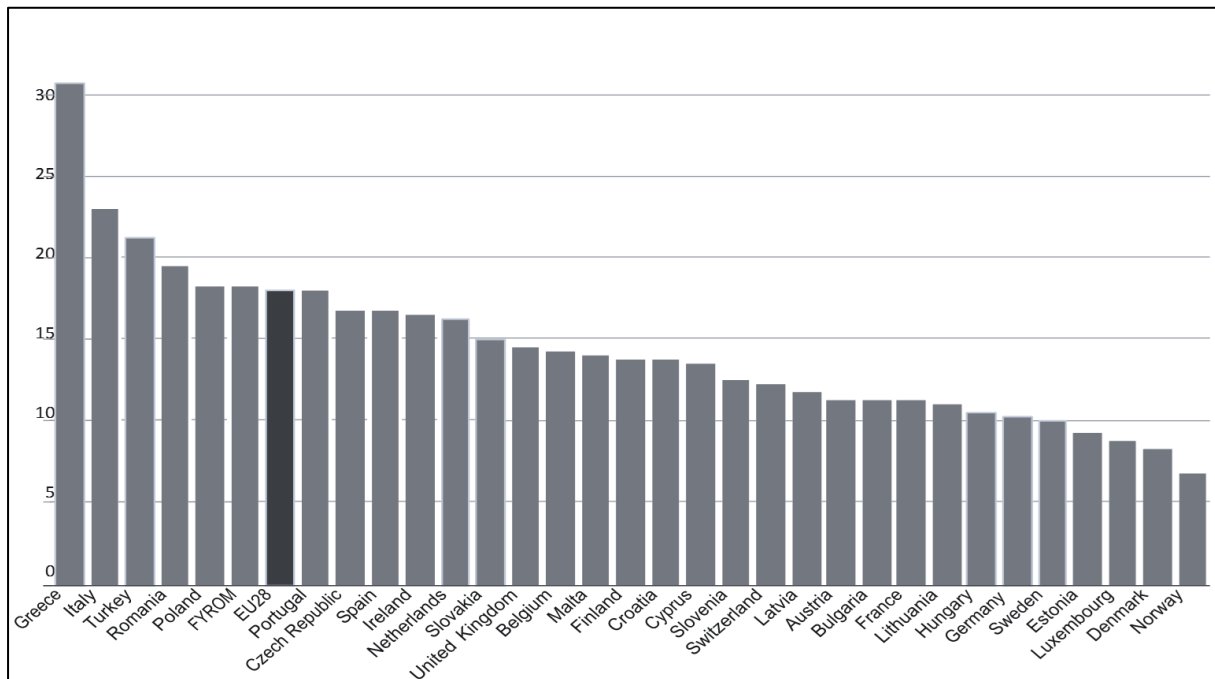
- *Temporary employment* has remained relatively stable at 12per cent of total employment between 2005 and 2015;
- *Undeclared work* has decreased in magnitude from 21.8per cent in 2005 to 17.9per cent of GDP in 2016 (Schneider, 2016), and
- *Self-employment* has remained relatively stable at 15-16per cent of total employment between 2005 and 2015.

Hence, the growth of NSE should not be over-exaggerated, including self-employment.

2.3. Self-employment: trends and challenges

Although the share of total employment that is self-employment has been relatively stable for the past decade in the EU28, this varies widely from 7per cent of total employment in Norway to 31per cent in Greece, with generally higher rates of self-employment in Southern and East-Central European countries (see Figure 2). Indeed, between 2005 and 2015, the share of self-employed increased in 12 Member States but decreased in 10 (Hatfield, 2015). In Southern and East-Central Europe, self-employment remains relatively high, but these countries are yet to see a growth in total employment. In Western Europe and Nordic nations, meanwhile, member states are beginning to see rising employment, while the number of self-employed workers has fallen.

Figure 2. Self-employment as a share of total employment, by country (per cent)



Source: EU-LFS 2015 (from Eurofound, 2016)

The reason self-employment is a challenge for protective rights is because dependent waged employees enjoy the full protection of labour law, including minimum wages, working time legislation, protection in case of redundancy and provisions regarding social security. This is less the case for the self-employed. They are in principle not covered by labour law and they are socially hardly (or not at all) protected. Neither are the self-employed protected by legislation and regulations on health and safety in most countries, and generally pay lower social contributions and are less protected by social security systems. A difference in terms of social security protection varies from country to country, leading to what has been termed a ‘social gap’ (Jorens *et al.*, 2009). Table 1 summaries this gap across the EU28.

Table 1. Entitlement of self-employed to social benefits, July 2015

	Unemployment benefits	Sickness benefits	Pensions
Greece	yes	no	yes
Italy	no	no	yes
Romania	voluntary	yes	yes
Poland	yes	voluntary	yes
Portugal	yes	yes	yes
Czech Republic	yes	voluntary	yes
Spain	voluntary	yes	yes
Ireland	no	no	yes
Cyprus	no	yes	yes
Netherlands	no	no	yes
Slovakia	yes	yes	yes
United Kingdom	no	yes	yes (contributory basic retirement pension only)
Croatia	yes	yes	yes
Malta	no	yes	yes
Belgium	no	yes	yes
Finland	voluntary	yes	yes
Slovenia	yes	yes	yes
Bulgaria	no	voluntary	yes
Austria	voluntary	yes	yes
France	no	yes	yes
Lithuania	no	voluntary	yes (if income declared as wages)
Latvia	voluntary	yes	yes
Hungary	yes	yes	yes
Germany	voluntary	yes (some categories only)	yes
Sweden	voluntary	yes	yes
Denmark	voluntary	yes	yes
Estonia	no	yes	yes
Luxembourg	yes	yes	yes

Source: Fondeville et al. (2015: Table 12)

In the Netherlands, for example, the self-employed have no benefits in the case of sickness or incapacity to work; nor do they have access to unemployment benefits. In Belgium as well as France, there is no unemployment insurance scheme for the self-employed. In Spain, in case of unemployment, they are entitled to out-of-work benefit (*Prestación por cese de actividad*), but only if they opted for insurance coverage. In Germany, unemployment insurance for the self-employed is also voluntary - i.e. there is no compulsion on the people concerned to have the protection that this provides. However,

if the self-employed do not have sufficient income or disposable assets, they are, in principle, entitled to the standard allowance provided to jobseekers (*Arbeitslosengeld II*) to ensure that they have enough for subsistence at least. In the UK, as well as having no protection in the event of accidents at work or occupational diseases – which is also the same in the Czech Republic – the self-employed are not entitled to a state earnings-related pension and have no access to unemployment benefits, though, as in Germany, if they become unemployed, they can claim means-tested assistance. In Poland, the self-employed pay only a minimum level of social contributions and so are entitled only to a minimum retirement pension. In a number of other countries, many of the self-employed opt to make lower contributions and, therefore, also have lower levels of entitlement to benefits. The self-employed, therefore, have little recourse to basic employment rights, such as paid sick leave, holiday and maternity leave, which means greater risk of financial instability and vulnerability. They are also less likely to have paid into a private pension, and work can be irregular and insecure.

2.3.1. Types of self-employment

To differentiate types of self-employment, the most basic distinction is whether they have employees or not. Fondeville *et al.* (2015) reveals that 10.3 per cent of those in employment are self-employed without employees (own-account workers), and 4.1 per cent self-employed with employees. Although the number of self-employed (i.e., independent workers) with employees increased by more than the number of self-employed without employees between 2004 and 2007, the reverse was the case between 2007 and 2014. The number of *self-employed without employees* increased by more than (or declined by less than) those with employees in 21 of the 28 EU member states; and in the majority of them, by more than the total employed (in 16 Member States, it rose by more or fell by less).

The growing number of self-employed without employees is not evenly distributed. In 2014, the self-employed without employees accounted for only four per cent of total EU employment among those aged 18-24, but 13 per cent for those aged 50-64 and 36 per cent for those aged 65-74 (Hatfield, 2015). There are also marked variations across occupations and sectors. 47 per cent of agricultural workers are self-employed without employees, but just 16 per cent of managers, 15 per cent of craft workers and nine per cent of professionals. They also constitute 42 per cent of total employment in the agricultural sector, 17 per cent in construction and 15 per cent in other services (Hatfield, 2015). Examining the reasons for self-employment, the sixth European Working Conditions Survey (EWCS) (Eurofound, 2016) in 2015 reveals that while 60 per cent of the self-employed opted for this employment status through personal preference, this was 71 per cent for the self-employed with employees. 24 per cent of the self-employed without employees stated that they had ‘no alternative option’ (Eurofound, 2016). Few of those who are self-employed without employees eventually take on employees (Fondeville *et al.*, 2015). Most remain sole traders.

There has also been a rise in the proportion of the self-employed working part-time in the EU (Eurofound, 2016; Fondeville *et al.*, 2015; Hatfield, 2015). Between 2007 and 2014, the average number of hours worked by the self-employed without employees reduced by just over two hours a week, which is over twice the reduction in the average hours worked by all in employment (Fondeville *et al.*, 2015). Much of this seems to have been involuntary. Between 2007 and 2014, the proportion of self-employed working part-time in the EU reporting that they did so because of being unable to find full-time work increased by six percentage points (Fondeville *et al.*, 2015).

In recent years, therefore, a debate has emerged about whether all of these self-employed without employees are self-employed in the traditional sense, or whether they

are engaged in dependent self-employment (Fehringer, 2014; Forde and MacKenzie, 2007; Gialis *et al.*, 2015).

3. Evaluating dependent self-employment in the European Union

In most legal systems, a binary divide between dependent employment and self-employment prevails, with dependent employment serving as the basis for labour regulation (Countouris and Freedland, 2013). Although a ‘grey area’ between the two legal categories has always existed, a concern is that in the last few decades, the shift towards greater outsourcing and sub-contracting, coupled with technological developments, has resulted in the expansion of workers occupying this grey area, variously termed ‘fake’, ‘false’, ‘sham’, ‘dependent’, ‘misclassified’ and ‘bogus’ self-employment, or ‘disguised’ employment (Behling and Harvey, 2015; Harvey and Behling, 2008; Jorens, 2008; Pedersini and Coletto, 2010, Thörnqvist, 2013). As the ILO (2016: 36) highlight, the categories of work occupying the middle of the spectrum between pure self-employment and pure dependent employees include: ‘disguised employment relationships’, in which ‘an employer treats an individual as other than an employee in a manner that hides his or her true legal status as an employee’, and ‘dependent self-employment’, in which ‘workers perform service for a business under a contract different from a contract of employment but depend on one or a small number of clients for their income and receive direct guidelines regarding how the work is done’.

The main reason cited for the growth of this ‘grey area’ is that for employers, it is cheaper to hire self-employed persons to perform work than to hire employees. Indeed, a UK report estimated that the true cost difference ranges between 35per cent and 50per cent (Jorens, 2010: 29). These lower costs provide the incentive for employers to hire more self-employed workers through outsourcing and sub-contracting arrangements. Indeed, it is suggested that in practice employees are fired and then re-hired as self-employed performing the same work. The price of hiring somebody on a self-employed basis is unrelated to the minimum wage or other wage-setting methods such as collective agreements. In addition, no social security contributions are paid when hiring the self-employed, and the law obliges employers to adhere to many costly standards for employees such as compensation in the case of dismissal, higher wages based on seniority, holiday payments and a right to be paid even if an employee is sick and incapable of work. Dependent self-employment thus circumvents collective agreements, labour laws, employment tax and other employer liabilities that would otherwise be implied in a standard contract of employment (Thörnqvist, 2011: 102).

Here, therefore, firstly, the prevalence and nature of dependent self-employment is evaluated, including its distribution across both countries and population groups, and secondly, the views of those in dependent self-employment are analysed regarding the conditions of their employment, and compared with all others in employment as well as another form of precarious work, namely those with no written contract. This will then set the scene for an evaluation of what might be done to tackle dependent self-employment.

3.1. Prevalence and nature of dependent self-employment

Few countries collect data in labour force surveys on how many workers are in dependent self-employment. Here, therefore, one of the few cross-national comparative surveys to measure the prevalence and growth of dependent self-employment is reported, namely the European Working Conditions Survey (EWCS).

In 2010 (and subsequently in 2015), three questions were asked to estimate whether the ‘self-employed without employees’ are actually self-employed or are in reality economically dependent workers (Eurofound, 2013a). These are that:

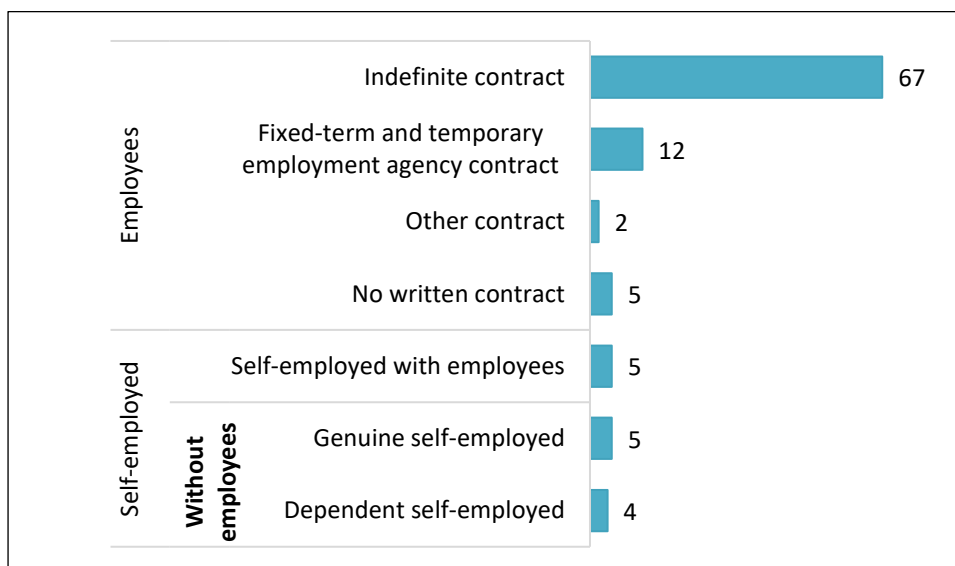
- A self-employed person without employees should have more than one client to be considered really self-employed;

- A self-employed person without employees should be able to hire employees if necessary;
- A self-employed person without employees should be able to make the most important decisions about how to run their business.

A self-employed person without employees who complied with fewer than two of these three criteria was considered to be dependent self-employed, and conversely those who complied with two or more were considered to be self-employed without employees. Those self-employed without employees considered to be dependent self-employed are thus those: (1) who have only one client, (2) have no authority to hire staff, and/or (3) have no authority to make important strategic decisions. In 2010, 0.9per cent of total employment in the EU27 was pure dependent self-employment complying with fewer than two of these three criteria, with cross-national variations from a statistically negligible proportion in Sweden to over 3per cent of non-agricultural private sector employment in the Czech Republic, Greece, Italy and Slovakia. When agriculture is included, this figure is 1.3per cent in the EU27.

In 2015, the sixth EWCS interviewed almost 44,000 workers (both employees and self-employed people) in 35 European countries: the 28 EU Member States, the five EU candidate countries, and Norway and Switzerland (Eurofound, 2016). This 2015 survey includes the same questions, namely: (1) number of clients; (2) authority to hire and dismiss employees, and (3) decision-making autonomy. In 2015, 1.4per cent of total employment in the EU28 was pure dependent self-employment complying with fewer than two of these three criteria (compared with 1.3per cent in 2010). However, an additional 2.9per cent of total employment in the EU28 was in a ‘grey zone’ comprising self-employed workers who comply with only two of the three criteria (compared with an additional 4.0per cent in 2010 in the EU27). The result is that in 2015, 4.3per cent of total employment in the EU28 can be classified as dependent self-employment comprised of self-employed workers who do not comply with one or more of these three criteria (compared with 5.3per cent in 2010 in the EU27). This is graphically portrayed in Figure 3.

Figure 3. Types of employment relationship in the EU28 (% , 2015)

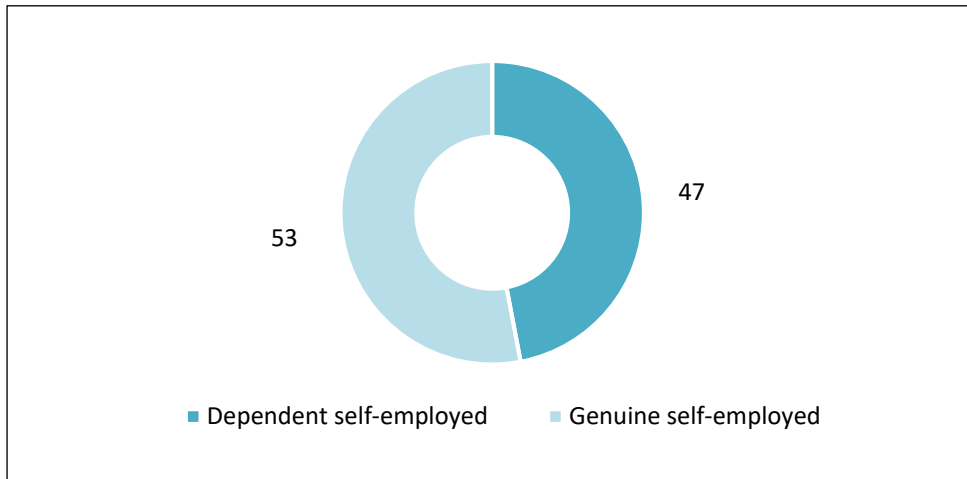


Source: EWCS 2015 (own calculations)

Indeed, in 2015 53 per cent (compared with 51 per cent in 2010) of the self-employed without employees were ‘genuine’ independent self-employed workers (fulfilling all three criteria), while 47 per cent (51 per cent in 2010) were dependent self-employed, with 15 per cent (12 per cent in 2010) meeting none or only one of the

three criteria, and 32 per cent (39 per cent in 2010) meeting only two of the three criteria. When the self-employed with employees are included, 31 per cent of all self-employed are dependent self-employed (compared with 36 per cent in 2010).²

Figure 4. Self-employed without employees in EU28 (% , 2015)



Source: EWCS 2015 (own calculations)

How, therefore, does the prevalence of dependent self-employment vary cross-nationally in the EU28? And who engages in dependent self-employment across the EU28, and what types of sectors, organisations and occupations is it most likely to be found?

3.1.1. Cross-national variations

Figure 5 charts the cross-national variations in the prevalence of dependent self-employment. The first column depicts the share of total employment in a country that is dependent self-employment, the second column the share of total self-employment that is dependent self-employment and the third column the distribution of dependent self-employment across the EU28. Analysing the cross-national variations in the share of total employment, the first column reveals that dependent self-employment ranges from nine per cent of total employment in Portugal, and eight per cent in Italy, Greece and Romania, to one per cent of total employment in Denmark and Sweden, and two per cent in Belgium, Estonia, France and Germany. There thus appears to be a broad East-West and North-South regional divide, with dependent self-employment being a greater share of total employment in Eastern and Southern European member states, and a lower share in Western and Nordic member states.

Turning to dependent self-employment as a share of total self-employment, it is again the case that stark variations exist cross-nationally, with dependent self-employment ranging at the upper end from 63 per cent of all self-employment in Romania, 52 per cent in Slovakia, 43 per cent in the UK and Austria and 42 per cent in Lithuania and Poland, to

² The same trend exists when the agricultural sector is excluded. Between 2010 and 2015, 'pure' dependent self-employment (i.e., complying with fewer than two of these three criteria) increased from 0.9 per cent of total non-agricultural employment to 1.1 per cent. When those complying with only two of the three criteria are included, an additional 3.3 per cent of total non-agricultural employment was dependent self-employment in 2010 and 2.5 per cent in 2015. Hence, in 2010, 4.2 per cent of total non-agricultural employment in the EU27 was dependent self-employment (not complying with one or more of these three criteria) and 3.6 per cent in 2015 in the EU28.

at the lower end 18 per cent of total self-employment in Germany and Belgium, 12 per cent in Sweden and 11 per cent in Denmark.

The final column in Figure 5 examines the countries where dependent self-employment in the EU28 is concentrated. This reveals that dependent self-employment is heavily concentrated in just two countries, with 20.6 per cent of all the dependent self-employment in the EU28 located in the UK and 18.2 per cent in Italy. Just under two in every five dependent self-employed in the EU28, therefore, are located in these two countries.

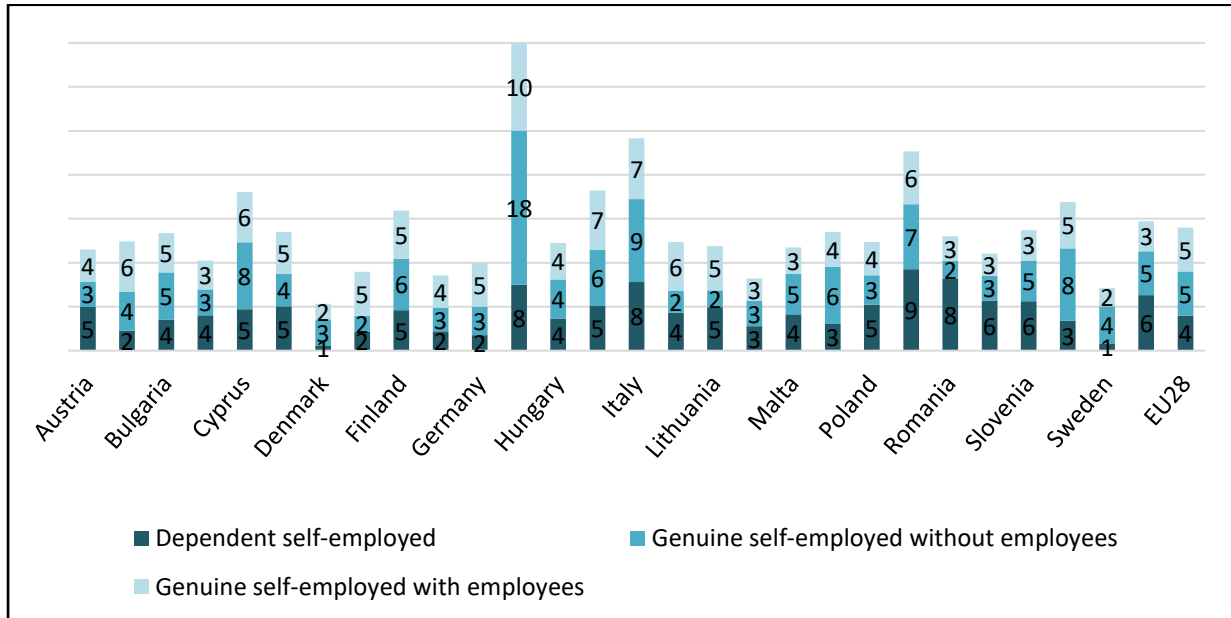
Figure 5. Cross-national variations in the prevalence of dependent self-employment

Country	Dependent self-employed			
	Percent of:		Of which:	
	All employment	Self-employed		
Austria	5	43	2.2	
Belgium	2	18	1.1	
Bulgaria	4	26	1.1	
Croatia	4	39	0.6	
Cyprus	5	26	0.2	
Czech Republic	5	37	2.7	
Denmark	1	11	0.2	
Estonia	2	24	0.1	
Finland	5	29	1.2	
France	2	26	6.1	
Germany	2	18	7.4	
Greece	8	21	2.8	
Hungary	4	30	1.6	
Ireland	5	28	1.0	
Italy	8	32	18.2	
Latvia	4	35	0.4	
Lithuania	5	42	0.7	
Luxembourg	3	34	0.1	
Malta	4	35	0.1	
Netherlands	3	23	2.6	
Poland	5	42	8.7	
Portugal	9	41	4.3	
Romania	8	63	7.2	
Slovakia	6	52	1.5	
Slovenia	6	41	0.5	
Spain	3	20	6.4	
Sweden	1	12	0.4	
United Kingdom	6	43	20.6	

Source: EWCS 2015 (own calculations)

Figure 6, meanwhile, displays the composition of self-employment in each of the 28 member states of the European Union (EU28) in terms of the share of total employment which is self-employment with employees, genuine self-employment without employees and dependent self-employment.

Figure 6. Nature of self-employment in EU28, by country (% of all employment)



Source: EWCS 2015 (own calculations)

3.1.2. Who engages in dependent self-employment?

To begin analysing whether certain socio-demographic and socio-economic groups are more likely to engage in dependent self-employment than others, Figure 7 examines whether participation in dependent self-employment varies by gender. This reveals that five per cent of all men in employment are dependent self-employed compared with just four per cent of all women in employment. However, only 29 per cent of men in self-employment are dependent self-employed compared with 36 per cent of women who are self-employed. Despite this, 58 per cent of all dependent self-employment is undertaken by men and just 42 per cent by women.

Figure 7. Participation in dependent self-employment by gender

Gender	Dependent self-employed		
	Percent of:		Of which:
	All employment	Self-employed	
Male	5	29	58
Female	4	36	42

Source: EWCS 2015 (own calculations)

As Figure 8 reveals, participation in dependent self-employment also varies according to age. There is a steady rise in the proportion of the total workforce employed in dependent self-employment as age rises, increasing from three per cent of the workforce under 35 years old to six per cent of the workforce aged 50 and over. This, moreover, is reflected in the distribution of dependent self-employment in that 46 per cent of dependent self-employment is conducted by those aged 50 and over. This form of employment, therefore, is conducted more by men and those aged 50 years old and over.

Figure 8. Participation in dependent self-employment by age

Age	Dependent self-employed		
	Percent of:		Of which:
	All employment	Self-employed	
Under 35 years	3	41	21
35 - 49 years	4	27	33
50 years and over	6	32	46

Source: EWCS 2015 (own calculations)

The interesting finding in Figure 9, however, is that the dependent self-employed are most likely to be found in households where all equally contribute to the household income. Whereas four per cent of those who assert that they contribute most to the household income are in dependent self-employment, and also four per cent of those who assert that they do not contribute most, seven per cent of those who contribute equally to the household income are in dependent self-employment. Nevertheless, most (54 per cent) of those engaged in dependent self-employment tend to be predominantly the main breadwinner in their household. Only one in three (34 per cent) of the dependent self-employed assert that they are not the main breadwinner and less than one in eight (12 per cent) that they contribute equally to the household income. Dependent self-employment, therefore, is for the majority engaged in such endeavour the principal source of household income.

Figure 9. Participation in dependent self-employment: by main breadwinner

Are you, in your household, the person who contributes the most to the household income?	Dependent self-employed		
	Percent of:		Of which:
	All employment	Self-employed	
Yes	4	26	54
No	4	45	34
All equally	7	33	12

Source: EWCS 2015 (own calculations)

3.1.3. Distribution across sectors, organisations and occupations

Turning to the sectors, organisations and occupations that use dependent self-employment, Figure 10 reveals that such a form of employment falls markedly as the number of employees in a business grows. Indeed, dependent self-employment is concentrated in sole trader businesses; 27 per cent of all who classify themselves as sole traders in the EU28 are dependent self-employed, and 64 per cent of all dependent self-employment is among sole traders. It is similarly the case that even in businesses with employees, it is smaller businesses which have a higher proportion of dependent self-employed. Indeed, five per cent of all employees in businesses employing two to nine employees are dependent self-employed and a further 24 per cent of all dependent self-employed are in such businesses. Indeed, only a very small proportion of the dependent self-employed are in medium and larger sized businesses, eight per cent and four per cent respectively. Dependent self-employment, therefore, does not appear to be predominantly a result of medium large businesses pursuing a strategy of outsourcing and sub-contracting to the dependent self-employed, at least directly. Rather, it appears to be predominantly the result of sole traders being dependent self-employed and micro-enterprises employing workers on a dependent self-employed basis.

Figure 10. Participation in dependent self-employment: by firm size

Firm size (no. of employees)	Dependent self-employed		
	Percent of:		Of which:
	All employment	Self-employed	
1 employee (interviewee works alone)	27	38	64
2 - 9 employees	5	18	24
10 - 249 employees	1	33	8
250+ employees	1	68	4

Source: EWCS 2015 (own calculations)

In what occupations, therefore, do the dependent self-employed work? Figure 11 reports the findings. This reveals that some 30 per cent of all skilled agricultural, forestry and fisheries workers are dependent self-employed, and that this far outstrips all other occupations. The next nearest is craft and related trade worker and elementary occupations, of whom five per cent of total employment in these occupations is dependent self-employment. Given that skilled agricultural, forestry and fisheries workers are a relatively small occupational group, the net outcome is that 20 per cent of all dependent self-employment is in this occupation, 19 per cent among professionals, 14 per cent among elementary occupations and 13 per cent among craft and related trade workers.

Figure 11. Participation in dependent self-employment: by occupation

Occupation	Dependent self-employed			
	Percent of:		Of which:	
	All employment	Self-employed		
Managers	4	13	5	
Professionals	4	33	19	
Technicians and associate professionals	3	27	11	
Clerical support workers	1	33	1	
Service and sales workers/ Armed forces	3	22	12	
Skilled agricultural, forestry and fishery workers	30	51	20	
Craft and related trades workers	5	27	13	
Plant and machine operators, and assemblers	3	45	5	
Elementary occupations	5	65	14	

Source: EWCS 2015 (own calculations)

Turning to the sectors in which the dependent self-employed are found, Figure 12 reveals that dependent self-employment is not confined to the private sector. Although five per cent of all employment in the private sector is dependent self-employment (one in every 20 private sector jobs), it is the not-for-profit sector in which this employment relationship is rife with nine per cent of all not-for-profit sector employment being dependent self-employment. Nevertheless, given the small size of the not-for-profit sector, the importance of this should not be exaggerated. Some 87 per cent of all dependent self-employment is located in the private sector, and just seven per cent in the not-for-profit sector.

Figure 12. Participation in dependent self-employment: by private/public sector

Sector	Dependent self-employed			
	Percent of:		Of which:	
	All employment	Self-employed		
The private sector	5	30	87	
The public sector	1	37	4	
A joint private-public organisation or company	2	32	2	
The not-for-profit sector or an NGO/ Other	9	48	7	

Source: EWCS 2015 (own calculations)

Figure 13 provides a more detailed breakdown by sector of participation in dependent self-employment. Starting with the first column, this compounds the earlier finding regarding the concentration of dependent self-employment in occupations associated with agriculture, forestry and fishing. Some 27 per cent of all employment in the agriculture, forestry and fishing sector is dependent self-employment. The next closest sector is the household services sector where 13 per cent of all employment is dependent self-employment followed by the arts entertainment and recreation sector. It should be noted that dependent self-employment is not as rife in the construction sector (seven per cent of all construction jobs) as in these other sectors. Examining the self-employed rather than total employment, however, it is the household services sector in which this employment relationship is rife. Some 84 per cent of all the self-employed in the household services sector are dependent self-employed. Across all sectors, nevertheless, it is the agriculture,

forestry and fishing sector that employs 22 per cent of all the dependent self-employed, with a further 14 per cent of the dependent self-employed in the arts, entertainment and recreation sector and 11 per cent in professional, technical and scientific and administrative services. Only nine per cent of all dependent self-employed are in the construction sector.

Figure 13. Participation in dependent self-employment by sector

NACE Revision 2	Dependent self-employed			
	Percent of:			Of which:
	All employment	Self-employed		
Agriculture, forestry and fishing	27	51	22	
Industry (except construction)	2	25	7	
Construction	7	28	9	
Wholesale and retail trade; repair of motors	3	18	10	
Transportation and storage	4	44	5	
Accommodation and food service activities	2	10	1	
Information and communication	5	32	3	
Financial and insurance/ real estate activities	3	22	3	
Professional, scientific, technical + administrative activities	5	26	11	
Defence, education, human health, social work	2	33	10	
Arts, entertainment and recreation + others	11	42	14	
Activities of households as employers	13	84	5	

Source: EWCS 2015 (own calculations)

Finally, Figure 14 examines the gendering of employment. This reveals that dependent self-employment is more prevalent in workplaces where mostly men have the same job title as the dependent self-employed, but is most prevalent in workplaces where nobody else has the same job title as the dependent self-employed person.

Figure 14. Participation in dependent self-employment: by gendering of employment

At your place of work are workers with the same job title as you ...?	Dependent self-employed			
	Percent of:			Of which:
	All employment	Self-employed		
Mostly men	3	30	24	
Mostly women	1	23	8	
Approximately equal numbers of men and women	3	37	17	
Nobody else has the same job title	13	30	51	

Source: EWCS 2015 (own calculations)

To evaluate whether these trends from the above descriptive statistics remain significant when one controls for other variables and holds them constant, Table 2 presents a logistic regression analysis of the prevalence of dependent self-employment. In order to

enable a comparison with other forms of precarious employment, the second model reveals the results for those who are employed without a written contract.

For a quarter of century across the EU28, the Employment Information Directive 1991 (91/553/EEC) has stated that every employee (however defined by member state law) has the right to a written statement of the terms and conditions of their employment. Employers violating the labour laws of their member state by not issuing a written contract or terms of employment therefore are doing so to evade paying tax and social contributions owed if they formally employ an employee. Annex II provides descriptive data on the share of total employment comprising those without a written contract of employment, along with descriptive data on their socio-demographic and socio-economic characteristics.

Starting with the characteristics of who is more likely to engage in dependent self-employment, the finding is that none of the socio-demographic variables are strongly significant. The propensity to engage in dependent self-employment is not significantly associated with either gender, age, educational level, whether the worker's parents were born in the country, the size of the household in which the worker lives, or even whether they find it difficult to make ends meet (i.e. a proxy indicator of poverty). The only significant correlation is between whether they are the main breadwinner in the household. Compared with those who contribute most to the household income, the propensity to engage in dependent self-employment is significantly higher among those who are not the main breadwinner in the household and those who contribute equally to the household income. Dependent self-employment, therefore, is not a practice prevalent among those who contribute most to the household income.

When it comes to occupational, organisational and sector characteristics however, there are some significant differences in the propensity to engage in dependent self-employment:

- Workers in firms with employees are significantly less likely to be dependent self-employed than those who are sole traders.
- Those workers in workplaces where men are more likely to have the same job title as them are significantly more likely to be dependent self-employed than workers in workplaces where women are more likely to have the same job title as them, but workers are less likely to be dependent self-employed in workplaces where men and women are equally likely to have the same job title as them.
- Workers in the public sector are significantly less likely to be dependent self-employed than workers in the private sector.
- Compared with managers, professionals, and skilled agricultural, forestry and fishing workers are significantly more likely to be dependent self-employed, and clerical support workers are significantly less likely to be dependent self-employed.
- Those employed in the agricultural, forestry and fishing sector are significantly more likely to engage in dependent self-employment than workers in all other sectors.

Comparing the characteristics of the dependent self-employed with another group of precarious workers, namely those working without a written contract of employment, the interesting finding is that there are some significant differences. The first important difference is that while socio-demographic characteristics were seldom significantly associated with the dependent self-employed as group, there are some significant socio-demographic characteristics associated with those working without a contract. They are significantly more likely to be younger, to have solely a primary education, to live in single person households, to have difficulty making ends meet, and not to be the main contributor to the household income.

Many of the occupational, business and sector characteristics of the dependent self-employed and those working without contract, nevertheless, are similar. Both types of worker are significantly more likely to be sole traders, employed in workplaces where men are more likely to have them same job title as them, and to be employed in agriculture, forestry and fishing, and craft and related trades. Workers without contract differ to the dependent self-employed in terms of the business, occupations and sectors in which they work in that they are also significantly more likely to be also found in

the households services sector, and compared with managers, are also more likely to be found among services and sales workers, and elementary occupations.

As such, although there are some similarities between the dependent self-employed and workers without a written contract, especially in terms of the occupations in which they work, firm size and sector, there are also significant differences. While the dependent self-employed appear to come from across the demographic and socio-economic spectrum, those working without contract tend to be significantly more likely to belong to vulnerable and marginalised groups of the population.

Table 2. Logistic regressions of the propensity for a worker to be dependent self-employed or an employee with no written contract, socio-demographic and business characteristics

Variable	Dependent self -employed		Employees with no written contract	
	β	se(β)	β	se(β)
<i>Gender (Female)</i>				
Male	-0.00543	0.147	0.112	0.126
Age	-0.0431	0.0270	-0.184***	0.0194
Age squared	0.000539*	0.000283	0.00215***	0.000212
<i>Education (Early childhood education/ Primary education)</i>				
Lower secondary education	0.0192	0.212	-0.140	0.175
Upper secondary education	0.126	0.202	-0.339**	0.166
Post-secondary non-tertiary education	-0.234	0.260	-0.470*	0.254
Short-cycle tertiary education	-0.00509	0.280	-0.0692	0.273
Bachelor or equivalent	0.287	0.287	-0.279	0.259
Master/ Doctorate or equivalent	0.270	0.292	-0.190	0.289
<i>Respondent's parents born in the country (No)</i>				
Yes	-0.193	0.158	-0.138	0.139
<i>Household size (1 person)</i>				
2 persons	-0.190	0.155	-0.464***	0.142
3 persons	-0.180	0.170	-0.535***	0.158
4 persons	-0.168	0.180	-0.404**	0.178
5 and more persons	-0.372	0.230	0.107	0.202
<i>Household ability to make ends meet (Very easily/ easy)</i>				
Fairly easily	0.142	0.144	0.139	0.147
With some difficulty	-0.0394	0.166	0.490***	0.143
With difficulty/ great difficulty	0.175	0.190	1.049***	0.151
<i>The person who contributes the most to the household income (The respondent)</i>				
Other person	0.460***	0.157	0.890***	0.121
All equally	0.867***	0.196	0.466**	0.205
<i>Number of employees in the company (1 - interviewee works alone)</i>				
2-9 employees	-2.101***	0.166	0.204	0.171
10-249 employees	-3.350***	0.231	-0.784***	0.194
250+ employees	-3.892***	0.360	-1.377***	0.222
<i>Workers with the same job title as the respondent at the work place (Mostly men)</i>				
Mostly women	-0.522**	0.221	-0.713***	0.169
Approximately equal numbers of men and women	0.411**	0.196	-0.244	0.165
Nobody else has the same job title	-0.00734	0.174	-0.260	0.173
<i>Sector (The private sector)</i>				
The public sector	-0.630**	0.295	-0.240	0.183
A joint private-public organisation/company	0.145	0.332	-1.151***	0.344
The not-for-profit sector or an NGO/ Other	0.0566	0.206	0.523***	0.168
<i>Occupation (Managers)</i>				
Professionals	0.752**	0.302	-0.251	0.426
Technicians and associate professionals	0.390	0.269	0.218	0.422
Clerical support workers	-1.168***	0.436	0.449	0.430

Service and sales workers/ Armed forces occupations	-0.352	0.270	1.019***	0.371
Skilled agricultural, forestry and fishing	0.714**	0.312	0.0182	0.488
Craft and related trades workers	0.165	0.273	0.464	0.390
Plant and machine operators, and assembly	0.00409	0.299	0.696	0.472
Elementary occupations	0.249	0.277	1.403***	0.389
<i>Economic activities, NACE rev. 2 (Agriculture, forestry and fishing)</i>				
Industry (except construction)	-1.207***	0.305	-1.449***	0.308
Construction	-0.667**	0.284	-0.501*	0.300
Wholesale and retail trade; repair of motors	-1.149***	0.265	-1.286***	0.281
Transportation and storage	-0.237	0.287	-1.278***	0.419
Accommodation and food service activities	-1.916***	0.351	-0.225	0.296
Information and communication	-0.873**	0.385	-1.116**	0.495
Financial and insurance/ real estate activities	-1.249***	0.364	-1.755***	0.491
Professional, scientific, technical + administrative activities	-1.467***	0.301	-0.890***	0.284
Defence, education, human health, social work	-1.696***	0.301	-0.409	0.289
Arts, entertainment and recreation + others	-0.653**	0.277	-0.222	0.295
Activities of households as employers	-1.740***	0.345	0.812***	0.280
Constant	0.510	0.711	1.037	0.682
Observations	32,008		32,008	
F	25.20		22.82	
p >	0.000		0.000	

Notes: All coefficients are compared to the benchmark category, shown in brackets.

Significant at: *** p<0.01, ** p<0.05, * p<0.1.

Source: EWCS 2015 (own calculations)

3.2. Working conditions of the dependent self-employed

3.2.1. Physical Environment

The dependent self-employed are more likely than other employees to be exposed for a quarter of their time or more to a range of physical hazards in the workplace (see Table 3). On the whole, therefore, the physical environment in which they work is worse than for other employees. There are, however, exceptions. For example, a greater proportion of the dependent self-employed are less exposed for a quarter of their time or more to noise so loud that you have to raise your voice to talk to people. Is it also the case, however, that the physical environment in which they work is worse than that witnessed by employees with no written contract? As shown, the dependent self-employed are more likely than employees without a written contract to be exposed for a quarter of their time or more to physical hazards in the workplace, and thus work in a poorer physical environment than employees without a written contract. This is reflected in their mean index score (see Appendix for further details of how this mean index score was calculated).

Table 3. Physical environment index by employment status in EU28

	Dependent self-employed	Employees with no written contract	All employment
<i>Proportion of workers (%): A quarter of the time or more</i>			
Vibrations from hand tools, machinery	22	17	19
Noise so loud that you would have to raise your voice to talk to people	23	23	27
High temperatures which make you perspire even when not working	28	27	23
Low temperatures whether indoors or outdoors	32	27	21
Breathing in smoke, fumes (such as welding or exhaust fumes), powder or dust (such as wood dust or mineral dust)	17	11	14
Breathing in vapours, such as solvents and thinners	12	10	11
Handling or being in skin contact with chemical products or substances	20	17	17
Tobacco smoke from other people	10	12	9
Handling or being in direct contact with materials which could be infectious, such as waste, bodily fluids, laboratory materials, etc.	11	11	14
Tiring or painful positions	51	46	43
Lifting or moving people	8	12	10
Carrying or moving heavy loads	40	34	31
Repetitive hand or arm movements	66	59	61
Mean index score (0-100)	82	84	84

Source: EWCS 2015 (own calculations)

3.2.2. Work Intensity

Table 4 reports whether the dependent self-employed are more likely to suffer from work intensity in their working conditions compared with all others in employment and also those working without a written contract. This is the only working conditions index where a small value means that the job quality is better. As can be seen, on issues of work intensity, the dependent self-employed are less likely to suffer from worse work intensity than all others in employment, and those without a written contract of

employment are even less likely to suffer from work intensity problems than the dependent self-employed. This is the case across all three sub-indices of work intensity. The dependent self-employed are less likely to suffer from work intensity problems than all in employment both with regard to quantitative demands, pace determinants and inter-dependency and also emotional demands. It must be concluded, therefore, that work intensity problems are less commonly witnessed by the dependent self-employed compared with all in employment.

Table 4. Work intensity index by employment status in EU28

		Dependent self-employed	Employees with no written contract	All employment	
		<i>Proportion of workers (%)</i>			
Quantitative demands	Working at very high speed (three-quarters of the time or more)	29	27	33	
	Working to tight deadlines (three-quarters of the time or more)	32	25	36	
	Enough time to get the job done (never or rarely)	6	9	10	
	Frequent disruptive interruptions (never)	36	36	22	
	<i>Index dimension – mean score (0-100)</i>	32	30	39	
Pace determinants and interdependency	Interdependency: three or more pace determinants	12	24	32	
	Work pace dependent on:	The work done by colleagues	15	31	39
		Direct demands from people such as customers, passengers, pupils, patients, etc.	64	56	67
		Numerical production targets or performance targets	36	29	42
		Automatic speed of a machine or movement of a product	12	12	18
		The direct control of your boss	14	34	35
<i>Index dimension – mean score (0-100)</i>	26	30	39		
Emotional demands	Hiding your feelings at work (most of the time or always)	25	28	31	
	Handling angry clients, customers, patients, pupils, etc. (three-quarters of the time or more)	15	12	16	
	Being in situations that are emotionally disturbing (a quarter of the time or more)	26	23	30	
	<i>Index dimension – mean score (0-100)</i>	25	23	30	
Mean index score (0-100)		28	27	36	

Source: EWCS 2015 (own calculations)

3.2.3. Working time quality

Table 5 reports whether the dependent self-employed are more likely to suffer from work time quality issues compared with all others in employment and also those working without a written contract. As can be seen the working time quality is slightly lower for the dependent self-employed than for all in employment, suggesting that the working conditions on this issue is slightly worse for the dependent self-employed. This is not the case on all sub-indices however. Although on issues of duration and atypical working time, the dependent self-employed have worse working conditions than all in employment, on the issues of having control over working time arrangements and flexibility, they have better working conditions than all in employment. Overall, nevertheless, they more commonly suffer slightly worse working conditions than all in employment on the issue of work intensity.

Interestingly, on the issue of work intensity, they are also more likely to suffer worse work intensity issues in the workplace than those without a written contract of employment, who in fact are less likely to suffer work intensity problems than all in employment.

Table 5. Working time quality index by employment status in EU28

		Dependent self-employed	Employees with no written contract	All employment	
		Proportion of workers (%)			
Duration	Long working hours (48 hours or more a week)	29	11	16	
	No recovery period (less than 11 hours between two working days)	27	21	23	
	Long working days (10 hours or more a day)	38	18	32	
	<i>Index dimension – mean score (0-100)</i>	69	83	76	
Atypical working Time	Night work	19	14	19	
	Saturday work	71	53	51	
	Sunday work	40	30	30	
	Shift work	5	11	20	
	▪ Daily split shift	17	8	7	
	▪ Permanent shift	28	42	40	
	▪ Alternating/rotating shifts	31	43	49	
	▪ Other type of shift work	24	7	4	
	<i>Index dimension – mean score (0-100)</i>	67	74	72	
Working time arrangements	Control over working time arrangements	Set by the company	11	45	56
		Can choose between different schedules	5	5	9
		Can adapt working hours	16	23	19
		Entirely determined by self	68	27	16
	Change in working time arrangement	No regular change	62	67	69
		Change the same day	23	9	5
		Change the day before	2	14	8
		Change several days in advance	10	8	13
		Change several weeks in advance	3	2	5
	Requested to come to work at short notice (at least several times a month)	19	19	12	
	<i>Index dimension – mean score (0-100)</i>	91	86	87	
Flexibility	Very easy to arrange to take an hour off during working hours to take care of personal or family matters	48	35	25	
	Work in free time to meet work demands (at least several times a month)	31	18	22	
	<i>Index dimension – mean score (0-100)</i>	74	74	70	
Mean index score (0-100)		75	79	76	

Source: EWCS 2015 (own calculations)

3.2.4. Social Environment

Table 6 reports whether the dependent self-employed are more likely to suffer from a worse social environment when working compared with all others in employment and also those working without a written contract. As can be seen, the social environment is overall fairly similar for the dependent self-employed compared with all in employment. However, there are marked differences in the two sub-indices. Although the likelihood of the dependent self-employed witnessing adverse social behaviour is very much on a par with all in employment, the social support index manifested in terms of receiving help and support from colleagues is markedly lower than for all in employment. Only 47 per cent of the dependent self-employed assert that they receive help and support from colleagues most/all of the time, compared with 71 per cent of all others in employment.

Table 6. Social environment index by employment status in EU28

			Dependent self-employed	Employees with no written contract	All employment
			<i>Proportion of workers (%)</i>		
Adverse social behaviour	In the last month	Exposure to verbal abuse	9	8	12
		Exposure to unwanted sexual attention	2	2	2
		Exposure to threats	4	2	5
		Exposure to humiliating behaviours	6	5	6
	Over the last 12 months	Exposure to physical violence	1	1	2
		Exposure to sexual harassment	0	1	1
		Exposure to bullying /harassment	2	3	5
<i>Index dimension – mean score (0-100)</i>		96	97	96	
Social Support	Help and support from colleagues (most of the time/always)		47	61	71
	<i>Index dimension – mean score (0-100)</i>		53	64	72
Mean index score (0-100)			85	86	85

Source: EWCS 2015 (own calculations)

3.2.5. Skills and Discretion

Table 7 reports whether the dependent self-employed are more likely to suffer from worse working conditions so far as the use of skills and discretion are concerned compared with all others in employment and also those working without a written contract. As can be seen, the skills and discretion index for the dependent self-employed is overall slightly better for the dependent self-employed compared with all in employment, and much better than for those working without a written contract. However, there are marked differences in the two sub-indices. Compared with all others in employment, the likelihood of the dependent self-employed witnessing problems is greater on the cognitive dimension, and very markedly lower on the training dimension (i.e. they receive very poor training). However, on the decision latitude dimension and organisation participation dimensions, the dependent self-employed score markedly higher than all others in employment. For example, they are more likely to have the ability to choose or change their order of tasks or rate or speed of work, and are more likely to feel that they have been consulted on changes in the workplace, to be able to improve work process and to influence decisions that are important to their work.

Table 7. Skills and discretion index by employment status in EU28

		Dependent self-employed	Employees with no written contract	All employment
		<i>Proportion of workers (%)</i>		
Cognitive Dimension	Solving unforeseen problems	84	66	83
	Carrying out complex tasks	53	34	62
	Learning new things	65	42	71
	Working with computers, smartphones and laptops, etc. (at least a quarter of the time)	38	21	57
	Ability to apply your own ideas in work ('sometimes', 'most of the time' and 'always')	92	71	78
	<i>Index dimension – mean score (0-100)</i>	62	43	64
Decision latitude	Ability to choose or change order of tasks	79	66	68
	Ability to choose or change speed or rate of work	84	73	71
	Ability to choose or change methods of work	82	69	69
	Having a say in choice of work colleagues ('always' or 'most of the time')	46	26	29
	<i>Index dimension – mean score (0-100)</i>	78	64	62
Organisational participation	Consulted before objectives are set for own work ('always' or 'most of the time')	57	42	46
	Involved in improving the work organisation or work processes of own department or organisation ('always' or 'most of the time')	64	40	49
	Ability to influence decisions that are important for your work ('always' or 'most of the time')	78	42	47
	<i>Index dimension – mean score (0-100)</i>	73	50	57
Training	Training paid for or provided by employer over the past 12 months (or paid by oneself if self-employed) (%)	13	11	38
	On-the-job training over the past 12 months (%)	13	14	34
	<i>Index dimension – mean score (0-100)</i>	13	12	36
Mean index score (0-100)		56	42	55

Source: EWCS 2015 (own calculations)

3.2.6. Job and career prospects

Table 8 displays that the dependent self-employed are more likely to perceive themselves as suffering from worse job and career prospects than all others in employment, but are less likely than those without a written contract of employment to view themselves as suffering worse job and career prospects. Indeed, this is the case across all three sub-indices related to career prospects, job security and the prospect of downsizing. Indeed, the view of the dependent self-employed on job and career prospects is markedly lower than for all others in employment, but not as low as for those without a written contract or terms of employment.

Table 8. Prospects index by employment status in EU28

		Dependent self-employed	Employees with no written contract	All employment
		Proportion of workers (%)		
Career prospects	My job offers good prospects for career advancement (strongly agree and tend to agree)	36	21	38
	<i>Index dimension – mean score (0-100)</i>	45	32	48
Job security	I might lose my job in the next six months (strongly agree and tend to agree)	19	27	16
	<i>Index dimension – mean score (0-100)</i>	70	61	74
Downsizing	During the last three years (or last year according to seniority in the company), has the number of employees at your workplace increased, stayed the same or decreased: decrease in employment	10	17	22
	<i>Index dimension – mean score (0-100)</i>	49	47	50
Mean index score (0-100)		54	48	57

Source: EWCS 2015 (own calculations)

3.2.7. Is dependent self-employment significantly worse?

To evaluate whether these marked differences in the working conditions and job quality of the dependent self-employed persist when other variables are taken into account and controlled for, such as their age, gender, educational level, firm size, sector and occupation, a logistic regression analysis was undertaken. Table 9 reveals some very different results to the crude descriptive statistics above on job quality and working conditions. The finding is that the dependent self-employed are not significantly more likely to suffer poorer working conditions so far as five of these six indices of job quality are concerned. Indeed, it is only on the social environment index that the dependent self-employed suffer significantly worse working conditions than all others in employment. The dependent self-employed, therefore, have a significantly poorer social environment in their workplace.

This is not the same, however, for those without a written contract. After taking into account and controlling for other characteristics, they suffer from significantly worse working conditions compared with all others in employment not only in terms of the indices of work intensity but also skills and discretion, and job and career prospects.

Table 9. Logistic regressions of the propensity for a worker to be dependent self-employed or an employee with no written contract: socio-demographic and business characteristics and job quality indices

Variable	Dependent self-employed		Employees with no written contract	
	β	se(β)	β	se(β)
<i>Gender (Female)</i>				
Male	-0.00220	0.147	0.185	0.129
Age	-0.0509*	0.0276	-0.179***	0.0206
Age squared	0.000607**	0.000291	0.00205***	0.000225
<i>Education (Early childhood education/ Primary education)</i>				
Lower secondary education	0.0275	0.219	-0.107	0.178
Upper secondary education	0.131	0.206	-0.275	0.171
Post-secondary non-tertiary education	-0.170	0.262	-0.372	0.258
Short-cycle tertiary education	0.0278	0.285	0.145	0.290

Bachelor or equivalent	0.334	0.291	-0.132	0.264
Master/ Doctorate or equivalent	0.321	0.301	0.0330	0.300
<i>Respondent's parents born in the country? (No)</i>				
Yes	-0.199	0.162	-0.0545	0.142
<i>Household size (1 person)</i>				
2 persons	-0.168	0.156	-0.397***	0.145
3 persons	-0.140	0.174	-0.448***	0.162
4 persons	-0.116	0.183	-0.304*	0.184
5 and more persons	-0.318	0.232	0.272	0.205
<i>Household ability to make ends meet (Very easily/ easy)</i>				
Fairly easily	0.143	0.148	0.0755	0.153
With some difficulty	-0.0599	0.168	0.322**	0.147
With difficulty/ great difficulty	0.132	0.196	0.781***	0.162
<i>The person who contributes the most to the household income (The respondent)</i>				
Other person	0.444***	0.163	0.829***	0.124
All equally	0.909***	0.197	0.527**	0.207
<i>Number of employees in the company (1 - interviewee works alone)</i>				
2-9 employees	-2.068***	0.170	0.188	0.183
10-249 employees	-3.305***	0.235	-0.822***	0.207
250+ employees	-3.851***	0.371	-1.286***	0.237
<i>Workers with the same job title as the respondent at the work place (Mostly men)</i>				
Mostly women	-0.514**	0.226	-0.687***	0.172
Approximately equal numbers of men and women	0.344*	0.200	-0.292*	0.170
Nobody else has the same job title	0.0577	0.176	-0.211	0.185
<i>Sector (The private sector)</i>				
The public sector	-0.609**	0.293	-0.147	0.197
A joint private-public organisation/company	0.149	0.337	-1.078***	0.349
The not-for-profit sector or an NGO/ Other	0.102	0.219	0.579***	0.179
<i>Occupation (Managers)</i>				
Professionals	0.745**	0.307	-0.457	0.431
Technicians and associate professionals	0.341	0.272	0.0229	0.428
Clerical support workers	-1.325***	0.456	0.135	0.434
Service and sales workers/ Armed forces occupations	-0.424	0.273	0.619*	0.376
Skilled agricultural, forestry and fish	0.635*	0.328	-0.356	0.493
Craft and related trades workers	0.104	0.283	0.0804	0.395
Plant and machine operators, and assembly	-0.0796	0.305	0.158	0.483
Elementary occupations	0.0881	0.306	0.813**	0.399
<i>Economic activities, NACE rev. 2 Agriculture, forestry and fishing</i>				
Industry (except construction)	-1.206***	0.309	-1.532***	0.315
Construction	-0.644**	0.287	-0.477	0.306
Wholesale and retail trade; repair of motors	-1.135***	0.268	-1.336***	0.288
Transportation and storage	-0.266	0.284	-1.345***	0.426
Accommodation and food service activities	-1.877***	0.353	-0.266	0.305
Information and communication	-0.821**	0.384	-1.166**	0.491
Financial and insurance/ real estate activities	-1.280***	0.372	-1.653***	0.491
Professional, scientific, technical + administrative activities	-1.471***	0.311	-0.938***	0.288
Defence, education, human health, social work	-1.718***	0.309	-0.485	0.296
Arts, entertainment and recreation + others	-0.683**	0.282	-0.206	0.301
Activities of households as employers	-1.740***	0.362	0.780***	0.283
JOB QUALITY INDICES				
Physical environment index	-0.139	0.491	0.0670	0.484
Work intensity index	-0.549	0.411	-0.652*	0.349
Work time quality	0.000185	0.387	0.268	0.318
Social environment index	-1.015***	0.365	0.543	0.334
Skills and discretion index	-0.142	0.313	-1.721***	0.287
Prospects index	-0.198	0.315	-1.166***	0.273
Constant	2.038**	1.006	2.187**	0.914

Observations	31,884	31,884
F	22.55	22.13
p >	0.00	0.00

Notes: All coefficients are compared to the benchmark category, shown in brackets.

Significant at: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Normalized indices included (0 to 1).

Source: EWCS 2015 (own calculations)

4. Policy approaches

The previous section revealed that poor working conditions are not confined to those in dependent self-employment. Decent work deficits exist across the spectrum of employment relationships. The objective, therefore, should be to address decent work deficits in all forms of employment relationship, including dependent self-employment. It is thus necessary for governments, as well as employers, workers and their collective organisations, to seek the goal of promoting decent work for all.

Indeed, to focus upon solely addressing decent work deficits in the realm of dependent self-employment, such as by ensuring that these workers have the same rights and protections as those in the standard employment relationship (SER), might mean that the problem of decent work deficits is merely pushed into other forms of employment relationship, such as genuine self-employment. This is not to deny, however, that specific actions are required in the realm dependent self-employment.

Firstly, therefore, the policy options available for addressing the employment misclassification of dependent self-employment will be here reviewed. Then turning attention to tackling decent work deficits across all employment relationships, including dependent self-employment, the second section addresses the issue of strengthening collective bargaining, and the third section addresses how to adapt social protection, whilst the fourth and final section returns to the overarching issue briefly addressed at the beginning of this report regarding the quantity of jobs and the notion of ‘social inclusion through employment’.

4.1. Addressing the misclassification of employment: policy options

In the vast majority of legal systems, a ‘binary divide’ exists between employment and self-employment, with ‘employment’ serving as the basis for labour regulation and protection. It is therefore the regulation and tax gaps between employment and self-employment existing in many countries that drive employers to misclassify workers as self-employed. They then fall outside the scope of labour law protections (dismissal, holiday pay, sick leave) and collective bargaining coverage, and are subject to different fiscal and tax regulations.

For this reason, in 2006, the International Labour Conference adopted the Employment Relationship Recommendation No. 198 to regulate the scope of the employment relationship and avoid circumvention of the labour and social protection attached to it. This set out a series of principles to help countries tackle employment misclassification. Recommendation No. 198 establishes the principle of the ‘*primacy of facts*’, whereby the determination of the existence of an employment relationship should be guided by the facts relating to the actual performance of work, rather than on how the parties describe the relationship. Many jurisdictions use such a principle either statutorily or via case law, including for example Bulgaria, Ireland, Italy, Poland and the UK (see ILO, 2016).

A second principle is determining that workers with certain characteristics must be deemed to be either employed or self-employed. Dependent self-employment in most EU Member States legally falls within a grey zone and the need has been identified for criteria to more effectively define whether a worker is employed or self-employed. This is being addressed in various ways across the EU28. Some EU Member States have introduced a hybrid legal category which is intended to provide dependent self-employed workers with some legal rights that would not exist under the legal status of self-employment (e.g. Germany, Italy, the Netherlands and Portugal). Other countries have maintained the binary divide between employment and self-employment and the approach towards the dependent self-employed has included: (i) presumptions that these are employees and fall within the scope of employment protection legislation (France, Greece, Luxembourg); (ii) reversal of

the burden of proving employee status (Belgium); and (iii) listing criteria that enable the classification of workers as either employees or self-employed (Austria, Belgium, Germany, Ireland) (ILO, 2016).

How, therefore, can employers be persuaded not to misclassify workers? Given that a major driving force for doing so is financial gain, one option is to ensure that the costs of misclassifying workers outweigh the benefits. To increase the costs, governments can increase the penalties and/or the risks of detection.

Sanctions for misclassification range from requalification of the employment relationship into the proper contractual relations, through to criminal sanctions, with various civil and economic sanctions in between. In many Member States, the main sanction is the requalification of the employment relationship. Hence, labour courts do not declare the employment relationship null and void, but instead alter it to dependent employment, retroactively since the start of the employment relationship. Such rulings are viewed as having a ‘declaratory’ efficacy. Moreover, all the rights (especially minimum wage and pension contributions) associated with the real contractual relationship (the declared one) are applied to the employee and the costs borne by the employer, as if the relationship had been correctly qualified since the outset. This is the case for the Czech Republic, Finland, France, Germany, Ireland, Luxembourg, Portugal, Sweden, UK and the Netherlands. In other Member States, the requalification of the employment relationship is limited to certain effects or circumstances. Under Romanian law, the requalification of self-employment as employees is relevant only for fiscal matters. Italian and Greek laws exclude the possibility to requalify the employment relationship when the employer is a public administration, in this case only providing for economic compensation. In Norway, requalification of the employment relationship is provided for as an alternative to economic compensation and the choice between the two is left up to the worker experiencing fraud. In Ireland, Poland and the UK, only judges, and not labour inspectorates or equivalent control bodies, can requalify the contractual relationship between employer and employee, meaning that it is necessary for the employee to sue the employer. Moreover, the length and costs of trials, as well as the fear of being labelled a ‘difficult worker’, often discourage workers from taking action. Sweden specifically addresses this problem by allowing trade unions to directly sue the employer on behalf of the worker.

Although sanctions aimed at deterring dependent self-employment are common, detecting such violations and effectively implementing sanctions remain difficult, which weakens the actual deterrence power of penalties. This is due to the difficulties facing labour inspectorates and judges in detecting such practices, and also the obstacles preventing workers from taking an action against their employer (i.e., time, cost, lack of appropriate information on workers’ rights), including the uncertain outcome of taking this kind of action before administrative or judicial authorities.

An alternative to this deterrence approach that raises the perceived and/or actual costs of misclassifying workers so that they outweigh the benefits, is to increase the rewards for not employing workers as dependent self-employed. This might involve equalising the financial costs of employers using dependent employment compared with outsourcing to the self-employed through a contract for services. Another option would be to use ‘positive sanctions’ to reduce the use of dependent self-employment. In the Italian labour market reform approved in 2015 (Decree No. 81/2015), an amnesty was introduced regarding possible fines and compensation if the employer transformed an existing self-employed contract (including those suspected as being bogus self-employment) into an open-ended subordinate employment contract by the end of 2015 (Eurofound, 2016).

The problem with solely seeking to address dependent self-employment, however, is that the problem of decent work deficits will be merely pushed into other forms of employment relationship, such as pure self-employment, just as has previously occurred with family workers. For this reason, it is necessary to address decent work deficits across the spectrum of employment relationships. To do this, various options are available.

4.2. Tackling decent work deficits: collective responses

A first means of addressing decent work deficits across the spectrum of employment relationships, including dependent self-employment, is to pursue collective responses. These can range from the pursuit of awareness raising approaches to collective bargaining.

Social partners for example can seek to increase commitment to reducing decent work deficits, notably by organising information and awareness raising campaigns. In Austria, for example, the white-collar Union of Salaried Employees, Journalists and Graphical Workers (GPA-djp) created specific websites for this purpose. In Spain, the Trade Union Confederation of Workers' Commissions (CC.OO) in Extremadura, in cooperation with the Spanish labour inspectorate, established an 'online mailbox' for workers to report fraudulent situations. Employer associations could also be involved in such awareness raising, such as at the sectoral and local levels, especially with regard to building a shared commitment to ensure correct and fair employment conditions. Joint trade union–employer initiatives, often at sectoral level, can provide information and assistance to companies and workers and contribute to monitoring the situation.

Another collective response is to build the capacity of unions to organize the dependent self-employed, not least to ensure their effective representation in collective bargaining, and to use collective bargaining to develop regulatory measures to address decent work deficits, as well as by advancing other collective efforts and building alliances between unions and other organizations in order to develop effective collective responses to decent work deficits in both dependent self-employment and other employment relationships.

The use of collective agreements, which can be tailored to the specific sectoral or occupational circumstances to regulate the terms and conditions of employment, is another way forward. The problem, however, is that the coverage of collective agreements remains limited in many Member States. There are situations in which such workers do not have the right to organize or bargain collectively as a result of legal impediments. A first solution with respect to freedom of association and collective bargaining is therefore to ensure that the legislative framework effectively protects and promotes these rights for all workers. Establishing a legislative framework that allows workers' organizations to operate freely and to choose how they are structured (for example, at the enterprise, sectoral, occupational or national level), as well as to remove impediments to the affiliation of all workers is a prerequisite in ensuring inclusive union strategies and actions in favour of non-standard workers. To remove or close regulatory gaps in the protection of collective rights, the right of the dependent self-employed and non-standard workers to establish and join trade unions must first be established, as well as the right of trade unions to affiliate and organize them.

The dependent self-employed, without a recognised employment relationship, are often not covered by collective agreements that are negotiated and find it difficult to engage in collective bargaining. A step towards regulating dependent self-employment is thus to recognize the existence of this employment relationship. Some collective agreements address the reclassification of dependent self-employed as wage employees, such as in the case of the agreement in the Netherlands postal and parcel delivery sector, which concerned businesses that were using self-employed deliverers, many of whom were earning less than the national minimum wage. This agreement stipulated that these businesses had to convert 80 per cent of the existing contracts with deliverers into employment contracts by the end of 2013.

In countries where dependent self-employment is a legal category, examples exist of collective agreements directed at them. In Germany, an agreement was signed in 2009 between the national Federation of German Newspaper Publishers (BDZV), several regional publisher associations and two trade unions (DJV and ver.di). This treats self-employed freelance journalists as 'employees' if at least 50 per cent of their income derives from a single employer or client in the journalism sector, and sets collectively agreed fees

for articles and images provided by them. In Italy, similarly, the main trade union organizations (CGIL, CISL and UIL) have had special structures in place since 1998 for representing non-standard workers, including those with a status midway between dependent and autonomous employees (*parasubordinati*).

There are also cooperative solutions. In Belgium, SMart is a cooperative with 60,000 members, supporting them by invoicing and collecting debts for them. In France, legislation that came into force in January 2016 recognises the role of 72 business and employment cooperatives, supporting members with accounting and access to sickness pay and benefits of conventional employees. The best services offer back-office support, debt management, contract advice, access to finance, sickness insurance, the shared use of equipment and access to workspace. Collective bargaining for the self-employed is complicated by competition law, which seeks to restrict the sharing of sensitive information across businesses, potentially restricting the extent to which groups of self-employed people can work together around general or minimum rates of charges for their work. Where they are members of a cooperative, and not in a position of market dominance, this risk is reduced. Collective responses, however, are not the only way of addressing decent work deficits.

4.3. Tackling decent work deficits: adapting social protection

Decent work deficits across the spectrum of employment relationships, including dependent self-employment, can also be pursued by improving social protection systems to ensure that all workers benefit from social protection coverage. This may include making systems more flexible with regard to contributions required to qualify for benefits, allowing for interruptions in contributions, enhancing the portability of benefits between different social security systems and employment statuses, preventing the deliberate misclassification of workers in order to avoid social protection coverage and ensuring adequate coverage for the self-employed. These changes could be complemented by efforts to guarantee a universal social protection floor by complementing social insurance programmes with non-contributory programmes that provide a basic level of coverage for everybody.

Some workers may not be covered or may have inadequate coverage under the existing social security systems, or may be covered by the law, yet still fail to meet the eligibility criteria for specific benefits. They may also face lower benefit levels as a result of their low wages and contributions, unless a minimum level of protection is introduced. Exclusion from coverage may also occur if social security contributions are not made on their behalf, despite being legally covered. There are also workers who do not meet minimum contribution thresholds for pension or unemployment insurance, and are thus not eligible to receive benefits.

To evaluate the range of policy options, the ILO (2016) asserts that four different types of protection system, variously linked to the employment relationship, need to be distinguished:

1. *Social protection linked to a contract with a specific employer*, such as employer liability for paid maternity leave, sick leave and workers' compensation, severance pay, employer-sponsored health or pension insurance. Such protection is effective only while workers are employed with the specific employer; protection is lost when they leave the job.
2. *Social protection linked to status as a salaried employee*, meaning that workers moving from one job to another continue to be covered and are also covered to varying degrees during periods of unemployment. This is normally provided through social insurance to all employees, albeit with thresholds. Examples include health insurance, maternity protection insurance, employment injury insurance, old-age and survivor pensions, or unemployment insurance. In addition, some categories of employees may also be eligible for tax-financed benefits, such as in-work benefits for low-income earners.

3. *Social protection linked to employment (including non-salaried employment)*, meaning that social insurance schemes cover self-employed workers, through mandatory or voluntary coverage, potentially subsidized from public funds for those with very low incomes. Tax-financed programmes may also provide protection for this group, including health insurance, pensions, maternity protection or in-work benefits for low-income earners.
4. *Social protection linked to residency status*, normally financed from general government revenues, although they can combine contribution and tax financing. Examples can include social assistance, social pensions, child/family benefits, disability benefits, national health service or residency-based health insurance.

These four types of protection system are often combined in different ways in various countries. Financing through taxes can ensure a basic level of coverage for large groups of the population and construct a floor of social protection. Contributory mechanisms, and in particular social insurance, often linked to employment, ensure higher levels of protection.

Although many EU member states cover some categories of self-employed through mandatory or voluntary social insurance coverage (European Commission, 2014), coverage rates overall are low, resulting in significant social protection gaps for the self-employed. For example, most self-employed workers in Germany and Greece are excluded from sickness and maternity coverage, and only a few countries (Czech Republic, Denmark, Estonia, Hungary) provide social insurance cover for self-employed workers in the event of unemployment (OECD, 2015: 181). There are nonetheless a number of notable examples of social insurance coverage for self-employed workers (ISSA, 2012), including mandatory coverage of farmers in Austria and France through mechanisms adapted to their specific characteristics and needs, or the coverage of artists and related occupations through the artists' social insurance funds (*Künstlersozialkassen*) in Germany. In France, the status of '*auto-entrepreneur*' introduced in 2008 appears to have improved protection for some categories of self-employed workers, though there are still some concerns about potential increases in misclassified self-employment (European Parliament, 2013).

Responding to the use of dependent self-employment in order to avoid social insurance contributions, some Member States have sought to ensure equal treatment of the dependent self-employed. Austria, Germany and Italy have implemented measures to close protection gaps and ensure equal treatment with wage employees, such as by extending access to social security. In Italy, a special and separate social security fund was created for the dependent self-employed, aimed at hindering the use of this form of contractual relationship for the sole purpose of circumventing regulations on the payment of social security contributions (European Parliament, 2013).

To further facilitate social insurance coverage for the dependent self-employed, the World Employment Confederation (2016) argue that social protection must now be organised over an entire career and not on the basis of an employment contract or job status. Designed at a time when the SER dominated, social protection systems must evolve. In a modern labour market, social benefits should satisfy at least three conditions. First, they should be portable, attached to individual workers rather than to their employers. Second, they should be universal, applying to all workers (regardless of employment status) and all forms of employment or work. And third, they should be pro-rata, linking employers benefit contributions to time worked, jobs completed or income earned. The challenge is to separate the funding of social protection from regular payroll contributions. One option is to create an '*individual social account*' that you would keep throughout your professional life, regardless of who your employer is or what type of contract you are on. This would comprise all social rights (unemployment benefits, pension, education, social security, employee savings funds) and could be used when needed and on the individual's own initiative, for example to cover a leave of absence, a training programme, take early retirement, etc. This individual account would merge systems that are already in place in some countries such as vocational training or working time accounts. Employees would contribute to the account on the basis of years worked, and employers would fund and operate it like a social drawing rights system. The account could be

accessed at a time of professional difficulty (to ensure financial stability in the event of unemployment), in case of personal problems (to reorganise working time or take a sabbatical) or simply to address a wish for professional development (and eventually ensure greater mobility).

This could also include a quota of vocational training hours that can be used whenever necessary and required. Equally, working time could be calculated over an entire career, with individuals having to fulfil a specific amount of hours in order to be eligible for a full pension, regardless of their situation (employed, self-employed, etc.). In the Netherlands a pioneering example is a savings account system for pensions has been in place for 10 years. It allows workers to save a portion of their salary every year (up to 12 per cent of annual income) in a savings account and to use that money towards any form of unpaid leave (to care for children or elderly parents, to adopt, take a parental leave, a sabbatical or to leave for early retirement). This account stays open even if the employee changes jobs (it is attached to the individual, not to the company) (ILO, 2016).

4.4. Rethinking the relationship between employment and social protection

All these policy responses so far seek to tackle the decent work deficits in both dependent self-employment and across employment relationships in general. The intention is to equalise social inclusion and protection across all employment relationships. The problem, however, as briefly highlighted at the beginning of this report, is that the quantity of jobs is currently insufficient for all working age people to achieve social inclusion through employment. Just 70.1 per cent of those aged 20-64 are in employment (65.6 per cent of those aged 15-64), and only 43.4 per cent of the total EU population. Of the 508 million EU28 population, 287 million are without employment and of the 333 million EU working age population (aged 15-64), 117 million are without employment. What, therefore, is to be done about the social inclusion and protection of these 117 million working age people (and 287 million EU people) without employment?

It is obvious that not all working age people can be inserted into employment. There has never been an age of full-employment for all (Beck, 2000; Giddens, 1998; Gorz, 1999). If employment remains the linchpin for social protection, the 30 per cent excluded will have to be given some alternative coping mechanism. This might be either a passive welfare benefits system, or it could be payment for active citizenship and a reinvigorated non-employment sphere through which means of livelihood can be pursued. However, maintaining employment as the principal vehicle for social inclusion and protection, and introducing alternative work and welfare systems for the 30 per cent is not a solution. It creates a 'dual society' in which the majority finds salvation through employment and the rest are confined to a second class sphere.

An alternative is to pursue a 'full-engagement' (rather than full-employment) society which provides sufficient work (both employment and other means of livelihood) and income so as to give citizens the ability to satisfy their basic material needs and creative potential (see Beck, 2000; Williams and Windebank, 2003). The first step is to recognise and value work beyond employment, including family work, parental work, caring labour, work for oneself and voluntary work. Once work beyond employment is recognised and valued, the next step is to move towards giving it equal status to formal employment. At present, people are currently enabled to enter employment but much less attention is given to helping people to engage in work beyond employment. One way forward in this regard is the provision of a universal basic income (van Parijs, 2004). This would then enable people to choose whether they wish to engage in more employment to earn income to pay formal employees to provide their goods and services, or whether they wish to provide such goods and services themselves or in alternative ways. Whether or not this is deemed acceptable, the important point is that for 30 per cent of the EU working age population, social inclusion and protection through employment does not appear achievable.

In sum, if this report stimulates discussion about tackling dependent self-employment in the broader context of decent work deficits across all employment relationships, then it will have achieved one of its intentions. If this then leads to a debate about what is to be done about not only the deficits in the quality but also quantity of jobs, and the implications of this for social inclusion and protection, then it will have achieved its fuller intention.

5. Afterword: Self-employment, wage-employment and the future of work

A recent ILO report on ‘Non-standard employment around the world’ (ILO, 2016) shows that over the past few decades in industrialized countries, there has been a marked shift away from standard wage-employment³ to non-standard employment (NSE)⁴ and self-employment and EU countries experienced the same trends. The model of stable full-time wage-employment providing a professional career perspective which had been dominant from the 1950s until the end of the 1970s has gradually entered into crisis. There has been a development of precarious forms of work that has severely impacted the wage-employment model which was at the heart of post-WW2 welfare state societies. For Castells (1996: 268), ‘The traditional form of work, based on full-time employment, occupational clear-cut assignments, and a career pattern over the life cycle is being slowly but surely eroded away’. This phenomenon tends to completely reverse the balance between what was called the ‘typical’ and the ‘a-typical’ jobs that are becoming the new standard of employment.

In that context, the development of self-employment has emerged in recent years as a core issue in the employment policy debates in EU countries. The growing number of self-employed but also the new discourse and measures aimed at promoting entrepreneurs are linked to: i) some demands from workers for more autonomy, ii) new opportunities related to information technologies and iii) the evolution of the labour market with the scarcity of the standard form of employment opportunities leading workers to find alternatives to wage-employment, including accepting more or less voluntary self-employment. Technological change and, in particular, the development of the platform economy, has fostered the development of self-employment as a main source of income or very often as an additional source of income.

This trend is associated with a new dominant paradigm which exalts self-employment and the entrepreneurial spirit as a positive feature of the labour market to the detriment of the standard wage employee. The last three decades in the EU are marked by this growing negative perception by many employers and policy makers of standard wage-employment. The problem posed by the need for labour and wage flexibility in a global economy marked by increased competition led to negative issues, in the form of dismantling part of the labour market institutions established to secure both a welfare state and a compromise of capital/labour, without substitution of other collective principles linking productivity gains with working conditions’ gains.

5.1. Efficiency, fairness and the role of standard forms of employment

During what was called the ‘*Fordist era*’ (Boyer, 1986) or the ‘*golden age of capitalism*’ (Bowles and Gintis, 1995) in industrialized countries, one of the fundamental changes that took place is the emergence of a relatively explicit compromise on the sharing of the fruits of growth. The new growth model or regime of accumulation, i.e. *Fordism*, after the Second World War, was based on major institutional transformations to articulate productivity gains, innovation and better living and working conditions of the population. In the context of a national modernisation, the particularity of *Fordism* was the

³ Here understood as work that is full time, indefinite, as well as part of a subordinate and bilateral employment relationship.

⁴ Here understood as : i) temporary employment, ii) part-time work, iii) temporary agency work and other forms of employment involving multiple parties and iv) disguised employment relationships and dependant self-employment

synchronisation of mass consumption and mass production. Indexing real wages on productivity resulted in a steady increase in demand for consumer goods, which allowed the expansion of the industry of mass production, a systematic exploitation of returns to scale and optimal programming of investments. This resulted in strong endogenous growth over a long period. Between 1960 and 1973, the OECD countries experienced annual growth rates of real GDP close to five per cent and Western Europe built an unprecedented European Social Model. The new regime of accumulation in place was based on an inclusive approach of growth through a fair redistribution of productivity gains between capital and labour (in other words, an increase of the real wage), the development of standard wage employment offering greater security to workers and, finally, a welfare state guaranteeing stability of purchasing power of individuals through the growing importance of indirect income and the establishment of comprehensive systems of social protection. As Esping Andersen (1994: 3) points out, 'Economically, it departed from the orthodoxy of the pure market nexus and required the extension of income and employment security as a right of citizenship. Morally, it sought to defend the ideas of social justice, solidarity and universalism'.

But the late 1960s were marked by new conflicts over the distribution of income resulting from a slowdown in productivity gains while conflicts in the productive sphere were proliferating based on workers' discontent about the alienating labour organisation; those conflicts being mainly converted in wage increase demands. The progressive exhaustion of productivity gains from the *Fordist* and *Taylorist* organisation of work, combined with an increase of labour cost, led to the breakdown of the previous regime of accumulation which linked wage increases, technical innovation and productivity gains. From a core component of a virtuous growth model, standard wage-employment progressively became for firms an obstacle to flexibility and competitiveness. As a result, firms reorganised the productive sphere through two main strategies in order to face the new challenge of global competition. Firstly, the geographical restructuring of production, and the development of global supply chains, that aimed at benefitting from world-wide cost differentials, led to increased competition between territories to obtain foreign direct investment or supplier contracts through offering the best business environment (in terms of taxation, infrastructure, training, labour laws, etc.). Secondly, there was the transition to a regime of flexible accumulation based on the search for maximum flexibility in terms of labour, management and production. In this context, firms have outsourced some of their activities to subcontractors or service companies and they have increased labour flexibility – notably through the evolution of human resource management which greatly contributed to the weakening of the employment relationship, leading to the development of NSE and the shift from labour contracts to commercial contracts for a growing number of self-employed.

The paradox is that the current debate on self-employment contributed to reopening the debate on the future of wage-employment and its role in firms' organisation of work. To better understand the implications for the future of work, it is important to understand that the employment relationship is marked by its incompleteness, because it deals with the sale of the labour force and not of labour. It is a kind of 'mutual bet' from employees and employers based on two uncertainties: (i) the uncertainty of the employer on the quantity and quality of the work s/he will obtain from the employee, and (ii) the employee's uncertainty about the actual results of the enterprise and the fair distribution of its gain. Favereau (2016) clearly emphasises that the importance of work for the firm cannot be properly understood if one does not take into account its three dimensions and how they are interrelated. He stresses the need to consider work as: (i) production capacity; (ii) capacity for cooperation and (iii) capacity for innovation and learning. Too often, only the first and second are considered, which tends to give priority to the product of work, its counterpart in terms of the effort of the worker, and finally the strategic and incentive means for bringing employees to comply in a context of subordinate relationship.

However, a very important dimension of work that is underestimated in current debates on economic efficiency and competitiveness is the capacity of innovation which results

from individual and collective learning processes. First at the individual level, because a solution to a collective problem always originates in a person (an individual body and an individual brain); then its transmission to the collective level in order to put it in the memory of the firm. It is therefore necessary to consider a possibility of cooperation which is neither 'forced' nor 'purchased' as in traditional mainstream models. Cooperation continues to be subordinated, but it is built on a cooperative global scheme in which the employee has enough confidence in the firm to which s/he belongs to be ready to share her/his most personal resources (creativity, imagination, intelligence) to the point of transferring (by objectification) the fruit of his/her learning process to the firm which will benefit from it and transform it into collective learning. The key problem of incorporating individual learning into the collective scheme of the firm is that of an intersection between efficiency and equity from a dynamic perspective. For organizational learning to take place, the discoveries of those who have learned, their interventions and their evaluations must be recorded in the organisational memory, otherwise the individual has learned but not the organisation. (Argyris and Schön, 1978). Such a vision of work and cooperation leads to viewing the firm as a system of collective wealth creation providing an enabling environment for the transformation of individual learning into collective learning. For this to happen, nevertheless, loyalty and the feeling of belonging and fairness are essentials. The mere fact that people interact with one another over time in a firm in the framework of an employment relationship increases the value for each to continue to interact and play a cooperative game.

From this perspective, the development of NSE and self-employment poses the problem of cooperation and innovation in any situation where mutual gains are not realised and where loyalty and trust are impacted by the nature of the employment relationship.

Indeed, the normal behaviour of non-altruistic actors when they decide to play a cooperative game (for example, to commit to cooperation and collective learning) is strongly associated with some expectations in terms of fairness. They will participate only if they trust their firm and if they do not prefer to be cautious, wait, or exit which are different ways to stymie collective learning (Reynaud, 1997). In other words, any firm, whatever its management model, is based on a quasi-social pact articulating economic efficiency and fairness. Workers will play the cooperative game only if they think that the rules of the game are fair, and that they will benefit from their individual investment in a collective scheme. It can be in his/her long-term interest to suspend his/her short-term interest and opportunism. But it remains to be understood why/when a rational agent decides to do so. This decision is taken *ex ante* before knowing exactly what they will get from their cooperation. It means that the actors have to take a gamble and trust their firm. As Bowles and Gintis (1995) argue, '[m]ore equal societies may be capable of supporting levels of co-operation and trust unavailable in more economically divided societies. Both co-operation and trust are essential to economic performance, particularly where limited or asymmetric information make both state intervention and market allocations inefficient'.

The future of standard wage employment is more than ever at the heart of the thinking on the future of work because it is strongly connected to the development of our societies. It is clear that the more negativity is attached to the concrete nature of wage employment, the more the labour market will be flexible and the more the labour market will resemble a market like the others. Conversely, the more the positive role of wage employment is acknowledged in innovation and collective learning, the less the labour market will resemble a market as the others, and the more job creation and human resource management will result from a different logic than that of the market. (Favereau, 2016: 33).

5.2. Why the nature of the employment relationship does matter

The inability of firms to measure perfectly the amount of effort their workers are putting forth, and the fact that employers' need to motivate workers, change fundamentally the character of labour markets. Over the last three decades, the mainstream theory (notably contract theory, implicit contract theory, efficiency wage theory or the new theory of property rights) aimed at explaining why firms may find it optimal to manage the 'internal market' for labour and refrain from cutting wages in recessions even though wage reductions would decrease labour costs (Campbell and Kamlani, 1997). The failure of firms to reduce wages in the face of unemployment must mean that for some reason it is unprofitable for them to do so (Bulow and Summers, 1985). The potential importance of the linkages between the level of wages and workers' productivity is at the heart of a large and rich extended standard theory of labour markets.

As a result of the incompleteness of employment contracts, employers and workers cannot foresee everything, and it would be too costly and impossible to write off everything. The employment relationship and the employment contract are confronted by the distinction between 'neat' work (respecting the spirit of the contract) and 'basic' work (respecting only the letter of the contract). Only the latter can be imposed by the employer (or sanctioned by a competent authority). The former remains at the discretion of the employee (Lopes, 2016). A key distinctive feature of the Hart and Moore (2008) model is that it is based on the assumption that only 'perfunctory performance' is subject to contract. The 'consummate performance', which is what is in the 'spirit of the contract', is not subject to contract. Workers may like to 'do their best' but they only provide an exemplary effort if they feel well treated. What the contracting parties think they are entitled to is determined by the (incomplete) contract they sign *ex ante*. Extended standard theories show that where firms cannot monitor workers perfectly, they will pursue policies that will cause workers to value their jobs (Bulow and Summers, 1985). Better working conditions improve the discipline of the workers, give them a more loyal interest in the institution and raise their personal efficiency. In addition, firms' desire to decrease hiring and training costs and to retain workers – in particular because of the growing importance of immaterial work – with firm-specific human capital is an important factor explaining the rigidity of wages, particularly for white collars.

Doeringer and Piore (1971) have developed a dual labour market model where jobs in the primary sector are good jobs (high wages, job security, ladders for internal promotion) while jobs in the secondary sector are characterised by low wages and casual attachment between workers and firms. They emphasise that members of disadvantaged groups are confined to the secondary sector with low wage and low security jobs in contrast with 'good high wage jobs' in the primary sector. In their model, the labour market is not a market like the others as it is characterized by 'internal markets' where coordination is not based on market mechanisms. All surveys of wage rigidity have found that concerns for fairness play an important role in the functioning of that 'internal market', and in particular in explaining why firms normally refrain from cutting wages in recessionary periods. An internal labour market is none other than a set of procedures by which workers within the organisation are protected from the competition of outsiders. It is because there is this protection, and therefore this possible permanence, that the collective knowledge and learning process necessary for production and innovation, can be formed and increased. The possibility of organisational learning with what it implies for efficiency and productivity gains (in the future) compensates for the neutralisation of competition with what it implies inefficiency and unproductivity (in the present) (Favereau, 1989: 307).

Work is a specific human activity, which can be the subject of employment contracts or commercial contracts. But the effectiveness of the labour contract in relation to the commercial contract increases with the difficulty of evaluating and measuring performance, that is, as uncertainty about the worker's behaviour increases (Holmström and Milgrom, 1994). The key point to remember here is that the employer can legitimately

direct certain aspects of employees' behaviour within the employment relationship. Labour law gives the employer the right to 'cooperation' of the employee in areas not covered by explicit and implicit agreements. In this context, employment relationships are more effective than commercial contracts to the extent that they provide flexibility: The fact that, through the subordination relationship, the employer can determine which tasks to perform facilitates the adaptation to uncertainty once it is lifted, and this without any cost. In commercial contracts, on the other hand, tasks are defined in advance and cannot be adjusted to unforeseen circumstances without (costs of) renegotiation (Lopes, 2016).

We must take into account from a dynamic perspective the efficiency gains associated with the temporal dimension of learning which is itself deeply related with standard forms of employment. The employee does not merely make an effort at a given moment, she/he participates in a movement, in an acquisition, in increasing firm's efficiency (Reynaud, 1997). Employees, recognising that their working conditions are relatively secured by an 'internal market' are therefore willing to invest their cognitive resources in improving the internal functioning of the firm employing them; at least if they can hope to share with their employer the benefits of productivity and competitiveness gains in various forms (raising wages, reducing working hours, improving working conditions, etc.). As we have seen above, an individual agent will play the game of cooperation, accepting that his/her solutions fall into the public domain within the organisation, if s/he believes in an equitable functioning of the latter. Here, equity promotes efficiency, which in turn will promote equity by making possible self-interested altruism or enlightened selfishness (Simon, 1983: 53). Cooperation within the firm requires minimal legitimacy and therefore the presence in collective representations of a reduced model of social link which will serve as a reference for judging unforeseen contingencies in the course of the contractual relationship between the employer and the employee. The wage rule is a convention that makes sense only within a wider interpretative grid of the type of social pact that the firm conveys (Favereau and Lazega, 2002)

5.3. From material to immaterial work: implications for the employment relationship

We must first recognise that the 'old' type of material work is still dominant in the world. But progressively in some areas of the global economy, work in its immaterial form is tending to become hegemonic. This shift to the hegemony of a new type of work appears only as a global trend, but this trend sheds light on the current dynamics and the stakes for the future of work as we are now witnessing the rise of the immaterial economy. This does not mean that factories and industrial workplaces disappear, but simply that the most important share of value added in any production (agricultural, industrial or service) is concentrated in the upstream and downstream sectors. It is the design, delivery network, learning and accumulation of information and knowledge about the customers that matter most now in wealth creation. The activity in collaborative networks, the linguistic and symbolic relations that weave together human beings constitute the main source of productivity gains, creativity and wealth (Moulier-Boutang, 2015).

What is the value of a company in post-industrial times? Its value today increasingly depends on intangible assets such as 'goodwill' and transformative capacities, which can be created and destroyed very quickly (Hard and Negri, 2015). The emphasis on innovation, as a condition of competitiveness, leads firms to solicit a new type of work which is deeply involving the personality of employees. It is 'the soul' of the worker which is mobilised by the firm. The quality and quantity of work are reorganised around its immateriality (Negri, 2010). As a consequence, work in the post-industrial era takes a more important role in the life of employees, less instrumental and more identity related because employees are invited to commit themselves without reservation, in all dimensions of their humanity.

In the *Fordist* era the skilled worker developed knowledge and know-how which were mainly linked to a specific workplace and thus to specific coordination and cooperation schemes. But emotional and intellectual skills, the ability to create networks, to communication and other skills that characterise the new nature of work do not generally depend on a specific workplace. The power of immaterial work – which includes affective, communicative, scientific and intellectual activities – is not reduced to the sum of simple work or cooperation (whatever its complexity); it is characterised by creativity – as an expression of the common.

This transformation of work affects all workers in a different way, depending on their functions in the hierarchy of the firm and the economic sector where they work, but it is now an irreversible process. It is deeply linked to the development of information technologies, data mining, computational statistics and other sub-fields of Artificial Intelligence (AI) and to the price decline in the real cost of computing. Moreover, computerisation of work based on algorithms and big data is now rapidly expanding and affects routine and non-routine cognitive tasks (Brynjolfsson and McAfee, 2011). This is likely to change the nature of work across industries and occupations. But the new frontier of accumulation and productivity gains will depend upon the tasks computers are able to perform which ultimately depend upon the ability of a programmer to have access to the relevant set of information which should be channels from many different sources in a way to be able to write a set of procedures or rules that appropriately direct the technology in each possible contingency (Frey and Osborne, 2013). To do that and define the right algorithm, programmers need the cooperation of workers and users. This process requires from workers *engagement* with AI technologies throughout the process of completing a task and *supervision* related to the monitoring, licensing, and repair of AI (US Department of State, 2016).

We are here back to the central idea of collective learning which is nourished by individual learning. An individual agent will play the game of cooperation, accepting that his/her solutions fall into the public domain within the firm if s/he believes in an equitable functioning of it (Favereau, 1994). Such a commitment involves their flesh and heart, it requires that their work be part of a community of people, a system of lasting relationships where their personal investment is recognized. (Favereau, 2014). Computerisation will thus be determined not only by technological advances but by the nature of cooperation in the firm. Immaterial work is thus at the heart the new phase of capitalism as both AI workforce but also *users* who operate those applications in specific settings will drive fundamental advances in AI and related fields, refine AI methods for specific applications, and contribute to push the boundaries of productivity gains (US Dept, AI, 2016).

This trajectory of the world of work towards immaterial work has a great importance for human resource management in the firm and for the future of the employment relationship. Indeed, employers exercise more and more their functions of control and oversight from outside the productive process, since the content of the process belongs more and more to another mode of production, to the social cooperation of immaterial work. That new type of work is increasingly inclined to generate its own forms of social cooperation and to generate value added in an autonomous way.

Henceforth, wage-employment has the potential for personal fulfilment and collective innovation, which feeds entirely new expectations on the part of both employees and management. However, its current mode of exercise and organisation, mainly through labour market flexibilisation, far from releasing this potential, has rather hindered, even crushed, its potential. The shift towards NSE is at the heart of a process of dereliction – in other words, a state of complete neglect and moral loneliness – of wage-employees in firms. This situation is associated with a type of suffering unprecedented in the history of industrial civilisation: typical examples are ‘burn out’, moral harassment, suffering at work, and extreme professional stress, and risk of suicide. It is now common to group them under the label ‘psycho-social risks’. With this consequence that the ‘taste’ of work, this essential and enigmatic thing, is gravely threatened but also this other essential and

enigmatic thing which is the capacity of collective creation which is at the heart of firms' wealth collective creation (Favereau, 2016).

This severe deterioration of the employment relationship and trust within firms increase workers' feeling of 'indignation' as regard the functioning of the firm. In such a context, providing the minimum effort and not playing the cooperative game risk becoming the standard behaviour. Hence the risk for the capitalist system is no longer the multiplication of open conflict but the exodus, in other words a process of withdrawal from the relationship with capital, and the fostering of a non-cooperative game within the firm

The evolution of the employment relationship has a great impact on exit and voice options by workers (Hirschman, 1970). Voice always reflects the decision to 'stick' with the deteriorating firm or organisation and this decision is in turn based on: i) an evaluation of the chance of getting the firm 'back on the tracks' through one's own action and through that of others; ii) loyalty. Voice has the function of alerting a firm or organization to its failing and it is at the heart of any cooperative game. What is killing innovation and collective learning is less open or latent conflicts – that can be managed through conflict management mechanisms (based on the sequencing conflict – bargaining process – compromise) – than the exit option. The presence of loyalty makes exit less likely; in other words it can neutralise within certain limits the tendency to exit. Loyalty is associated with the reasoned expectation that improvement can be achieved from within. It reflects the willingness to fight for change from within. Loyalty is deeply related to trust and to the feeling of belonging associated to the employment relationship.

Not all forms of subordination within the firm are the same. Some are more effective at providing an enabling environment for collective learning which requires true (not artificial) interactions between employees, including their managers. A wage-employment system only stimulates the acquisition of individual skills and collective learning if employees do not prefer withdrawal or caution, seeing the immobility. The employment relationship is a convention that makes sense only within a wider analytical framework on the type of social pact the firm conveys (Favereau, 1999: 172). Cooperation within the company requires minimal legitimacy and therefore the presence in collective representations of a model of fairness which will serve as a reference for judging unforeseen contingencies in the course of the contractual relationship between the employer and the employee. With self-employment, or the most precarious segments of NSE, including bogus self-employment, dissatisfaction is more likely to take the form of silent exit. The evolution of the labour market with the erosion of institutional affiliations, the deterioration of legal protection for the most vulnerable, and the individualisation and quantification of performance and evaluation criteria is a source of disengagement of workers blocking initiatives of change from above – or of driving dynamics of endogenous innovations within the firm. It is expressed in the firm through resistance to change or restraining to strict 'basic work'. Short term efficiency based on the flexibilisation of the labour market raises major issues about long-term efficiency which is deeply interrelated with the feeling of fairness experienced or not by workers.

This evolution of the labour market is a concern because these employment arrangements are often associated with greater insecurity for workers when compared with standard wage-employment. NSE and self-employment, particularly when they are not voluntary, may increase workers' insecurities in different areas, including: i) employment security and mobility with the possibility of transitioning to better jobs less likely; ii) earnings security because of the dependence on commercial contracts and substantial wage penalties relative to comparable standard workers; iii) working time with workers in on-call employment, casual arrangements or commercial contracts typically having limited control over when they work with implications for work-life balance but also income security; iv) occupational health and safety (OSH) with significant OSH risks due to a combination of poor induction, training and supervision, communication breakdown and fractured or disputed legal obligations; v) social security as workers in non-standard employment and self-employment face a lack of continuity in employment and short working hours which may result in inadequate coverage or limited benefits during

unemployment and retirement; vi) training as it is less likely to receive on-the-job training which can have negative repercussions on career development or adaptive capacity to technological change and finally vii) representation as the workers in NSE and self-employment have more tenuous attachment to the workplace and are facing constraints and vulnerabilities which do not provide an enabling environment for joining an employers and workers' organization.

Unleashing the full potential of immaterial work calls for the construction of an alternative business model, which will be organised mainly around the 'innovation capacity' dimension of wage employment. Its objective will be to transform profits (redefined as corporate collective income) into jobs; but jobs that have meaning, their value and their effects have been the subject of continuous exploration and collective deliberation: what to produce and how to produce it? If the specialisations of individuals can constitute a first source of value (by the gains of individual productivity, plus the positive externalities expected of the combinations between specialisations), a rich and dense network of relations between subjects having their share of autonomy will open the way to additional creations of value, bringing about new positive externalities, unexpected, creating new unexpected specialisations.

To conclude, one of the major challenges for the world of work in the 21st century is the evolution of wage employment in firms. Either firms will continue to degrade the employment relationship quantitatively or qualitatively as in the past 30 years in the name of flexibility, profitability and competitiveness – at the risk of self-destruction of the conditions of cooperation and innovation, or they will seize the opportunity offered by the new modalities of work to both reconstruct the human foundation of a democratic capitalism and rebuild the conditions for efficiency and productivity gains from a dynamic perspective. Such a process could precisely bring about a democratisation of the organisation of the firm and a new social pact built on a renewal of the wage-employment form (Favereau, 2016). Faced with a growing phenomenon of fragmentation, indignation and anomia, firms have a key role to play in making liveable, practicable and thinkable the "live together" within the world of work to open a new era of decent work, inclusive growth and sustainable development.

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APPENDIX

Technical notes to European Working Conditions Survey

Data used

The report used the 2015 European Working Conditions Survey (EWCS). The sample used in the EWCS is representative of those aged 15 and over (16 and over in Bulgaria, Norway, Spain and the UK) living in private households and in employment who did at least one hour of work for pay or profit during the week preceding the interview. The sample in each country was stratified by region (NUTS 2 or equivalent) and degree of urbanization. The sixth edition of the EWCS covers the 28 EU Member States, Norway and Switzerland and Albania, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey and comprise 43,850 interviews out of which 35,765 conducted in the EU28 Member States.

Analytical methods

For the purpose of this study (to compare working conditions of workers in precarious work), only the individuals who answered to the questions *Q7* (*Are you working as an employee or are you self-employed?*), *Q9* (*Regarding your business, do you: a) Have the authority to hire or dismiss employees?; b) Get paid an agreed fee on a weekly or monthly basis?; c) Have employees –(working for you); d) Generally, have more than one client or customer*), *Q91e* (*To what extent do you agree or disagree with the following statements? I make the most important decisions on how the business is run*) and *Q11* (*What kind of employment contract do you have in your main job? a) Contract of unlimited duration; b) Contract of limited duration; c) A temporary employment agency contract; d) An apprenticeship or other training scheme; e) No contract; f) Other*) were kept in the analysis (35,259 individuals). Based on these four questions, the workforce was divided in seven categories, namely: self-employed without employees (dependent self-employed or genuine self-employed), self-employed with employees, and employees (with indefinite contract, with fixed-term and temporary employment agency contract, with other type of contract or with no written contract).

For both the descriptive statistics and regression analysis, weighting schemes were used as recommended in EWCS 2015 technical report. Country level post-stratification weight (w4) has been used for carrying out analysis for country comparisons. When carrying out analysis on an aggregate level (EU28), a different weighting scheme was used (w5_EU28) which takes the relative size of the workforce in each of the countries into account. The variables used in the analysis are listed in Table A1. For the descriptives, we analysed all cases available for each analysed variable (don't know and refusal were excluded). However, we kept in the regression analysis the individuals for which data on each and every independent variable was available.

The six job quality indices are measured on a scale from 0 to 100. They comprise the same dimensions as the Eurofound overview report (2016), except the *social environment index* where the *management quality* dimension was excluded because it is not available for self-employment and *prospects index* where the *employment status* dimension was excluded because is used as a dependent variable in the regression analysis. With the exception of *work intensity*, the higher the index score, the better the job quality. Thus, except the *work intensity*, the variables were normalized and rescaled with value 0 for the lowest level of the variable (the worse condition for the worker) and gradually increased

to 100, the highest level of the variable (the best condition for the worker). For work intensity the values were set in the opposite fashion. Each of the job quality indices comprise a number of sub-dimensions with their indicators. All indicators and sub-dimensions were given the same weight when calculating the job quality indices mean (the correlation matrix is available in Table A3).

Table A1. Variables used in the analysis

Variable	Description
Dependent variables	
Dependent self-employed	1 = Yes; 0 = Otherwise
Employees with no written contract	1 = Yes; 0 = Otherwise
Independent variables	
Gender	1 = Male; 0 = Female
Age	Respondent exact age. Age squared is also included in the regression analysis
Education	1 = Early childhood education/ Primary education; 2 = Lower secondary education; 3 = Upper secondary education; 4 = Post-secondary non-tertiary education; 5 = Short-cycle tertiary education; 6 = Bachelor or equivalent; 7 = Master/ Doctorate or equivalent
Respondent's parents born in the country	1 = Yes; 0 = No
Household size	1 = 1 person; 2 = 2 persons; 3 = 3 persons; 4 = 4 persons; 5 = 5 persons or more
Household ability to make ends meet	1 = Very easily/ easy; 2 = Fairly easy; 3 = With some difficulty; 4 = With difficulty/ great difficulty
The person who contributes the most to the household income	1 = The respondent; 2 = Other person; 3 = All equally
Number of employees in the company	1 = 1 - interviewee works alone; 2 = 2-9 employees; 3 = 10-249 employees; 4 = 250+ employees
Workers with the same job title as the respondent at the work place	1 = Mostly men; 2 = Mostly women; 3 = Approximately equal numbers of men and women; 4 = Nobody else has the same job title
Sector	1 = The private sector; 2 = The public sector; 3 = A joint private-public organisation/company; 4 = The not-for-profit sector or an NGO/ Other
Occupation	1 = Managers; 2 = Professionals; 3 = Technicians and associate professionals; 4 = Clerical support workers; 5 = Service and sales workers/ Armed forces occupations; 6 = Skilled agricultural, forestry and fish; 7 = Craft and related trades workers; 8 = Plant and machine operators, and assembly; 9 = Elementary occupations
Economic activities (NACE rev. 2)	1 = Agriculture, forestry and fishing; 2 = Industry (except construction); 3 = Construction; 4 = Wholesale and retail trade; repair of motors; 5 = Transportation and storage; 6 = Accommodation and food service activities; 7 = Information and communication; 8 = Financial and insurance/ real estate activities; 9 = Professional, scientific, technical + administrative activities; 10 = Defence, education, human health, social work; 11 = Arts, entertainment and recreation + others; 12 = Activities of households as employers
Physical environment index	Mean (rescaled 0 to 100) of 13 indicators
Work intensity index	Mean (rescaled 0 to 100) of three dimensions: quantitative demands (4 indicators), pace determinants and interdependency (6 indicators) and emotional demands (3 indicators)
Work time quality	Mean (rescaled 0 to 100) of four dimensions: duration (3 indicators), atypical working time (4 indicators), working time arrangements (2 indicators) and flexibility (2 indicators)
Social environment index	Mean (rescaled 0 to 100) of two dimensions: adverse social behaviour (7 indicators) and social support (1 indicator)
Skills and discretion index	Mean (rescaled 0 to 100) of four dimensions: cognitive dimension (5 indicators), decision latitude (4 indicators), organisational participation (3 indicators) and training (2 indicators)
Prospects index	Mean (rescaled 0 to 100) of three dimensions: career prospects (1 indicator), job security (1 indicator) and downsizing (1 indicator)

Table A2. Dependent self-employed and employees with no written contract, by socio-demographic characteristics

Variable	Dependent self-employed			Employees with no written contract		
	Percent of:		Of which:	Percent of:		Of which:
	All employment	Self-employed		All employment	Employees	
Gender						
Male	5	29	58	4	5	47
Female	4	36	42	5	6	53
Age						
Under 35 years	3	41	21	6	6	33
35 – 49 years	4	27	33	3	4	28
50 years and over	6	32	46	6	7	39
Education						
Early childhood education/ Primary education	11	45	7	16	21	10
Lower secondary education	6	35	19	9	11	26
Upper secondary education	4	31	40	5	6	45
Post-secondary non-tertiary education	3	24	5	3	4	4
Short-cycle tertiary education	4	30	7	3	4	5
Bachelor or equivalent	4	31	12	2	3	6
Master/ Doctorate or equivalent	4	26	10	2	2	4
Respondent's parents born in the country						
No	5	38	13	5	6	14
Yes	4	30	87	5	6	86
Household size						
1 person	5	36	16	6	7	17
2 persons	4	32	32	5	5	30
3 persons	4	30	22	4	5	20
4 persons	4	28	21	4	5	19
5 and more persons	4	32	9	8	9	14
Household ability to make ends meet						
Very easily/ easy	4	24	27	3	3	17
Fairly easily	4	32	33	4	4	25
With some difficulty	4	35	23	6	7	30
With difficulty/ great difficulty	7	44	17	13	15	28
The person who contributes the most to the household income						
Yes	4	26	54	4	4	44
No	4	45	34	7	8	49
All equally	7	33	12	4	6	7
Number of employees in the company						
1 employee (interviewee works alone)	27	38	64	14	51	31
2-9 employees	5	18	24	9	12	41
10-249 employees	1	33	8	3	3	20
250+ employees	1	68	4	1	1	8
Workers with the same job title as the respondent at the work place						
Mostly men	3	30	24	4	5	30
Mostly women	1	23	8	3	3	20
Approximately equal numbers of men and women	3	37	17	4	4	18
Nobody else has the same job title	13	30	51	9	17	32
Sector						
The private sector	5	30	87	5	6	78

The public sector	1	37	4	2	2	9
A joint private-public organisation/company	2	32	2	1	1	1
The not-for-profit sector or an NGO/ Other	9	48	7	16	20	12
Occupation						
Managers	4	13	5	2	3	2
Professionals	4	33	19	1	1	5
Technicians and associate professionals	3	27	11	2	2	6
Clerical support workers	1	33	1	2	2	4
Service and sales workers/ Armed forces	3	22	12	7	8	31
Skilled agricultural, forestry and fishery workers	30	51	20	12	28	7
Craft and related trades workers	5	27	13	4	5	8
Plant and machine operators, and assemblers	3	45	5	2	3	4
Elementary occupations	5	65	14	14	16	33
Economic activities (NACE Rev. 2)						
Agriculture, forestry and fishing	27	51	22	15	32	12
Industry (except construction)	2	25	7	1	2	5
Construction	7	28	9	6	9	7
Wholesale and retail trade; repair of motors	3	18	10	3	4	10
Transportation and storage	4	44	5	2	2	2
Accommodation and food service activities	2	10	1	12	14	12
Information and communication	5	32	3	2	3	1
Financial and insurance/ real estate activities	3	22	3	1	1	1
Professional, scientific, technical + administrative activities	5	26	11	3	4	7
Defence, education, human health, social work	2	33	10	3	3	15
Arts, entertainment and recreation + others	11	42	14	12	16	13
Activities of households as employers	13	84	5	44	52	15

Source: EWCS 2015 (own calculations)

Table A3. Correlations between the job quality indices (N=31,884)

	Physical environment index	Work intensity index	Work time quality	Social environment index	Skills and discretion index
Physical environment index					
Work intensity index	-0.31				
Work time quality index	0.23	-0.31			
Social environment index	0.08	-0.15	0.12		
Skills and discretion index	0.16	0.09	-0.05	0.18	
Prospects index	0.15	-0.04	0.02	0.15	0.35

Source: EWCS 2015 (own calculations)

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