



Managing social risks of non-standard employment in Europe

Günther Schmid Johannes Wagner

| Conditions of Work and Employment Series No. 91                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Inclusive Labour Markets, Labour Relations and Working Conditions Branch                                                                      |
| Managing social risks of non-standard employment in Europe                                                                                    |
| Günther Schmid*                                                                                                                               |
| Johannes Wagner**                                                                                                                             |
| * Emeritus Director at WZB Berlin SSC & retired Professor of Political Economy at FU Berlin ** Programme executive for Engagement Global GmbH |
| INTERNATIONAL LABOUR OFFICE - GENEVA                                                                                                          |

Copyright © International Labour Organization 2017 First published (2017) Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications. Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country. Conditions of work and employment series; no. 91, ISSN: 2226-8944 (print); 2226-8952 (web pdf) First published 2017 Cover: DTP/Design Unit, ILO The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers. The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them. Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval. Information on ILO publications and digital products can be found at: www.ilo.org/publns. Printed in Switzerland.

# Acknowledgements

The authors thank Janine Berg and Christina Behrendt from ILO as well as an anonymous referee for helpful comments to earlier drafts. The usual caveat, however, holds: All contents and conclusions remain our responsibility.

# **Contents**

|            |       |         |                                                                | Page |
|------------|-------|---------|----------------------------------------------------------------|------|
| Ac         | know  | ledge   | ments                                                          | iii  |
| Co         | ntent | s       |                                                                | iv   |
| Fig        | ures  | & Ta    | bles                                                           | v    |
| 1.         |       |         | tion                                                           |      |
| 2.         |       |         | ıl framework of labour market institutions                     |      |
| 3.         |       | -       | evelopment of NSE in Europe                                    |      |
| <i>J</i> . |       |         |                                                                |      |
|            |       |         | t, structure and dynamics of NSE in Europe                     | 6    |
|            | 3.2   | •       | ining the dynamics of NSE in Europe                            | 13   |
|            |       | 3.2.1   | A simple causal model                                          | 13   |
|            |       | 3.2.2   | Structural change                                              | 14   |
|            |       | 3.2.3   | Career and power relationships                                 | 16   |
|            |       | 3.2.4   | Age related causes                                             | 17   |
|            |       | 3.2.5   | Employment protection                                          | 18   |
|            |       | 3.2.6   | Preferences for NSE                                            | 20   |
|            | 3.3   | Conse   | equences of increasing NSE in Europe                           | 21   |
|            |       | 3.3.1   | An analytical framework for measuring the impact of NSE        | 21   |
|            |       | 3.3.2   | NSE and social inclusion in form of labour force participation | 23   |
|            |       | 3.3.3   | NSE and prosperity in form of productivity, GDP/P and wages    | 26   |
|            |       | 3.3.4   | NSE, wages and inequality                                      | 29   |
|            |       | 3.3.5   | NSE and social protection                                      | 30   |
| 4.         | Mai   | naging  | g social risks related to NSE                                  | 32   |
|            | 4.1   | The ca  | ase of part-time work                                          | 33   |
|            | 4.2   | The ca  | ase of temporary work                                          | 35   |
|            | 4.3   | The ca  | ase of self-employment                                         | 38   |
| 5.         | Mai   | n finc  | dings and outlook                                              | 40   |
|            | 5.1   | Main    | findings                                                       | 40   |
|            | 5.2   | Outlo   | ok                                                             | 41   |
| Re         |       |         |                                                                | 45   |
|            |       |         |                                                                |      |
|            |       |         | Work and Employment Series                                     |      |
| Vυ         | mulli | JIIS UL | . ** VI B. AHU L'HIPIU / HICHI DCI ICS                         |      |

# Figures & Tables

|            |                                                                                              | Page |
|------------|----------------------------------------------------------------------------------------------|------|
| Figure 1.  | Non-standard employment rates in EU28 Member States, 1998 and 2014                           | 6    |
| Figure 2.  | Ranking of non-standard employment rates in EU28, 2014                                       | 7    |
| Figure 3.  | Non-standard employment rates of men in Europe, 1998 and 2014                                | 8    |
| Figure 4.  | Non-standard employment rates of women in Europe, 1998 and 2014                              | 9    |
| Figure 5.  | Part-time employment rates 1998 and 2014                                                     | . 10 |
| Figure 6.  | Fixed-term employment rates 1998 and 2014.                                                   | . 10 |
| Figure 7.  | Self-employment rates 1998 and 2014                                                          | . 11 |
| Figure 8.  | A simple causal model for NSFE                                                               | . 13 |
| Figure 9.  | Share of skill-groups in NSE compared to their shares in total employment in Europe 2014     | . 16 |
| Figure 10. | Share of age-groups in NSE compared to their shares in total employment in Europe 2014       | . 17 |
| Figure 11. | NSE as percentage of total employment and labour force participation (2014)                  | . 24 |
| Figure 12. | Part-time employment as percentage of total employment and labour force participation (2014) | . 24 |
| Figure 13. | Self-employment as percentage of total employment and labour force participation (2014)      | . 25 |
| Figure 14. | NSE as percentage of working age population and productivity as GDP per hour                 | . 26 |
| Figure 15. | NSE as percentage of working age population and GDP per capita (2014)                        | . 27 |
| Figure 16. | Managing social risks related to part-time employment                                        | . 33 |
| Figure 17. | Managing social risks related to temporary employment                                        | . 35 |
| Figure 18. | Managing social risks related to self-employment                                             | . 37 |
| Table 1.   | Correlates of total NSE rates, averages from 2005 to 2014                                    | 12   |
| Table 2.   | Sectoral features of NSFE in 2014 as percentage of total employment compared to 2008         | 15   |
| Table 3.   | Correlates between employment protection (EP) and NSE rates (NSER) in the period 2008-2014   | 19   |
| Table 4.   | Reasons of working part-time or fixed-term in EU-28, percentage, 2014                        | . 20 |
| Table 5.   | Decomposition of GDP/P in EU28                                                               | . 22 |
| Table 6.   | Correlates of the shares of NSE and labour force participation over the period 1998-2014     | . 25 |
| Table 7.   | Correlates of NSER and labour productivity (GDP/H) over the period 1998-2014                 | . 28 |

# 1. Introduction

This study analyses the extent, structure and development of non-standard employment (NSE) in Europe as well as its consequences on economic performance and social inclusion. In this study, we follow the definition of NSE used by the ILO, which includes part-time work, temporary work (fixed or project based contracts, casual labour, minijobs or even zero-hour contracts), triangular employment relationships through temporary agencies or subcontracting companies, but also include self-employment. Self-employment is a still a relatively small employment category in Europe when compared with wage employment, but it has nonetheless risen recently. Its rise should be understood within the context of the diversification of work, in particular own-account work.

Given the growth of NSE across the globe, it is important to ascertain its effects on workers' protection, enterprises' development and overall labour market and economic performance. Workers in non-standard employment often have low job tenure and are more likely to transit in and out of the labour market with respective high risk of low pay, (in-work) poverty, unemployment, which erodes employability and exacerbates the likelihood of precarious employment careers over their life course. As these workers are more likely than 'standard workers' to have interrupted or even no social insurance contribution records, their entitlement to benefits in case of unemployment, illness, maternity, disability and old age are also negatively affected.

This study is divided into five sections. Section 2 starts with an analytical framework of the whole set of labour market institutions such as unemployment or employment insurance, employment services, education and training, employment protection, wage setting, wage-related taxes or benefits, and public employment by sketching their potential role in social risk management related to NSE with special emphasis on institutional complementarity or equivalents.

Section 3 proceeds by providing rich descriptive information on the extent, structure, and development of NSE in Europe, based on data from the European Labour Force Survey (ELFS) during the periods 1998 to 2014. The chapter goes beyond description by testing possible causes of this development and by demonstrating the consequences of NSE for economic performance and social inclusion.

Section 4 continues by reflecting on the possible institutional responses to the rise of NSE followed by an employment policy analysis of how countries, social partners, or sector or occupational groups are approaching or should address the risks related to NSE. The analysis seeks in particular good practices of social risk management and explores to what extent and under which conditions they might be adopted by other countries in different stages of economic development.

Section 5 provides a summary of the main findings and policy recommendations, and concludes with general reflections on how to deal with NSE in the context of globalisation and digitalisation.

Finally, there is an Appendix that includes seven additional figures and one table.

# 2. Analytical framework of labour market institutions<sup>1</sup>

The labour market is not a market per se where 'demand' (employers looking for labour) and 'supply' (people providing their 'labour force') meet and freely contract. As any market, the labour market needs a set of rules, organisations, policies and resources to properly function and to enforce the rules. Among them are employment services, education and training systems, employment protection regulations, wage setting rules including collective bargaining organisations, taxes on wages, unemployment or employment insurance, other social insurance, in-work benefits and – last but not least – public sector work where employment, by definition, follows other rules than the market. All of these institutional elements build up an ensemble called labour market institutions (LMIs).

As "institutions" they provide both restrictions as well as opportunities. A minimum wage, for example, restricts the range of possible wages by a downward-limit; it also provides, however, security of a decent minimum income for workers and protection against cut-throat competition both for employers and employees. LMIs, in particular, aim at providing a balance between equity and efficiency considerations (Okun, 1975) and to overcome rational traps related to collective action problems (Frank 2012). Compared to product market institutions (regulation of capital flows, trade regulations, property rights), however, LMIs are much deeper rooted in the societies to which they belong; they are embedded in cultures, induce people to stick to habits or traditions and to adhere to strong value systems related to fairness and solidarity. That's why Robert Solow (1990) chose "The labor market as a social institution" as the title of one of his seminal books, and that's why one is struck by the wide diversity of LMIs over the globe in general and over Europe in particular.

Designing LMIs is a delicate art to find the right balance between equity and efficiency and always has – as we will argue below – to consider the effectiveness of LMIs in the context of other institutions. Unemployment insurance, for instance, aims at maintaining skills, raising morale, and inducing productive job search, but it might also induce moral hazard, raise the reservation wage and thus prolong unemployment and reduce employment. Properly designed in an anticyclical way (extended in recessions and scaled down in booms), it even induces positive external effects: macroeconomic stabilisation in particular through maintaining aggregate consumption or demand (e.g., Dolls et al. 2011) and reduction of unfair job competition for scarce jobs in recession (e.g. Lalive et al. 2013).

Employment services, often publicly provided, restrict on the one hand the 'market' for private employment services, thereby reducing employment opportunities in the private sector. They also have to be financed by contributions or taxes thus raising the burden of wage costs, thereby indirectly reducing employment. On the other hand, they may be better able to pool information and risks than private employment services, thereby increasing mobility (possibly connected with mobility incentives or training from the unemployment insurance) and employment opportunities of the unemployed or the job searching people, both 'inactive' (school leavers, mothers returning) or 'active' (frustrated workers who would like to move). Because mobility raises the exit options and thereby potential labour supply for potential vacancies, it reduces both the monopoly power of local employers and insider-workers, thereby lowering wage inequality and by this way – indirectly (the efficiency-wage argument) – unemployment (Akerlof and Yellen, 1990). The example also shows that the interactions might be quite complicated, taking time to show their real impact on the final (positive or negative) balance on employment. It also demonstrates the substantial potential role of

<sup>&</sup>lt;sup>1</sup> The following considerations are based on Schmid (1994), Hall and Soskice (2001), profiting also from a recent survey article for ILO by Gazier (2013).

employment services in supporting mobility chains and transitions from non-standard to standard employment (or vice versa) (e.g., Schmid, 2008, pp. 242-280).

Employment protection restricts, first of all, employers' freedom of hiring and firing and may lead to cautious recruitment practices that lead to lower standard employment and to the recourse of non-standard employment such as fixed-term contracts, casual work, part-time work or dependent self-employment. Moreover, it might limit the intergenerational exchange of the staff, possibly inducing employers to make use of early retirement options, with corresponding problems of social protection in old age or even self-respect related to work (e.g., Freeman et al. 2008). On the other hand, employment protection deters firing as a first response of firms to a downturn and thus encourages firms to build up mutual loyalties that, for instance, reduce for the employer the necessity and costs to control shirking, and give incentives for the employees to invest in firm specific skills in the expectation that the respective higher risks (reduced employability on the market) either are rewarded by the employer through higher wages and working time flexibility and/or compensated through generous unemployment benefits to search for an alternative job in case of the closure of the firm. Employment protection also supports the unionization of workers and collective bargaining since in the absence of this protection, workers may be less disposed to join a union out of fear of reprisal.

The role of public employment is often neglected as part of labour market institutions (for the state of the art see Gottschall et al. 2015). The opportunities related to this form of employment are quite clear: They can provide regular employment in areas which are not or not fully covered by profitable markets (e.g. in the care sector) and they probably can more effectively handle situations where individual performance is for some reason (age, health or psychological problems) slightly or temporarily restricted. Instead of providing in-work subsidies to private employers, public work might be more effective and equitable. The restrictions related to such forms of public employment are clear, too: public finance is always scarce, substitution or displacement of regular market work might occur, people in secure public service jobs might show lack of incentive to work hard or to take further training. Furthermore, public sector employment might, on the one hand, relieve the pressure on the private sector to attain cost-competitiveness through NSE, but might also, on the other hand, induce higher levels of NSE through outsourcing.

This is not the place to outline the totality of LMIs' diversities between countries, and also not the place to explore the partially unifying and partially contested theoretical views of experts and researchers. All in all, at least from a European point of view, the nexus between LMIs and NSE is far from clear, and respective research still is underdeveloped, either due to lack of proper data or due to lack of rigorous methodology (Hipp et al. 2015). Some important common concepts and stylized facts, however, have developed over time and are worthwhile as a reminder before we start with the empirical work.

First, the concept of institutional path dependency: Building up mutual expectations between the actors on the labour market, institutions cannot be changed easily from one day to the next. Some institutions go back more than 100 years (Madsen 2006), for example, the cooperative industrial relations system in Denmark, or the dual vocational training system (apprenticeship) in the German-speaking countries of Austria, Germany and Switzerland, where the bulk of workers come from this training and recruiting route. Yet this institution remains marginal in other countries (Eichhorst et al. 2012). The diversity comes from the specificity of societal contexts and history, but also from the variety of objectives pursued by each scheme and rule, e.g. efficiency and equity considerations may be combined in multiple ways. Labour markets are usually segmented in different submarkets. Some groups, benefitting from long-term and secured careers with promotional ladders, may be favoured by some institutions, while others are left aside or excluded. Another essential source of variety is the degree of implementation of the rules, depending on the size of the informal sector, on

the political will and the amount of resources devoted to detecting and sanctioning noncompliance (Falkner et al. 2005). There may be a big gap, and even an abyss between laws or signed agreements and their implementation. In some countries, tax-avoiding – for instance – may be a culture or even 'sport', in other countries it may be considered as criminal act or at least anti-social. So, for reasons of path dependency it is almost impossible just to copy institutions from other countries; learning from other countries, therefore, is restricted.

Second, even if possible, copying might be ineffective for other reasons. All these institutions interact with each other and have to be analysed in the context of different social and economic situations. LMIs might be mutually supportive (institutional complementarity), but they can also be incongruent (institutional incongruence) or hampered by trade-offs (institutional trade-offs).

An example for institutional complementarity is the interplay between dual education and training systems and income maintenance through unemployment insurance. As apprenticeship training, by definition, concentrates on the formation of occupation and firm-specific skills, the income risk is high due to the fact that firm specific skills or narrow occupational skills get out of date or that firms go bankrupt; firm specific skills can become a great barrier for unemployed to re-enter the labour market under such circumstances. Adequate income maintenance through unemployment insurance, in this case, is clearly a complementary institution since it allows to take the higher risks involved in occupation or firm-specific training and education (Estevez-Abe et al. 2001). So, there is no wonder, that for instance the conservative and strongly market oriented Switzerland has one of the most generous unemployment insurance systems of the world. Furthermore, the Danish "Golden Triangle" (the 'flexicurity' model) can be considered as a good example for institutional complementarity: low employment protection is complemented by high income security and strong activation measures in case of unemployment or mobility demanded through structural change (Madsen 2006).

Institutional incongruence comes up, for example, when costs and returns of job creation investments fall apart. In Germany, e.g., the municipalities were responsible for paying social assistance for jobless long-term unemployed whose insurance benefits had run out, but they were not endowed with sufficient financial means to create jobs or to reap fully the investments made into job creation measures. The 'Hartz-Reforms' partly solved this problem by the central government taking over the bulk of the costs for means-tested unemployment benefits and corresponding employment service measures (Leschke et al. 2007; Schmid and Modrack, 2008).

Institutional trade-offs might occur when the same institution affects different objectives either positively or negatively. Employment protection may (and is intended to) support mutual investments of employers and employees in training and education thereby enhancing productivity, particularly in the period after a downturn as workers are less likely to be laid off. Nonetheless, it may also create insider-outsider cleavages enhancing wage rigidities, preventing wage flexibility in recession or the hiring of new apprentices to maintain a sustainable stock of skills. Some studies find strong positive correlations between high levels of employment protection and some non-standard forms of employment, in particular temporary jobs (Berkhout et al. 2013; Martin and Scarpetta, 2011; Schmid, 2011b). Other studies discovered that employment protection and respective high levels of tenure enhance productivity on the cost of employment levels, arguing for protected mobility to solve this trade-off (Auer et al., 2005). In countries, where employment protection is combined with the institution of life-time employment in large firms, corresponding mandatory early retirement might lead to (often precarious) self-employment in old age as in Korea or to precarious non-standard work in small and medium sized firms as in Japan (Freeman et al., 2008).

Third, one has to consider institutional equivalents, which means that one missing (or badly functioning) institution might be replaced by the functioning of another institution. An effective minimum wage, for instance, can be established by the state through mandatory legal minimum wages (as in France or Great Britain), but also through collective bargaining enforced by strong unions and employers associations (like in Sweden, Denmark or Austria). Open-ended contracts (the essential element of 'standard' employment) might be combined with internal flexibility in terms of working time flexibility, task flexibility or even wage flexibility) and thus be an (even more) effective equivalent for external flexibility like temporary or casual work or out-contracting to (dependent) self-employed (Storrie, 2012; Schmid, 2015). Both sides – workers and employers – might be interested in internal flexibility for various reasons. LMIs even might be (at least to a certain degree) a functional equivalent to product market institutions or financial market institutions. If, for instance, devaluation of a currency is not any more possible due to joining a common currency union (like Greece as member of the Eurozone) or due to the binding of a national currency (like Denmark) to the Euro or the Dollar, then real devaluation might be implemented through working time and wage flexibility (like in Denmark). Other equivalents to devaluation are wage cost subsidies (Kaldor, 1936) and labour mobility incentives.

Although this complexity of institutional arrangements and relationships is a good reason to dampen high expectations with respect to the learning potential of comparative institutional analysis, it does not justify using this as an argument to abstain from any institutional reform. On the contrary, understanding the logical principles and the context in which institutions produce or support equitable and efficient results on the labour market will encourage necessary reform. Furthermore, normative principles help to distinguish between 'good' and 'bad' institutions, in particular the overriding principle of social inclusion. In their seminal book "Why Nations Fail", Acemoglu and Robinson (2012) provide plenty of historical material of how "inclusive" instead of "exclusive" or even "exploitative" institutions contribute to prosperity and prevent poverty.

We are now prepared to ask which role LMIs play in preventing, mitigating and coping with the risks related to NSE. The first part of the answer is to look at the facts and to derive the relevant sub-questions from them.

# 3. Recent development of NSE in Europe

This view on the dynamics of employment relationships in Europe is based on the European Labour Force Survey (ELFS) using the following definitions for labour force participation and non-standard forms of employment:

- (1) Activity rate or labour force participation = (all employed + unemployed) as percentage of the working age population (age 15 to 64);
- (2) Part-time employment rate = employed in open-ended or in temporary (fixed-term) part-time work or in part-time self-employment as percentage of the working age population;
- (3) Temporary employment rate = employed in temporary or fixed-term contracts (including temp-agency work with fixed-term contracts and temporary part-timers) as percentage of the working age population;
- (4) Self-employment rate = own account workers (self-employed without dependent employees) in full-time or in part-time plus self-employed with employees as percentage of the working age population;
- (5)Non-standard employment rate = sum of (2, 3 and 4 controlled for overlaps) as percentage of the working age population.

The statistical analysis uses a special data set of EUROSTAT which allows, by using a filter, to put the three components of non-standard employment together to an aggregate figure of non-standard employment. The figures usually published cannot be added since categories overlap: part-timers may be self-employed or in open-ended or in fixed-term contracts and temporary workers may work part-time or full-time. Our dataset leaves open the option to separate temporary part-time from temporary full-time contracts or to distinguish between part-time and full-time self-employment if the analytical perspective requires such a differentiation.

# 3.1 Extent, structure and dynamics of NSE in Europe

Figure 1 shows the total non-standard employment rate for 28 EU member states in 1998 and 2014.<sup>2</sup> The first pattern we can see is that the countries of so-called old Europe rank highest in terms of the combined indicator for non-standard employment; the new member states, in particular from Eastern Europe rank lowest. The Netherlands stands out as the champion with 47.2 per cent; in other words, almost half of the Dutch in working age (15-64) are in non-standard employment, especially part-time employment. The members with the lowest nonstandard employment rate are the Baltic States of Latvia, Lithuania and Estonia with about 12 per cent.<sup>3</sup>

6

<sup>&</sup>lt;sup>2</sup> Missing countries in 1998 are Bulgaria, Cyprus, Croatia, Malta and Slovakia.

<sup>&</sup>lt;sup>3</sup> Only Bulgaria, not included due to missing data in 1998, has a lower non-standard employment rate of 8.45 per cent in 2014.

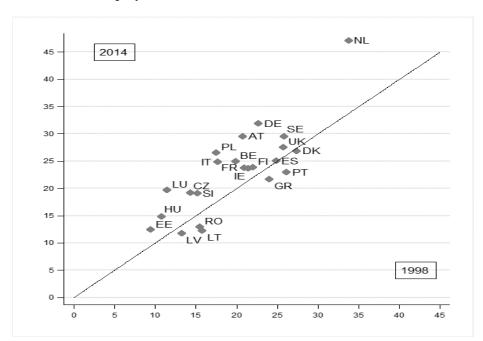


Figure 1. Non-standard employment rates in EU28 Member States, 1998 and 2014

Source: Eurostat, ELFS; own calculations: The non-standard employment rate includes part-time, fixed-term, and self-employment, controlled for overlaps

The second feature is that most of the EU member states are situated at the left or above the diagonal line that serves as an implicit time axis: NSE increased in most EU-member states. On the top of this development are again The Netherlands with the growth in NSE-rate of 13.5 percentage points; Italy, Germany, Luxembourg, Poland and Austria follow with 7 to 9 percentage points. Only a few countries experienced a small decline, for instance Portugal, Lithuania, Latvia, Romania, and Greece, i.e. the countries most heavily exposed to the economic crisis in 2008 that were quick to shed temporary workers.

The ranking of all 28 EU-member states for 2014 (Figure 2) provides a first hint to possible causes for the spread of NSE.

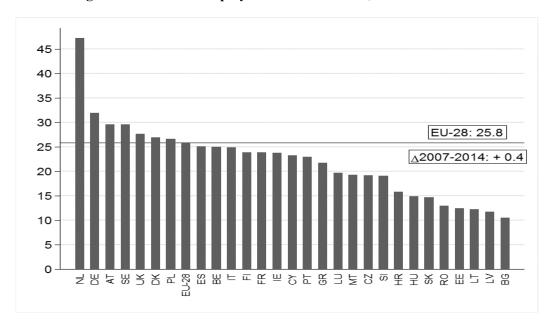


Figure 2. Ranking of non-standard employment rates in EU28, 2014

On the average, 25.8 per cent of working age population in EU28 worked in some form of non-standard employment. At the top, as already mentioned, are the Netherlands with 47.2 per cent followed by Germany and Austria. But the interesting point is the bottom where almost only new EU member states from former socialist Eastern Europe are clustering: Bulgaria with a non-standard employment rate of only 10.5 per cent, followed by Latvia, Lithuania, Estonia, Romania, Slovakia, Hungary, Croatia, Slovenia, and the Czech Republic; only Poland is an exception with a non-standard employment rate of 26.6 per cent (basically temporary work). This pattern indicates that NSE might be a characteristic of mature developed capitalist Western countries, whereas the former socialist countries are facing today still a high share of employment in the agricultural and informal sector. Another element of an explanation for the differences between East and West could be the 'inherited' high share of women in standard employment in most former socialist countries and their accordingly lower share in non-standard forms of employment, whereas women in most west European countries have low shares in standard employment and comparably high shares in non-standard employment.

The differentiation of these observations by gender provides a second hint to the reasons of rising non-standard employment: It is in particular the increasing labour force participation of women that accounts for part of the growth of non-standard employment, especially part-time employment.

Figures 3 and 4 clearly show that the variation of non-standard employment among women in the EU is much higher than among men. The minimum and maximum non-standard employment rates for men in 2014 vary between about 13 per cent (Latvia, Bulgaria, Estonia, and Luxembourg) and 37 per cent in the Netherlands; for women, however, they range from 7.5 per cent in Romania to 57 per cent in the Netherlands.

Whereas non-standard employment of women increased (apart from small decreases in Romania, Portugal, Lithuania, Denmark and Latvia) in almost all EU member states (especially in the Netherlands, Germany, Austria, Luxembourg, and Italy), the pattern of dynamics for men is mixed: Two Baltic States (Latvia, Lithuania) and Spain, Greece and Portugal experienced a decline, and only a few of the countries (Poland and the Netherlands) show a substantial increase (10 to 12 percentage points) in male non-standard employment. Nonetheless, much of this decline is cyclical as workers in non-standard contracts, especially temporary work and temporary agency work, are the first to lose their jobs when a recession hits.

By decomposing non-standard employment into its three components of part-time, temporary and self-employment, our expectation is confirmed: part-time work is the most prominent element of non-standard employment in most countries (Figures 5, 6, and 6). The *part-time employment rates* – here including the (for most countries) trivial number of self-employed people working in part-time and temporary part-time workers – however display great variation between the EU member states, ranging from 1.4 per cent in Bulgaria<sup>4</sup> to 35.5 per cent for "champion" Netherlands. It is remarkable that in the Netherlands only 9 per cent of the working-age population work as temporary part-timers, which means that most of part-timers are 'standard' in the sense of open-ended contracts.

\_

<sup>&</sup>lt;sup>4</sup> Not in Figure 5 due to missing data in 1998.

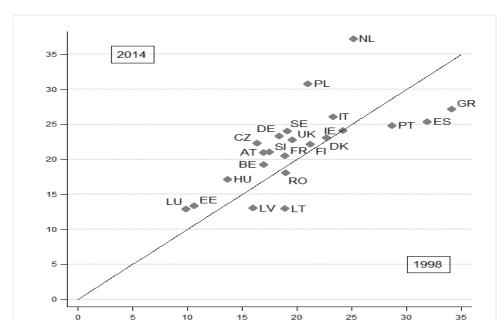
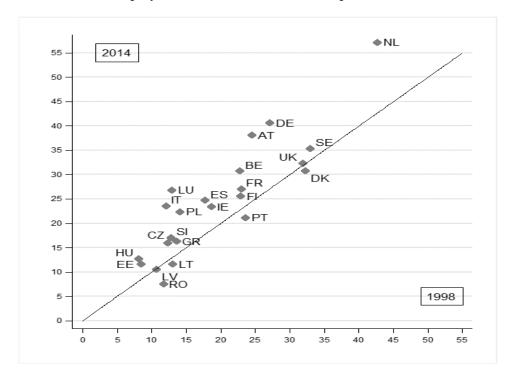


Figure 3. Non-standard employment rates of men in Europe, 1998 and 2014

Figure 4. Non-standard employment rates of women in Europe, 1998 and 2014



The break-down into the two time periods 1998-2007 and 2007-2014 shows that even in the recent recession and after-recession period, the activity rates in part-time work increased with the exception of Croatia and Poland, unlike temporary employment which suffered as a result of the crisis. The dynamic, however, has substantially slowed down in particular in countries with already high part-time figures like Denmark, Sweden, UK, and the Netherlands where the growth of part-time employment rate surpasses hardly one percentage point from 2007 to 2014. Even in Austria and Germany with high growth rates in 1998 to 2007, the slow-down is remarkable.

The breakdown of Figures 5 to 7 into age groups shows among others two interesting features: First, part-time increased in the recent period especially among senior workers (age 55-64) in those countries that exhibit drastic increases in total activity rates of senior workers (Austria, Germany, France, Netherlands); second, part-time rates among young (15-24) are high in those countries that combine vocational training with formal schooling (Denmark and Netherlands).

The fixed-term employment rates (unfiltered, i.e. including part-timers with temporary contracts) vary "only" between (less than) one per cent in Romania and 14 per cent in Poland. Most of fixed-term employment consists of full-timers (the EU28 average was 5.4 per cent in 2014), whereas the part-timers in fixed-term contracts make up less than one third (the EU28 average was 2.3 per cent). Generally, fixed-term or temporary employment is concentrated among the young workers (15-24), and lowest among senior workers (55-64). In the Netherland, about one third of young people in working age are employed on fixed-term contracts, in Germany it is one fourth, in other words: the fixed-term employment rate of young Germans is 24.1 per cent, depending to some extent on the large extent of apprenticeships. The corresponding figures for seniors are only 2.8 per cent (NL) and 2 per cent (DE), however increasing in most EU member states from a low level.

The self-employment rate (unfiltered, i.e. including self-employed with employees, as well as part- and full-time own account workers) displays a minimum of five (Luxembourg) and a maximum of 15.5 per cent in Greece in 2014. The majority of self-employed are full-timers in own account work, i.e. solo self-employed without employees (the EU28 average was 5.4 per cent in 2014), whereas the self-employed with employees make-up a bit more than a quarter of all self-employment (the EU28 average was 2.7 per cent in 2014). Generally, self-employment is highest in the core-age group (25-54) and lowest among youth.

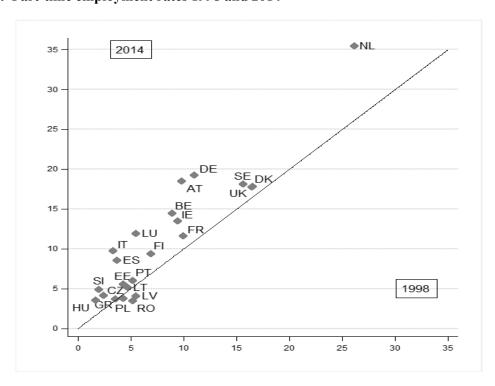


Figure 5. Part-time employment rates 1998 and 2014

Note: Including open-ended, fixed-term, and solo-self-employed part-timers

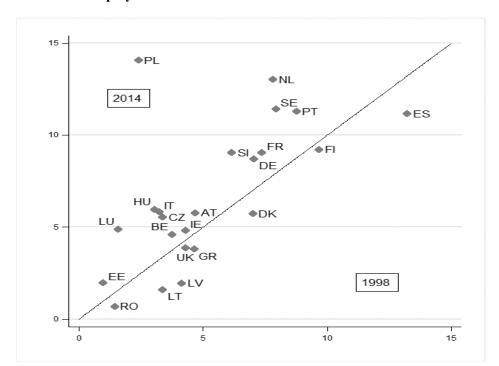


Figure 6. Fixed-term employment rates 1998 and 2014

Note: Including part-timers as well as full-timers.

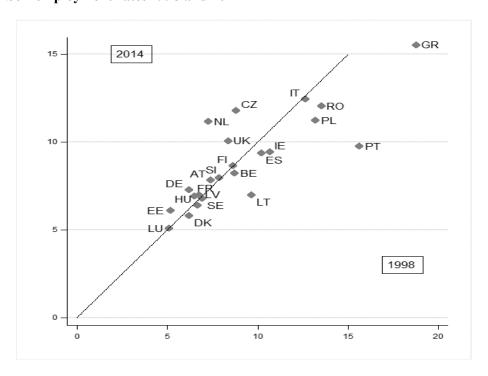


Figure 7. Self-employment rates 1998 and 2014

Note: Including part-time, full-time own account workers and self-employed with employees.

Source: Eurostat (ELFS), own calculations; all figures as percentage of working-age population.

Labour market participation in form of self-employment decreased substantially in some countries in the observation period 1998-2014, in particular in Greece (-3.2 pp) and Portugal (-5.8 pp), but increased also substantially in some countries, in particular in the Netherlands (+3.9 pp), Czech Republic, and UK. The negative dynamics is mainly related to self-employment with employees (-0.26 pp in EU28 2007-2014), and the positive dynamics interestingly comes from part-time solo self-employment (+0.19 pp in EU28 2007-2014), in particular among women, in some countries (Netherlands, UK, Germany) also from full-time solo self-employment. This observation leads us to reflect a bit more on the reasons for this development.

Behind any variation of figures there are possibly hidden patterns. Are, for instance, the components of (supposedly) "flexible" employment complementary or substitutive? A first answer to this question can be found by simply correlating the various forms of non-standard employment across the 28 country observations in 2014. In order to avoid auto-correlations, we further subdivide self-employment into part-time and full-time, and we do the same with fixed-term contracts, which leaves (as 5<sup>th</sup> component) part-time work in form of open-ended contracts and (as 6<sup>th</sup> component) self-employed with employees (Table 1).

Table 1. Correlates of total NSE rates, averages from 2005 to 2014 (280 observations)

|                              | Open-ended<br>Part-time | Temporary<br>Full-time | Temporary<br>Part-time | Self-employed<br>Full-time | Self-employed<br>Part-time |
|------------------------------|-------------------------|------------------------|------------------------|----------------------------|----------------------------|
| Temporary<br>Full-time       | - 0.09                  |                        |                        |                            |                            |
| Temporary<br>Part-time       | + 0.67                  | + 0.28                 |                        |                            |                            |
| Self-employed<br>Full-time   | - 0.42                  | + 0.08                 | - 0.16                 |                            |                            |
| Self-employed<br>Part-time   | + 0.20                  | + 0.04                 | + 0.25                 | + 0.16                     |                            |
| Self-employed with employees | + 0.08                  | + 0.36                 | + 0.18                 | + 0.23*                    | - 0.16                     |

Source: Eurostat (ELFS), own calculations; N = 28 Member States of the EU; Strong coefficients (significant at 1per cent level) are in bold; \*) significant at 5 per cent level

Only five of the 15 possible correlations are significant at the one per cent level: The strong positive correlation between open-ended and temporary part-time employment (r=0.67) is intuitively clear since both contractual forms are *complementary*. One can plausibly assume that a substantive part of temporary part-time continues as open-ended part-time employment.<sup>5</sup> The same explanation can be given for the (weaker) positive correlation between temporary part-time work and temporary full-time work (r=0.28), in other words: a substantial part of temporary part-time contracts might lead to temporary full-time contracts, although such interpretations cannot directly be derived from such correlations.

<sup>&</sup>lt;sup>5</sup> Of course, one would need individual transition data over the life course to rigorously test this assumption. Such data are hardly available and an urgent desideratum for improving the statistics. Averages over 10 years used here add only a little to confirm the assumption.

Another complementarity is indicated through the weak but significant positive correlates of self-employment with employees and temporary full-time as well as temporary part-time employment. If we separate these correlates between men and women (not shown here), those correlates become even stronger for women. This observation leads to the informed speculation that in particular small enterprises with only a few employees tend to use temporary part-time or temporary full-time contracts for reasons of cost-saving and volatile or uncertain demand as those firms are usually (mostly as subcontractors) at the end of the service chain.

Furthermore, the less but still significant correlation between solo self-employment in full-time and self-employment with employees (r=+0.23)<sup>6</sup> might, again dynamically interpreted, indicate that some start-ups eventually lead to small enterprises with some employees. The successful start-up programme for unemployed for instance in Germany, to which we refer later in the policy part, confirms the legitimacy of such a speculation.

A final interesting result of this exercise is the negative correlation between full-time self-employment and open-ended part-time work (r=-.42),<sup>7</sup> which indicates a *substitutive* relationship between these forms of non-standard employment: Former (in particular traditional) self-employment might be substituted by dependent part-time work. In other words, this pattern can be (with the usual caveats related to correlations) interpreted as structural change from precarious full-time self-employment towards open ended part-time employment that provides more security in terms of (even if small) income. Furthermore, it can be assumed that formerly self-employed people in agriculture or commerce transit into dependent part-time work and combine this small but regular income with volatile income from various kinds of informal work on the side (especially in small-sized agricultural production), moonlighting or even illegal work. This kind of structural change might be expected especially for countries that need to catch up with mature 'developed' countries.

# **3.2** Explaining the dynamics of NSE in Europe

### 3.2.1 A simple causal model

What are the reasons of expanding non-standard forms of employment? The causal nexus of this development is obviously very complex. Factors related to structural change and institutions are intertwined, mutually reinforcing or conflicting. Instead of evoking single causes or ad hoc explanations, we take therefore recourse to Ockham's razor<sup>8</sup> and start with a simple causal model based on just two dimensions for labour supply and labour demand (Figure 8).

<sup>&</sup>lt;sup>6</sup> Significant for women even at the 1 per cent level (r=+0.35).

<sup>&</sup>lt;sup>7</sup> This negative correlation is even stronger (-.54) among women.

<sup>&</sup>lt;sup>8</sup> According to William of Occam, a philosopher of the 14<sup>th</sup> century, suggesting that the simplest hypothesis is usually the correct one.

Figure 8. A simple causal model for NSFE

|                    |                   | S U PP L Y                    |  |  |
|--------------------|-------------------|-------------------------------|--|--|
|                    | Contingent        | Life-course                   |  |  |
| D E Fluctuating M  | Precarious<br>NSE | Flexible<br>SE                |  |  |
| A<br>N<br>D Stable | Testing<br>NSE    | Career/investment oriented SE |  |  |

The attachment of people in working age to the labour market (*supply*) can be contingent or life-course oriented, and employers' *demand* for labour can be fluctuating or stable. Labour supply is *contingent* if other aspects than income generation through wagework predominate or – at least – play a strong role, for instance education or training and family or care obligations. The reasons for *fluctuating* labour demand can be manifold, for instance seasonal like in agriculture, tourism or holidays, and project oriented types of work like in art, research, further education or training, repair and installation of new technologies into the work organisation; extension and globalisation of service chains is a further cause of fluctuating demand. If both factors come together, i.e. contingent supply and fluctuating demand, there is a high chance for non-standard forms of employment; furthermore, if the corresponding labour supply has low bargaining power because it is not well organised through trade unions as is often the case of women, or has low skills as it is often the case with migrants, or has no work experience like youth, then the likelihood is great that these NSE become precarious.

If, however, the attachment of people to the labour market is strong and life-course oriented, the required flexibility of employers due to fluctuating demand has to be met for example by internal flexibility such as short time or overtime work and multiple skills. So, the standard employment relationship can still be maintained if complemented by elements of internal numerical or functional flexibility.

Labour demand can also be stable in the sense that demand can be calculated and products can be put on stock, for instance in the manufacturing of consumption goods with long duration like refrigerators or autos or machine tools. In this case, employers have for various reasons an interest in long-term employment relationships. Confronted with contingent workers, they can use this labour supply in particular for screening the optimal match through fixed-term or part-time contracts. Even free-lancers might be welcome either for testing their willingness to join later on as dependent wage workers or to establish long-term specialised client-customer relationships. Legal or technical professionals or artists might be examples. In all these cases we would expect non-standard employment relationships with a career orientation from the supply side or a testing orientation from the demand side.

If stable labour demand meets life-course oriented labour supply, we have the ideal case for a career and investment oriented standard-employment relationship, i.e. full-time wage work in an open-ended contract lasting for a long time, may be even for a life-time. Apart from stable demand, employers have an interest in such relationships if workers are hardly replaceable or replacement costs a lot of money. Both partners, employers and employees, are eager to yield the fruits of long-term investments in innovation and skills.

## 3.2.2 Structural change

Quite plausible propositions follow already from this simple model for which we easily can find crude descriptive evidence. First, because structural change moves labour demand

more and more from manufacturing to services, and since in many services' demand is more volatile than demand for manufactured goods, it seems plausible to expect both an overall increase in non-standard employment relationships and a concentration of these relationships in services that are in particular prone to fluctuation in demand. One reason is that production and delivery of services often fall together so that production of stock like in manufacturing is not possible, another reason is that services-demand (as in the care sector) often arises around the clock (24-hour-economy).<sup>9</sup>

Table 2. Sectoral features of NSFE in 2014 as percentage of total employment compared to 2008 (+ = increase; - = decrease)

| A: Part-time            | EU-27 | GE    | UK    | GR    |
|-------------------------|-------|-------|-------|-------|
| Manufacturing           | 7+    | 11+   | 8+    | 6+++  |
| Retail and repair       | 22++  | 31-   | 36-   | 8+++  |
| Hotel. restaurants      | 33+++ | 44+++ | 46+   | 15+++ |
| Public administration   | 19++  | 28+++ | 24+++ | 4+    |
| Education               | 26++  | 42+   | 35    | 11+   |
| Health, social services | 30++  | 40++  | 33-   | 7++   |
| Household activities    | 60++  | 86+   | 64+++ | 46+++ |
| Agriculture             | 18-   | 21+   | 18+   | 10    |
| Construction            | 7++   | 10+   | 8+    | 17+++ |
| Transport               | 11++  | 17-   | 8++   | 5+++  |
| Total                   | 19++  | 26++  | 25++  | 9+++  |
| B: Temporary work       | EU-27 | GE    | UK    | GR    |
| Manufacturing           | 11+   | 10    | 5+    | 6+    |
| Retail and repair       | 11+   | 12-   | 4+    | 4+    |
| Hotel, restaurants      | 19+   | 14    | 9+    | 20+++ |
| Public administration   | 13-   | 12    | 5+    | 8     |
| Education               | 15-   | 20-   | 10-   | 11+   |
| Health, social services | 12-   | 14    | 6+    | 7     |
| Household activities    | 17    | 4     | 9+++  | 20    |
| Agriculture             | 9++   | 7     | 4-    | 3-    |
| Construction            | 11    | 9     | 3+    | 13++  |
| Transport               | 10++  | 10-   | 5++   | 5-    |
|                         |       | •     |       |       |

Source: Eurostat (ELFS), own calculations; ++ = more than 1pp; +++ = more than 3pp; -- = more than 1pp; --- = more than 3pp.

-

<sup>&</sup>lt;sup>9</sup> For a closer look of the relationship of NSE and occupations (including country case studies) see the informative volume by Eichhorst and Marx (2015).

Table 2 confirms that *part-time work* in Europe is concentrated in Hotel and Restaurants, Health and Social Services, and Household Activities, all domains of women's work and with comparatively volatile or instable demand. Part-time work is least developed in manufacturing and construction, both domains of men's work and relatively stable demand. Germany and UK display similar features although the labour market institutions of these two countries are quite different. Structural change, both on the labour demand and supply side, seems to be the main driver of part-time work.

The second panel of Table 2 for *temporary work*, however, demonstrates that institutions matter: Whereas the sectoral differences are small (even manufacturing being near the total), the differences between Germany and the UK are quite pronounced and indicate that the use of temporary work (fixed-term or temp-agency) depends to a larger extent on institutions and to a lesser extent on occupations or industries. The most prominent factor, to which we come later, is the difference in employment protection regulation.

## 3.2.3 Career and power relationships

A second expectation from the simple causal model is that highly educated people have not only great interest in jobs that provide a career perspective and promise high returns of investments in human capital, but more importantly that they also dispose of higher bargaining power than low skilled people to defend their interests and to get either non-standard employment contracts in testing form or as stepping stones to career-oriented standard employment. The low-skilled may also have an interest in stable jobs, but their skills are more interchangeable and replaceable, and easy to find on the market, thus making it difficult for them to bargain effectively on an individual basis.

In Figure 10 we find, for instance, that people with low skills (blue) are overrepresented by about 28 percentage points (pp) in Romania, 9 pp in Denmark, 6 pp in Germany, and only by 2 pp in the Netherlands (5 pp being the EU-average). At medium skill level (light), the pattern is mixed, whereas people at high-skill level (dark brown) are underrepresented in most countries (especially in Eastern European new member states), with the exception of Italy, Czech Republic and Estonia (- 5 pp being the EU-average). The low-skilled are in particular overrepresented among the part-time workers without any exception in the 28 member states of EU-28 (see Figure A4, Appendix).

These differences hint to the importance of institutions which influence, for instance, the strength of employment protection, the kind of labour market skills (generalised or specific), or the probability of transition from non-standard to standard forms of employment.

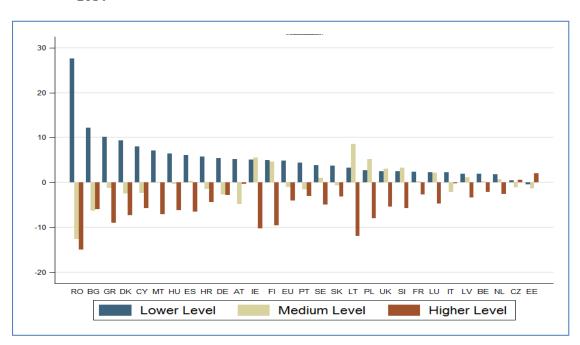


Figure 9. Share of skill-groups in NSE compared to their shares in total employment in Europe 2014

Source: Eurostat: Labour Force Survey; own calculations. For a differentiation of this figure according to the components of NSE see Figures A4 and A5, (Appendix).

## 3.2.4 Age related causes

According to our model, we would expect that the marginal age groups, the young (15-24) and the mature aged people (55-64), are less attached to the labour market than the core age group (25-54). Their labour supply is for various reasons compared to the core age group more contingent on other circumstances like education or restricted work capacities. Their bargaining power is more constrained due to low work experiences, low seniority rights (in the case of youth) or possibly outdated skills and competences (in the case of elderly). They are either at the beginning of their occupational career (often, as with youth, still unspecified) or at the height or declining curve of their career. Employers have not yet invested much into their human capital (in the case of youth) or are not willing any more to further investments because the return of these investments becomes less certain (in the case of elderly). All in all, we expect a much higher incidence of NSE among youth, and to a lesser extent among mature aged workers, and – in any case – a comparatively low incidence among the core age group. Figure 10 confirms this expectation.

Without any exception, the core age group is less represented in NSE compared to their overall employment share, in particular in Denmark, Romania, Slovenia, Finland and Sweden; at the EU average, the core age group is over 5 pp underrepresented. Also without any exception, youth are overrepresented, however with higher variations and not just mirroring the old-age group. The EU average of overrepresentation is 5 pp with a range of 17 pp (Denmark), 11 pp (Finland), 9 pp (Sweden) and almost zero pp in Romania. The age group 55-64 has, compared to its share in total employment, only a slightly higher incidence of NSE at the EU-level (about 1 pp), in some countries even a lower incidence, in particular in Denmark, Sweden, Spain and Italy. One tentative explanation is that seniority rights are stringent in Spain and Italy, whereas Denmark and Sweden are known as countries with strong activation policies for elderly people, in particular through training and subsidised employment.

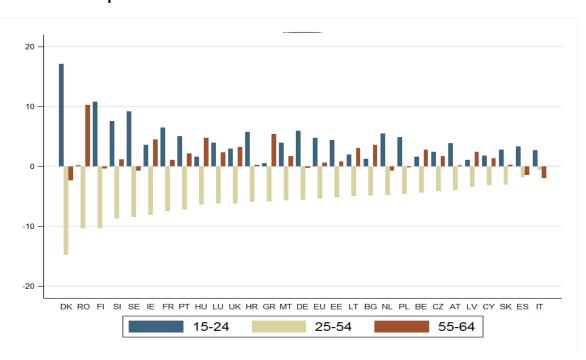


Figure 10. Share of age-groups in NSE compared to their shares in total employment in Europe 2014

Source: Eurostat: Labour Force Survey; own calculations. For a differentiation of this figure according to the components of NSE see Figures A6 and A7 (Appendix).

The age differentiation according to the components of NSE provides further interesting information. The overrepresentation of young people is especially pronounced (and without any exception in EU-28) in temporary (fixed-term) work even in countries without apprenticeship employment relationships. The core age group (25-54) is particularly underrepresented in part-time work with the exception of Italy and Austria; in Germany, the core-age group is almost equally presented compared to overall employment (see Figures A6 and A7, Appendix).

### 3.2.5 Employment protection

When considering the whole portfolio of LMIs (see section 2), the most prominent candidate for driving NSE is employment protection. Neoclassical theory has two clear propositions: First, the stronger the standard employment relationship is protected (especially through individual dismissal laws), the more employers will be inclined to circumvent this employment relationship through NSE, especially temp-agency work, fixed-term contracts, part-time work and all kinds of out-contracting, among others to freelancers like the self-employed without dependent employees. Second, the more temporary employment is restricted and protected, the less employers can take refuge to this form of non-standard employment. In any case, strong employment protection can lead to a dualistic segmentation in the labour market, with the young, the old, married women with children, people with disabilities, migrant background and low skilled workers less likely to have standard jobs.

New institutional and behavioural theory of economics, however, sees this relationship in a more complex way. Employment protection can foster, for instance, cooperation among employees in the firm, thereby increasing productivity and competitiveness, which eventually can result in higher labour demand, thereby reducing or at least mitigating segmentation. Forms of non-standard employment, thereby, might play the role as mediators or stepping-

stones to transform employment potentials into real and sustainable employment. Combined with generous social security entitlements, strong employment protection might indeed be disastrous for the weaker groups of the labour market, the potential outsiders; but if <u>basic</u> social security is decoupled from standard-employment through a citizenship-related universal right (as in most Scandinavian countries), the form of employment relationship will be less affected by employment protection (Schömann et al. 1998; Gangl 2003).

Table 3 confirms both neoclassical and new institutional theory: It is in particular individual employment protection regulation that induces employers to take recourse to non-standard employment in order to maintain the flexibility of labour input they need, but significantly only for NSE of men and for fixed-term full-time employment, for part-time self-employment and for self-employed with employees; the latter observation may also result from the fact that high and persistent unemployment pushes unemployed people under condition of high individual employment protection (for the insiders) into this kind of risky non-standard employment.

Table 3. Correlates between employment protection (EP) and NSE rates (NSER) in the period 2008-2014

|                            | NSER  Men <sup>1</sup> | NSER  Women <sup>2</sup> | Part-T<br>open-<br>ended<br>Total | Part-T<br>fixed-<br>term<br>Total | Part-T<br>self-<br>empl.<br>Total | Fixed-T<br>full-<br>time<br>Total | Self-<br>empl.<br>solo<br>Total | Self-<br>empl.<br>with E<br>Total |
|----------------------------|------------------------|--------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|---------------------------------|-----------------------------------|
| Individual EP <sup>3</sup> | .31                    | .15                      | 10                                | .22                               | .31                               | .45                               | .12                             | .33                               |
| Collective EP <sup>4</sup> | 13                     | .05                      | .15                               | 10                                | .27*                              | 26*                               | 02                              | .05                               |
| Temporary EP <sup>5</sup>  | 21                     | 35                       | 44                                | 36                                | 40                                | .25*                              | .14                             | 01                                |
| Combined EP <sup>6</sup>   | .24*                   | .18                      | 01                                | .16                               | .16                               | .31                               | .11                             | .37                               |

Source: Eurostat; OECD (2013); own calculations; figures in bold significant at 1 per cent level; \*significant at 5 per cent level (N=22 member states of the EU, 128 observations)

- 1) Men in part-time, fixed-term or self-employment in percentage of working-age men (15 to 64), (2008-2014)
- 2) Women in part-time, fixed-term or self-employment in percentage of working-age women (15 to 64), (2008-2014)
- 3) Indicator composed of eight characteristics of employment protection against individual dismissals (2008-2014) (OECD 2013)
- 4) Indicator composed of four characteristics of employment protection against mass dismissals (2008-2014) (OECD 2013)
- 5) Indicator composed of six characteristics of employment protection in case of temporary work (2008-2014) (OECD 2013)
- 6) Indicator composed of 3, 4, and 5.

The distinction by gender (not shown here) plays no specific role; the coefficients show all in the same direction albeit with different strengths. The combined employment protection indicator has the same, albeit weaker impact on non-standard employment. The correlation between temporary employment protection and the non-standard employment rate is negative, in particular for women and related to all kind of part-time work. This means that EU-Member states with high protection of temporary employment have comparatively low part-time employment rates. In other words, member states with lax regulation of fixed-term (temporary) contracts allow employers to use temporary part-time to screen the labour force and to eventually transform these contracts into open-ended part-time or to use part-time self-employment as work input, for instance in form of contract work. More sophisticated testing methods based on individual transition data, however, have to support such crude correlations on the aggregate level.

#### 3.2.6 Preferences for NSE

It is evident that asking people about their preferences should provide insights into the reasons for non-standard employment. This raises, however, a measurement problem. Preferences cannot be measured directly because they are not fixed or even not inherited. Preferences are also expression of economic constraints and cultural influences. It remains therefore unclear whether responses to corresponding questions in surveys reflect genuine choices (as expression of autonomy or free will) or the results of external constraints and influences.

Despite these caveats, it makes sense to take notice of such surveys since they represent the results of individual decisions interacting with external constraints. Thus, being aware of contextual conditions, changes of such preferences in time, across countries, ages and gender might tell a story. The European Labour Force Survey (ELFS) contains information about the reasons given for being in part-time or temporary (fixed-term) work. In the following, however, we cannot exploit the whole potential of this information available and have to restrict ourselves to some key points for Europe (EU-28) as a whole.

Table 4 shows that about a third of part-timers looks after children or incapacitated adults (21.7 per cent) or has "other personal reasons" (13.2 per cent); it is of no surprise that these reasons a less urgent for men than for women. 4.1 per cent mention "own disability", in this case, however, with a higher incidence among men. In total, 10.3 per cent undergo school education or training, with a remarkable higher percentage of men (19.1 per cent). Altogether, a bit less than one third works part-time for not finding a full-time permanent job, in other words, almost each third part-timer is involuntarily working part-time, among men it is over 40 per cent. Furthermore, about one in five (21.1 per cent) gives "other reasons" for being in part-time, indeed a large percentage of persons for whom we have no clue why they work part-time.

Table 4. Reasons of working part-time or fixed-term in EU-28, percentage, 2014

| Danama                                         |      | Part-time |       |      | Fixed-term |       |
|------------------------------------------------|------|-----------|-------|------|------------|-------|
| Reasons                                        | Men  | Women     | Total | Men  | Women      | Total |
| Looking after children or incapacitated adults | 4.2  | 27.1      | 21.7  |      |            |       |
| Other personal reasons                         | 7.3  | 15.1      | 13.2  |      |            |       |
| Own illness or disability                      | 6.4  | 3.4       | 4.1   |      |            |       |
| Person undergoing school education or training | 19.1 | 7.5       | 10.3  | 18.2 | 16.7       | 17.5  |
| Person could not find a fulltime/permanent job | 40.2 | 26.3      | 29.6  | 61.6 | 63.2       | 62.3  |
| It is a contract for probationary period       |      |           |       | 9.1  | 8.2        | 8.7   |
| Person did not want a permanent job            |      |           |       | 11.1 | 11.9       | 11.5  |
| Other reasons                                  | 22.8 | 20.6      | 21.1  |      |            |       |

Source: Eurostat (ELFS), own calculations; for the dynamics from 2008 to 2014 and some selected countries (Germany, Netherlands, Sweden, UK) see Table A1 (Appendix).

Involuntary part-time increased since 2008, in particular among men, whereas the proportion of other reasons for part-time remained almost constant. It needs, however, to be mentioned that the proportion of involuntary part-timers varies widely across countries in Europe. Interestingly, however, these figures correlate negatively with the extent of part-time work. The country with the highest share of part-time work, the Netherlands, has one of the lowest shares of involuntary part-time (9 per cent), whereas most of the countries with low shares of part-time have a high proportion of involuntary part-time, for instance Spain, Greece and Bulgaria with levels over 60 per cent. Further studies should assess the impact of other institutional factors, in particular public or affordable care services, on whether part-time is voluntary or involuntary.

Related to fixed-term contracts, the figures signal a clear preference: Most of the people, almost two third, prefer employment contracts that are open-ended and provide a long-term (career-) perspective and income security. There are no (!) significant gender differences related to the preference for open-ended ('stable') employment relationships.

If we look at changes of 'preferences' over time, we find remarkable differences only related to involuntary part-time which increases slightly both for women and – to a larger extent – for men in the period of observation (2008-2014). Involuntary temporary work rather increased slightly than decreased, whereas voluntary temporary work remained constant at a level of about 12 per cent.

Temporary work related to education or training also remained constant at a level of about 18 per cent; this figure, however, is heavily biased through the high levels in countries (like Germany) where apprenticeship systems are established, which are by definition fixed-term contracts (three to four years) until the end of training. Surprising and a bit disappointing from a transitional labour market point (TLM) of view is the fact that the reason of part-time for education or training intentions did not increase over the last decade. For an ageing workforce that is confronted with high structural and technological change, the combination of intermediate part-time combined with training or retraining would certainly enhance employability and upward mobility. It is probably still the lack of institutional incentives that explain the stagnant share of part-time in education. We will come back to this point later.

# 3.3 Consequences of increasing NSE in Europe

Conventional studies usually concentrate on individual wages and social protection as consequences of NSE. As the literature is already quite established in this respect and almost unanimous in finding that wages as well as social protection more or less deteriorate with NSE, we take a broader perspective and look also at quantitative aspects in terms of inclusion into the labour market and qualitative aspects in terms of aggregate productivity and economic welfare.

## 3.3.1 An analytical framework for measuring the impact of NSE

Two hundred forty years ago Adam Smith already noted that the 'Wealth of Every Nation' "must [...] be regulated by two different circumstances; first, by the skill, dexterity,

<sup>&</sup>lt;sup>10</sup> For details of some countries (Germany, the Netherlands, Sweden, and the United Kingdom) see Appendix of the original report, to be downloaded at <a href="https://www.guentherschmid.eu">www.guentherschmid.eu</a>.

<sup>&</sup>lt;sup>11</sup> Williams and Renooy (2014, p. 106: Appendix F.8) referring as source to Eurostat: lfsq\_eppga(Q2); lfsa\_eppgai, OECD, Incidence of involuntary part time workers.

<sup>&</sup>lt;sup>12</sup> Among our selected countries, only Sweden seems to be an exception (Table A1, Appendix).

and judgment with which its labour is generally applied; and second, by the proportion between the number of those who are employed in useful labour, and that of those who are not so employed" (Smith 1937 [1776], Vol. 1, VII). In other words: it is not only productivity but also social inclusion into the labour market that create sustainable wealth. Today, this wisdom can be transformed into a simple identity equation:

#### $GDP/P = GDP/H \times H/E \times E/WAP \times WAP/P$

GDP/P is the *Gross Domestic Product per Capita*, indicating economic wealth; GDP/H is the *Gross Domestic Product per Hour*, indicating productivity; H/E is the number of *Hours per Employed*, *indicating* variable inclusion under the condition that the mean varies both across the working population as well over individuals' life course; E/WAP is the *Employment Rate*, i.e. the number of employed as percentage of the working age population, indicating social inclusion; WAP/P is the *Working Age Rate*, i.e. the number of people in working age per population, which can be interpreted as the demographic element of sustainability. For the sake of illustration, a simple descriptive exercise on the basis of this formula might be illuminating:

Table 5. Decomposition of GDP/P in EU28

|             | GDP/P* | = | GDP/H | X | H/E    | X | E/WAP  | X | WAP/P  |
|-------------|--------|---|-------|---|--------|---|--------|---|--------|
| EU28 / 2008 | 34,203 | = | 44.4  | x | 1,741  | x | 0.657  | X | 0.673  |
| 2013        | 33,430 | = | 46.4  | x | 1,695  | x | 0.641  | X | 0.663  |
| Ø yearly Δ  | - 0.46 | ≈ | 0.88  | + | - 0.54 | + | - 0.49 | + | - 0.30 |

<sup>\*)</sup> GDP in US \$, constant prices (base year 2010); E=Total Employment of Population 15-64; WAP=Working Age Population 15-64; Ø $\Delta$ =average yearly change (ln-based). Empirical deviations from the identity equation are due to deficits in the reliability of the data, in particular related to the total hours worked (H). Sources: GDP/P and GDP/H: OECD.stat; all other variables Eurostat (resp. EU Employment and Social Developments in Europe 2014); own calculations.

As Table 5 shows, in 2013 economic wealth in constant prices (GDP/P) in the European Union (EU28) did not yet recover compared to 2008, the year shortly before the great recession. Labour productivity increased, but at a slow rate compared, for instance, to the United States that had a yearly productivity increase of 1.4 per cent. The European productivity dynamics were not enough to compensate for the reduced working time per employed and the decline of the employment rate. Whereas reduced working time, in our framework, might be positively interpreted as an increase of time variability over the life course, the main problem obviously is the drastic fall in labour market activity through social exclusion, in particular in form of unemployment. In EU28, the unemployment rate (the mirror of decreasing employment) rocketed during this short period from 7 per cent to 10.8 per cent, in particular among youth (from 15.8 per cent to 23.5 per cent). In addition, the demographic sustainability indicator (WAP/P) slightly worsened.

According to this analytical framework and in view of the deteriorating labour market conditions in EU28 we are in particular interested in the impact of NSE on social inclusion and productivity which includes also wages.

## 3.3.2 NSE and social inclusion in form of labour force participation

Ideally, we would like to measure inclusion both in terms of the variability of working time over the life course (time sovereignty) and in terms of the level of labour force participation (as an essential part of social inclusion). Unfortunately, valid indicators on life-course variability are not available so that we have to content ourselves with part-time as a crude indicator. Both indicators are interrelated in the sense that variability increases the individual chances to participate in the labour market. Before starting to test the relationship between non-standard employment and labour force participation, the two main reasons for expecting a positive relationship shall be made explicit.

First, from the demand side perspective, deepening labour division (due to globalisation or internationalisation and information technologies) seems to require a flexible work organisation in which individual job security may become a barrier rather than a requisite of high productivity. This does not mean that job tenure becomes obsolete as a requirement for cumulating experience and cooperation among complementary skilled workers. But it suggests that either job security has to be combined with continuous enhancement or enrichment of skills and competences, or individual job security has to be replaced by individual employment or labour market security (Auer, 2007; Auer and Cazes, 2003) in order to enable employers to mix the skills according to the changing tasks related to high-skill diversity production often based on projects or network types of work organisation (Marsden 2004).

Second, from a supply side perspective, rising education of women – a pattern found all over Europe – should further encourage their participation in the labour market which, however, increases coordination problems – both for men and women – between gainful labour market work and work related to care or education that money can't (or should not) buy. In other words, and in view of our simple model: Labour supply becomes more contingent. Furthermore, higher living standards may induce people to value free time for leisure or self-productive activities higher than additional market income, leading to claims of opportunities to transit between various employment relationships over the life-course. For this reason, the life-course perspective of labour supply becomes more demanding and complex.

Both kinds of reasoning lead to the expectation that labour force participation and non-standard employment are developing in a parallel way. This expectation would be (at least provisionally) falsified by significant negative correlations between non-standard employment shares and labour force participation rates.

Figure 11 shows, however, a positive relationship between the aggregate share of non-standard employment<sup>14</sup> and activity rate in 2014 for 28 member states of the EU. As the scatter plot makes clear, the Scandinavian countries and the Netherlands rank highest both in terms

-

 $<sup>^{13}</sup>$  As indirect test we correlated the part-time employment rate (unfiltered) with the gender gap in the total activity rate or labour force participation (gender differences in percentage points), expecting a negative correlation (the higher the part-time rate, the lower the gender gap). The result is indeed a significant r = -.17, indicating that men and women are at least to some extent able to coordinate labour market and unpaid (home/family) work in an equal way; obviously, there is still room of manoeuvre the lower this gap.

<sup>&</sup>lt;sup>14</sup> Notice that we use here the shares of aggregate (part-time, fixed-term, self-employment) non-standard employment in total employment to avoid multi-collinearity, since non-standard employment rates are parts of the activity rate or of labour force participation.

of non-standard employment shares and labour force participation; the new member states, and Italy, rank lowest.

The weak correlation is mainly due to two opposing trends within the dimensions of non-standard employment: Whereas part-time work (Figure 12) turns out as a strong driver of labour participation<sup>15</sup>, self-employment (Figure 13) is negatively correlated for reasons we already mentioned above.<sup>16</sup>

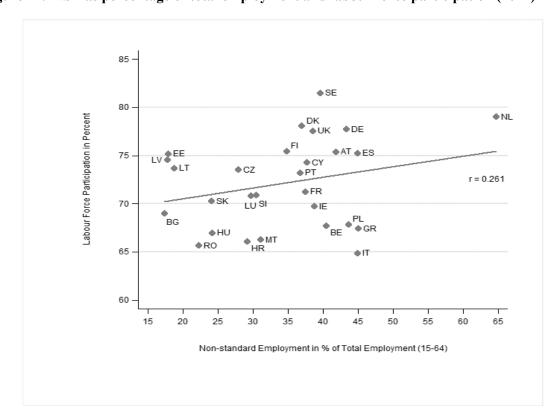


Figure 11. NSE as percentage of total employment and labour force participation (2014)

<sup>&</sup>lt;sup>15</sup> Albeit weakening in the second part of our observation period, not shown here.

<sup>&</sup>lt;sup>16</sup> Within solo self-employment, we have also two opposing trends: the (still) stronger negative trend due to structural change from agriculture (where many people are solo self-employed) to manufacturing or services, and the other (still) weaker positive trend due to the new ('creative') sector composed of start-ups and freelancers. The shares of temporary employment and labour market activity correlate positive but only weekly and insignificant.

Figure 12. Part-time employment as percentage of total employment and labour force participation (2014)

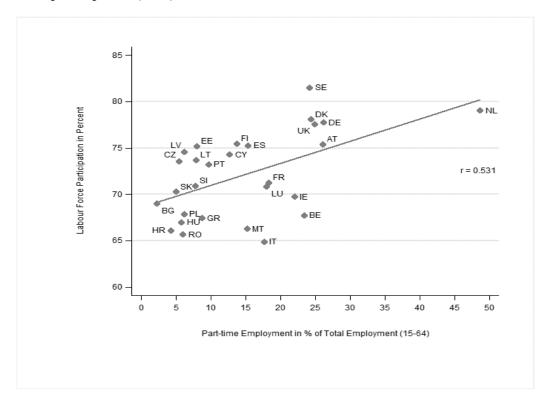
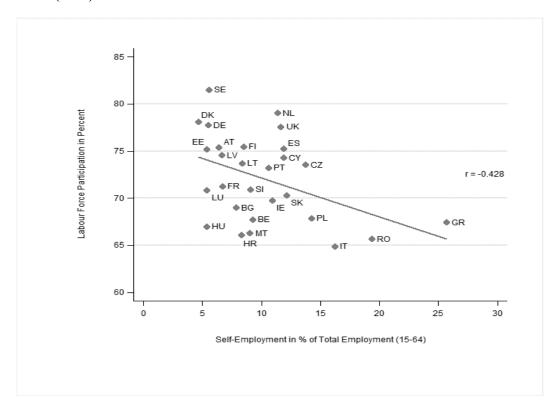


Figure 13. Self-employment as percentage of total employment and labour force participation (2014)



The 'causal' interpretation of these figures can be substantiated by looking at the dynamics of these two relationships. Checking this by taking all yearly observations of this relationship in the 28 EU-member states over the period 1998-2014 (452 available observations) and for all six filtered components of non-standard employment, we find significant positive correlations only for open-ended and fixed-term part-time work (Table 6) whereby the coefficients are even stronger among men compared to women.

Table 6. Correlates of the shares of NSE and labour force participation over the period 1998-2014; 28 EU-Member States, 452 observations

|                              | Total | Men | Women |
|------------------------------|-------|-----|-------|
| Part-time open-ended         | .55   | .54 | .32   |
| Part-time fixed-term         | .48   | .43 | .28   |
| Part-time solo self-employed | .03   | 15  | .01   |
| Full-time fixed- term        | .10   | .03 | .08   |
| Full-time solo self-employed | 43    | 13  | 38    |
| Self-employed with employees | 25    | .10 | 36    |

Source: Eurostat (ELFS), own calculations; bold figures significant at 1 per cent level

Empirical evidence, therefore, suggests that only the availability of part-time work can be considered as a strong driving force of labour market inclusion both in terms of variability and level; furthermore, this strong relationship is restricted to dependent part-time work. Temporary (fixed-term) full-time work is not at all related to labour market inclusion. Self-employment in both senses, with and without employees, does not contribute to increasing labour force participation, in particular not for women.

## 3.3.3 NSE and prosperity in form of productivity, GDP/P and wages

When we look at the relationship between non-standard employment rates and GDP per capita ('wealth' indicator) or GDP per hour ('productivity' indicator), we find strong positive correlations in both cases (Figures 14, 15). Although correlations do not allow to be interpreted as (one-directional) causal relations (here in the sense that non-standard employment causes higher economic wealth or productivity), the strong connection permits at least reflecting about possible causal relationships behind this empirical coincidence.

Figure 14. NSE as percentage of working age population and productivity as GDP per hour (2014)<sup>17</sup>

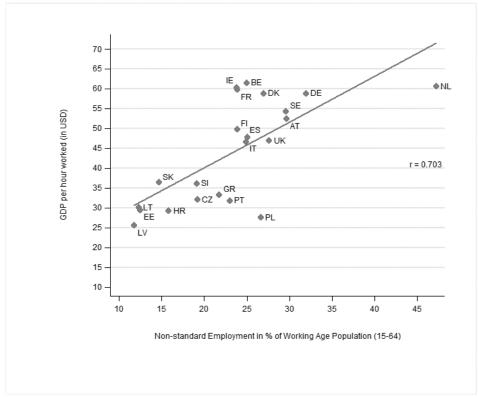
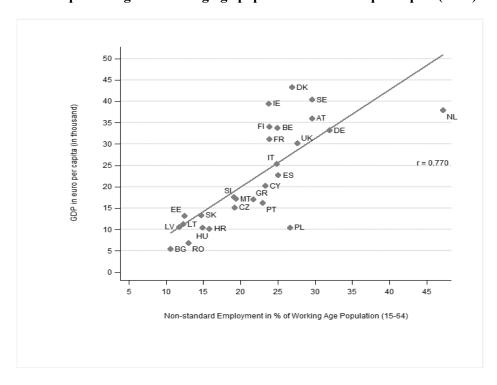


Figure 15. NSE as percentage of working age population and GDP per capita (2014)



<sup>&</sup>lt;sup>17</sup> Figures 14 and 15 without Luxembourg, which is by (its small) size and specific economic structure (financial capital) a rather unique case and an extreme outlier. Including Luxembourg, the correlates remain significantly and strongly positive (r=0.55 for productivity, r=0.52 for GDP/P).

Conditions of Work and Employment Series No. 91

Taking up again our starting quote of Adam Smith, a further deepening of labour division reflected in the variety of employment relationship comes in mind as one of causal nexus. Another is related to the fact that part-time work enables national economies to tap into the resources of female labour force. If the informal home economy is transformed into a market economy (in particular care, health, and education services) GDP grows almost automatically. Moreover, if (the potential) female labour force is better educated than in former times (which is the case without any doubt), marketization and mobilisation of this potential labour force leads to higher productivity. This kind of reasoning is confirmed by the fact (not shown here) that the simple one-year correlation is much stronger for women than for men, in fact, only significant for women (r=.66 for GDP/P; r=.70 for GDP/H). Further corroboration delivers the observation over the whole time period (1998-2014): The positive correlations hold over the whole period and become highly significant (451 for GDP/P, respectively 371 observations for GDP/H), but again only for women and not for men.

The slip-side of the coin is: Whereas non-standard employment of women seems to contribute to (or at least is compatible with) higher economic welfare and productivity, non-standard employment of men does not. Some explanation of this puzzle might be provided if we repeat the correlations by distinguishing between the six kinds of non-standard employment: open-ended part-time, fixed-term part-time, part-time solo self-employment, full-time fixed-term employment, full-time solo self-employment, and self-employed with employees; Table 7 shows the results.

Table 7. Correlates of NSER and labour productivity (GDP/H) over the period 1998-2014 (27 EU-Member States, 354 observations, without Luxembourg)

|                               | Total | Men | Women |
|-------------------------------|-------|-----|-------|
| Part-time open-ended          | .77   | .65 | .78   |
| Part-time fixed-term          | .57   | .50 | .60   |
| Part-time solo self-employed  | 01    | 02  | .01   |
| Full-time fixed- term         | .00   | 09  | .06   |
| Full-time solo self-employed  | 31    | 23  | 46    |
| Self-employed with employees  | .21   | .23 | .04   |
| Total Non-standard employment | .68   | .29 | .76   |
| Total standard employment     | 28    | .19 | 54    |

Source: Eurostat (ELFS) and own calculations; figures in bold significant at 1 per cent level.

It seems to be in particular open-ended part-time that contributes to higher labour productivity, even (only a bit weaker) for men, whereas solo-self-employment dampens – at the aggregate level – labour productivity, in particular related to women. These results are confirmed by using chain values (2010=100) and focussing on the relationships over time instead on differences between countries, albeit with much lower coefficients. One reason for this observation can be found in the logic of the service economy which often has to deliver just in time so that variability in the employment contract through part-time contracts contributes to higher productivity. The correlation between temporary (fixed-term) full-time work and productivity is not significant; however, it becomes even significantly negative, if we correlate only involuntary fixed-term contract and productivity (r=-.39). An important

reason for this finding is that only open-ended and longer-term employment relationships ensure the return of investments into innovation and skills.<sup>18</sup>

Summing up, standard and non-standard forms of employment seem to be to some extent complementary for knowledge and client oriented service economies. If we differentiate further, we find – and this is a real astonishing but plausible result – that it is voluntary part-time that contributes to higher productivity. Flexibility through involuntary temporary or fixed-term contracts does not pay-off in increasing productivity and economic welfare, rather on the contrary.

The overall correlation of standard employment with GDP/H is just the reverse (r=.28), however slightly positive for men (r=.19) but strongly negative for women (r=-.54). The overall negative sign gets stronger for the period of 2007-2014. This, at first glance, surprising result be explained on the background of Baumol's productivity dilemma: Whereas we find in (declining) manufacturing a virtuous circle, which means that an easy increase in productivity through new technologies induces an increase of wages, thereby a rise in demand and then employment, the increasing service sector is determined rather the other way round: difficult (low or even no) increases in productivity meet wage rigidities that prevent wage differentiation according to productivity, which in turn makes employment contract differentiation necessary to acquire wage flexibility in services (Baumol, 1967). Probably the only way to get out of this dilemma is to radically change the tax structure from labour taxes to (differentiated) commodity taxes (Jansson, 2006) or to consumer taxes (Frank 2012), a point to which we come back later (chapter 5).

## 3.3.4 NSE, wages and inequality

Finally, the impact of NSE should also be measured in equity terms, whether – for instance – efficiency in raising the level of labour participation affects inequality. Various dimensions of inequality would have to be measured, for instance wage inequality, inequality in social protection, the risk of becoming unemployed or dismissed, but also potential discrimination in participating in employability measures like continuous training and education. In the following we concentrate on the combined risk of part-time work and low wages, and provide some evidence related to social protection of NSE on the basis of a literature review.

Studies on wage inequality related to NSE are quite established. A recent study by Dias da Silva and Turini (2015) across the EU member states and using data from the European Structure of Earnings Survey finds that, after controlling for individual and job characteristics, workers on standard employment contracts earn on average about 15 per cent more than workers on fixed-term contracts with similar observable characteristics. Furthermore, the wage premium of people in standard contracts is higher for men, workers at middle age and with middle or higher education. Wage premiums are higher when employment protection for permanent contracts is strict and the share of non-standard employment high, which supports the view that workers with fixed-term contracts suffer from a negative wage gap due to lower bargaining power and lack of transition opportunities to regular jobs; also long duration of UB contributes to high wage gaps.

<sup>&</sup>lt;sup>18</sup> This result fits with micro-studies showing that excessive use of fixed-term contracts, especially in form of temp-agency work, dampens productivity and innovation; see among others Kleinknecht et al. (2014), Lisi (2013), Martin and Scarpetta (2011), and Zhou et al. (2011).

<sup>&</sup>lt;sup>19</sup> The correlation between involuntary part-time and GDP/H (productivity) is significantly negative (-.33).

<sup>&</sup>lt;sup>20</sup> These to some extent paradox results need further research at the micro-level of firms and individuals.

But there are important differences in the impact of NSE on wage inequality between the EU-member states for which we will mention just one example related to part-time because it might teach policy lessons to be taken up again in the final section. Janine Leschke (2015) described and explained the different levels of part-time work and their low-wage incidence for two occupations that contrast in terms of required skills and tasks: the case of teaching and the case of elementary sales and cleaning. These cases represent in our model the fluctuating vs. contingent type and the (rather) stable/career oriented type of the demand/supply relationship. The main outcomes of this study are:

- First, as to be expected, women face not only a higher risk of being in part-time but also a higher risk of receiving low wages; there are only two marginal exceptions for teaching occupations in the Nordic and Southern countries.
- Second, and also to be expected, is the higher risk of low wages in the elementary sales and cleaning occupation compared to the teaching occupations where the risks of low wages even among part-timers is quite low (only three to five per cent in EU).
- Third, and most interesting, is the fact that even in teaching occupations, women for instance in the continental welfare regime (Germany, the Benelux countries, France, Austria, and the Netherlands) face not only a substantially higher risk of being in part-time but also a higher risk of being in low wages compared to the Nordic welfare regimes (Denmark, Sweden, Finland).
- Fourth, the same pattern but at a much higher level can be observed in elementary sales and cleaning occupations where 46.2 per cent of women in the continental welfare regime get wages below 67 per cent of the median wage. In this case, the Anglo-Saxon women (UK and Ireland) do even worse (60.3 per cent), whereas in the Nordic countries 'only' 34.1 per cent of women part-timers receive low wages.
- Fifth, the multiple regression analysis confirming the descriptive patterns provides some hints for an explanation: It is in particular full-time equivalent childcare provision and public employment which is preventing or at least mitigating the risk of being in part-time and in lowwage at the same time (Leschke, 2015, pp. 339-41).

This rather specific but methodologically robust result leads us to reflect in a more general way about the proper institutional response for preventing, mitigating and coping with the increasing risks related to NSE.

#### 3.3.5 NSE and social protection

The scarce literature on the relationship of NSE and social protection is unanimous in demonstrating that people in nonstandard employment are less well covered by social protection (health, pension and unemployment insurance) and underrepresented in active labour market policies (e.g., Schulze Buschoff and Protsch, 2009). Since the OECD has already provided a review to what extent our three components of NSE (part-time, temporary work, self-employment) are covered by various forms of social protection (family allowances; insurances related to old age; disability and survivors; sickness and maternity; unemployment; work injury), we can leave this issue with a brief summary. In most cases, the benefit rules for part-time and temporary workers are the same as for standard workers, yet self-employed workers are more likely to experience different statutory treatment than people in other components of NSE. In most countries, unemployment and work injury benefits for the self-employed are different than for standard workers. Sickness and maternity, old-age, disability and survivors benefits are also different in some countries. The most common difference with standard workers is the exclusion of NSE from benefits related to unemployment and work



 $<sup>^{21}</sup>$  OECD (2015), in particular Table 4.6: Statutory benefit differences between non-standard and standard work, by benefit, 2010, page 181. See also ILO (2016).

# 4. Managing social risks related to NSE

Before starting with concrete suggestions, we first have to introduce the concept and premises of our policy discourse. We have consciously chosen the term "Managing Social Risks" for the following reasons: First, 'social risk management' has been introduced in the last decades as a concept to re-emphasise risk prevention and risk mitigation as alternatives to reactive risk-coping (Esping-Andersen et al. 2002; Holzmann and Jorgensen, 2000). Even if it sounds trivial, the important truth is nevertheless that the best social protection mechanism, e.g., unemployment insurance, are toothless as long as (preventative) job creation by sound macro-economic policy or the building up of high skills and adaptive competences by an effective education system are missing. Despite some caveats, social risk management is also inspired by the concept of social investment (e.g., Hemerijck, 2013). Like the ILO's decent work concept, these approaches emphasize the need to embed social protection mechanisms in broader economic and policy frameworks.

Second, individuals are faced with and affected differently by various risks over the life course, but they are endowed with different capabilities to cope with these risks (Anxo et al 2007; Sen 2001). From a life course perspective, unemployment may be the main risk of unsteady income flows or even a permanent loss of decent earnings; but is not the only one. Income risks can also occur through changes in the individual earnings capacities related to parenthood, illness or eroding skills, or just by the bad luck of having chosen an occupation that is no longer in demand. Some of these risks can and should be shouldered by the individuals. But sometimes even these risks accumulate or the shoulders are too small to carry the burden. Anticipating the respective need of solidarity requires building up redistributive capacities to take differences in individual risk exposure and individual adaptive capabilities into account.

Third, labour market risks are to a large extent risks that require some kind of collective action to build up reliable capacities of social protection. Structural and cyclical unemployment, for instance, are risks that private insurance cannot properly cover; adverse selection, correlation of risks plus efficiency consideration require at least some kind of public risk pooling (ILO, 2014; Barr, 2001; Bonilla and Gruat, 2003; Schmid et al. 1992).

Last but not least, we use the introduction of the term risk management in the employment policy discourse as a "moral opportunity" to reconsider the balance between solidarity and individual responsibility in managing risky labour market transitions over the life course (Heimer, 2003; Schmid, 2008, pp. 213-219). In a world of changing context condition, the balance established for instance by European welfare state regimes after the Second World War seems to be seriously hampered through external challenges like globalisation, as well as through internal challenges like the rising demand of social inclusion, including demands for gender equality and inclusion of people with disabilities.

In the following, we take the concept of transitional labour markets (TLMs) as a reference framework for managing social risks (Schmid, 2008, 2015). In this framework, ex ante risk sharing to empower individual actors to adjust to structural changes in the labour market play a predominant role. In fact, ex ante risk sharing is the essence of social insurance principles, which has at least seven great advantages related to ex-post means tested social assistance:

1. Social insurance benefits are better protected against discretionary political decisions than means-tested benefits due to targeted individual or employers' contributions, often complemented by targeted fiscal budgets for reasons of redistribution. The way of financing (taxes or contributions) is thereby not the decisive point; the important point is long-term fiscal targeting. The digital revolution, however, might require an increasing share of general tax financing (preferably consumer taxes) to enhance the

redistributive capacities and relieve wage income in exchange for burdening capital income.

- 2. Social insurance benefits are usually implemented through independent institutional bodies (often in tripartite arrangements) that develop over time a specific professionalism that is immune to short-sighted policy intervention.
- 3. Individual and wage-related benefits can be calculated much easier and fairer than means-tested benefits.
- 4. The incentives of work-related social insurance benefits to work are stronger than for means-tested benefits, not least due to the entitlement effect.
- 5. The macro-economic stabilisation impact of wage-related replacements is higher than those of (usually lower) means-tested benefits.
- 6. Generous short-term UB (up to about nine or twelve months) have various positive external effects: they reduce cut-throat competition between insiders (covered by insurance) and outsiders (not [yet] covered by insurance). They also provide individual workers with the possibility to search for a suitable job which matches their skills, and not have to accept any job, especially a precarious one; and they protect at least for a reasonable time people from recurring to costly consumer credits.
- 7. Jobless people covered by U-/Employment insurance remain healthier and more self-confident than jobless people without such benefits or only means-tested benefits.

Two specific strategies follow from this general concept: First, making not only work pay, but also making transitions pay, by extending social insurance principles beyond the risk of unemployment to include volatile income risks associated with critical events over the life course (school-to-work-transitions, job-to-job transitions, working time transitions, and transitions from work to retirement). Second, making not only workers fit to the market but also making the market fit to the workers by enhancing the capacity of employers and employees to adjust to uncertainties by investing in human capital and in the workplace environment.

These are big words. What could it specifically mean for managing the social risks related to NSE? It is obvious that the following considerations to this big question have to be separated both for the different forms of NSE as well as for the different context conditions between the world of work in Europe (with highly formalised labour markets) and the world of work in so-called developing or emerging economies (with high shares of informal employment).

## 4.1 The case of part-time work

As shown in the previous sections, part-time employment is the most prominent feature of NSE in Europe. Figure 16 gives an overview of possible strategies (complemented with best practices) of social risk management based on the matrix of labour market institutions developed in the second section. We will concentrate on a few examples often illustrated with German experience because this is our home country which we know best.

Figure 16. Managing social risks related to part-time employment

| Institutions/<br>strategies | Making transitions pay                                                  | Making market fit to workers                                      |  |  |
|-----------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------|--|--|
| U/E-Insurance               | Inclusion of parental leave and involuntary PT; portable entitlements   | Subsidise U/E-insurance contributions for low-wage earners        |  |  |
| E-Services                  | Inclusion of part-timers                                                | Support employers to reasonably adjust work environment (E-pools) |  |  |
| E&T                         | Combining part-time with CEVT*                                          | Enhance Dual Learning Systems                                     |  |  |
| EP                          | Same EP-rules should apply as for full-time                             | Entitlements to part-time and return to full-time                 |  |  |
| W-Formation                 | Wage insurance                                                          | Enforce wage discrimination related to part-time                  |  |  |
| T&B                         | Individual income taxation                                              | Progressive income taxation                                       |  |  |
| Public E&S                  | Enhance public employment wherever reasonable (public goods & services) | Full-time equivalent child care or affordable private care        |  |  |

<sup>\*</sup> CEVT=Continuous education and vocational training.

Inclusion of part-time work into unemployment insurance is quite common yet insures only pro rata the reduced wage income due to part-time work. Income loss caused by transiting from full-time to part-time, due, for instance, to parental leave, has so far not been covered in most European countries. The Canadian employment insurance, however, is an early model for such an inclusion (van den Berg et al. 2008).

In Germany, the new parental leave allowance ('Elterngeld'), introduced in 2007, now insures the income loss due to full-time or part-time leave like in the case of 'full-time' unemployment by 67 per cent of the former net wage income. Such leave allowance might be considered as an element of employment insurance although it is formally not included into UI and not financed by individual or employer's contributions. The entitlements are portable from one employer to another and to any other location in the country (Bergemann and Riphahn, 2015).

Involuntary part-time, however, is not yet covered but might be an idea to make transitions pay: In many cases, part-time serves as a stepping stone to full-time, and part-time unemployment insurance would provide an incentive for unemployed to take up part-time. It would also encourage employers to use a part-time job as a basis to test the employability of unemployed. Moreover, Denmark and Sweden provide UI for involuntary part-time workers (according to MISSOC, Comparative Tables, July 2014); and the interim allowance (*Zwischengeld*) in Switzerland is a functional equivalent that insures the income gap between 'full-time' UB and income of the new job (Schmid, 2011a, pp. 129-130).

A case of making the market fit to workers could be to subsidise UI-insurance contributions for low-wage earners by choosing, for instance, a progressive contribution scale for UI-contributions, which in Germany is already the case for so-called 'midi-jobs' (i.e. part-time jobs in the range of a 450 and 850 Euro monthly wage).

A much neglected opportunity would be the easy transition from full-time to (temporary) voluntary part-time and to provide part-time unemployment benefits under the condition that the other part of the 'working' time is used for labour market education or training. In principle, this seems to be possible in Germany but is not much used as it requires

a flexible work-organization. Small and medium enterprises lack this institutional capacity which could be compensated by employment services or regional labour pools.

The same seems to be the case regarding the right to reduce working time and to return later on to full-time. This entitlement has existed in Germany since 2001 for workers in firms with more than 15 employees. This possibility, so far, has not been much used owing to the prohibitive costs related to flexible work organization, but also due to the fact that the right to return to full-time (at comparable conditions that existed before going part-time) cannot yet be properly enforced. Apart from parental part-time leave, the individual decision to reduce working time is linked to the open-ended ('permanent') contract. In other words, the decision implies being an open-ended part-timer without a guarantee to return to full-time work, unless the employer explicitly agrees to a temporary part-time arrangement. So the risk related to the reduced working time has to be shouldered completely by the individual if the labour law does not provide a helping hand, e.g. the obligation of employers to accept requests for temporary part-time unless he or she has good reason not to do so.

It is a well-established fact that equal tax treatment for married women has a strong positive effect on female labour force participation. In many EU countries married women, especially if they work part-time, are taxed more heavily than men or single women. Sweden is a good example of where the transfer from joint to separate taxation in combination with other family-friendly policies has led to higher labour force participation among women. A study for 17 OECD countries shows that women will participate more when they are being taxed individually and equally compared to men (Jaumotte, 2003). Another study, referring to a Dutch tax reform changing tax allowances to non-transferable tax credits, found also a positive impact on female labour force participation (Bosch and Van der Klaauw, 2009). Germany still has joint taxation which subsidises heavily traditional partnerships (men as full-time wage earners, women – if any – only as marginal part-timers) and thus discourages women from increasing their involvement in paid employment and establishing their own social protection in old age.

Finally, the importance of the state as employer not only of last resort but also as employer and promoter of public goods and services should not be neglected. High inclusive quality care or education is a collective action problem which the market does not solve or only insufficiently. The same holds true for providing adequate child care in the spirit of making the market fit to workers. Here, equity and efficiency considerations open up a winwin situation: women's improved education can only be turned into productive capabilities if the tasks related to societal reproduction are solved through collective action. Under such provisions, part-time work could even merge into short full-time work and long full time work into long part-time work (30-hour week), opening up a new standard employment relationship. Last but not least, such a development would also facilitate the sharing of care responsibilities between men and women.

## 4.2 The case of temporary work

Institutional responses related to *temporary employment* (Figure 17) often trade-in flexibility with new securities ('flexicurity'): efficiency-enhancing reforms of employment protection that allow greater flexibility are compensated by efforts to provide adequate income support to temporary workers facing higher risks of unemployment than standard employees. As the Danish flexicurity model, however, reminds us: such deals have to be coupled with the institutional capacity of effective re-employment services to facilitate their reintegration into employment and to thereby balance efficiency with equity considerations.

A review by Martin and Scarpetta (2011) suggests that unemployment benefits appear to have a positive impact on average worker transitions, with particularly strong effects on

youth and young adults who are over-proportionally employed in temporary jobs. Reforms in unemployment or employment insurance, should therefore consider two issues. First, the regulation of the waiting period for entitlements should be adjusted to the new situation of an increase of temporary jobs. Many EU member states require a contribution period of two or even three years which many, if not most of the temporary workers, cannot fulfill. In general, shorter contribution periods are to be recommended.<sup>22</sup>

Figure 17. Managing social risks related to temporary employment

| Institutions/<br>Strategies | Making transitions pay                                                     | Making market fit to workers  Public support of mobility insurance such funds (the case of Austria) |  |  |
|-----------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--|--|
| U/E -Insurance              | Easing inclusion plus mobility insurance; portable entitlements            |                                                                                                     |  |  |
| E-Services                  | Inclusion of temporary workers                                             | Support employers to reasonably adjust work environment (e.g., E-pools)                             |  |  |
| E&T                         | Inclusion of temporary workers                                             | Support specific training funds for temporary workers                                               |  |  |
| EP                          | Principle of equal pay (only targeted or CA deviations); transition budget | Strict enforcement of existing labour law; single employment contract                               |  |  |
| W-Formation                 | Minimum wages; possibly wage premiums for risky temporary work             | Enforce wage discrimination related to temp-agency workers                                          |  |  |
| T&B                         | Targeted U/E-Insurance contributions                                       | Experience rating of U/E-insurance contributions to employers                                       |  |  |
| Public E&S                  | Enhance public employment wherever reasonable (public goods & services)    | Carefully targeted temporary public employment for long-term unemployed                             |  |  |

Another institutional response could be *mobility savings accounts* which owe their inspiration to the 2003 Austrian reform of dismissal law ('Abfertigungsrecht'). This reform converted uncertain firing costs for employers into a system of individual savings accounts, funded by an employer payroll tax (1.53 per cent of wages). From the employer's perspective, this system guarantees certainty about the cost of any future dismissal at the time of hiring; dismissal decisions became independent from the length (and accumulated entitlements of severance payments) of the employment relationship. For the workers, costs associated with labour mobility are reduced because they do not lose their entitlement to 'severance pay' when quitting to take a new job; accumulated entitlements are paid out if transiting into retirement. The new law is inclusive because all workers are covered, independent of the number or duration of employment relationships, whereas the old law privileged workers with 'standard' contracts. The state supports the corresponding funds through establishing and controlling private mobility administrations (*Mitarbeitervorsorgekassen*) which ensure the portability of accumulated individual entitlements and liquidity of the various funds (Schmid, 2011a, 123/4).

36

<sup>&</sup>lt;sup>22</sup> For example, systems could be adapted to consider cases where eligibility conditions require x months of contributions during a longer period of y months (e.g. 12 months of contributions during the last 3 years); some European countries have moved in this direction. See ILO 2016 report for examples.

A further possible and widely discussed institutional reform would be to tackle the asymmetry between temporary and permanent contracts more directly by relaxing the stringency of EP for the latter while at the same time increasing the degree of stringency for the former. Steps in this direction have been repeatedly made in the Netherlands, most recently with the Flexwet in July 2015 that stipulated a maximum period of three fixed-term contracts within a period of two years after which a fixed-term contract is automatically transformed into a permanent contract.<sup>23</sup> The same law made dismissal again easier in exchange of an individual entitlement to a transition budget replacing severance payments. Every employer (with 25 or more employees) has to provide a transition allowance in the case he or she initiates the termination of the employment relationship if that relationship exceeded two years. The transition allowance would be calculated as follows: For every year of service less than 10 years, the employee receives one third of his monthly salary; for every year of service that exceeds 10 years, half of his monthly salary is granted. When the employee is over 50 years old, he or she is entitled to one monthly salary for every year of service that exceeds 10 years. A maximum of 75.000 Euros in total applies, unless the employee's annual salary exceeds this amount, in which case this higher amount counts as maximum. The decisive difference to the severance payment is that the transition allowance has to be utilised – in mutual agreement between employer and employee – for reintegration to another job, in particular through training or other employability measures. The law intends to reduce the pressure on firms to resort to fixed-term contracts, transforming 'passive' security into 'active' security.

Another concrete step towards this strategy could be the establishment of a single employment contract in order to move away from a dual EP system of the type which exists in many European countries today, with relatively strict EP for permanent workers and relatively lax EP for temporary workers. A single employment contract would set firing costs at initially low levels and rising with firm tenure, requiring, for instance, the transition from a temporary to a permanent or open-ended contract after three years at the latest (Casale and Perulli, 2014). There are, however, serious doubts about the effectiveness of single contracts because the thresholds of such legal frameworks lead to stepwise increasing dismissal costs that induce employers to replace a worker with a new one whose protection starts from zero. This effectively means that newly recruited workers still face the same insecurity, at least for a certain length of time and for the weakest group on the labour market. Depending on how the single-employment contract is modelled, it is quite possible that it would make the situation of some workers with short tenure even more precarious than it would be with a temporary contract (Eichhorst et al. 2016). Linking severance payment with seniority in the current job instead with seniority in the career would also reduce incentives to professional mobility, which it is at the core of our TLM approach (Lepage-Saucier et al. 2013).

In cases where the employment contract is combined with an education or training contract, e.g. in the case of apprenticeships or in the arena of academic education and research, there might be special regulations. However, the current practice, e.g., in Germany – where young academics have employment contracts with an average of only nine months – is unsustainable.

Finally, minimum wages (MWs) are an effective instrument to prevent miserable wages below a decent level and therefore play a necessary role in complementing a social protection floor for workers in NSE. Although a MW would not solve the problem of discriminatory wages in NSE compared to SE, it can at least narrow the range of such discrimination, in particular at the low end of the wage scale. Germany only recently introduced a mandatory

-

<sup>&</sup>lt;sup>23</sup> www.english.szw.nl/

minimum wage of  $\in 8.50$  (January 2015), which the government – according to the recommendation of the German Minimum Wage Commission – decided to increase to  $\in 8.84$  in January 2017. Contrary to expectations of some mainstream economists, this MW has had – so far – no evident damaging effects on employment. It is, however, too early to definitively assess its impact (Mindestlohnkommission, 2016). In theory, the employment impact is indeterminate (Manning 2003) so that positive or negative effects depend much on the implementation of MW; an evidence-based setting of MW is, therefore, indispensable.

The UK seems to be a model for other countries that have not yet taken this step (Metcalf 2008; Brown 2014; Butcher 2012). To the surprise of even the Low Pay Commission, however, that so far was de facto setting the level and pace of the British national minimum wage, the British conservative government introduced in April 2016 a minimum living wage of £7.20 (about  $\[ \in \] 9.20 \]$ ) for adults older than 25 with the ambitious aim of increasing this living wage to at least £9.00 in 2020. The impact of this policy remains to be seen.

## 4.3 The case of self-employment

When we come to *self-employment* (Figure 18), the basic issue for proper institutional responses is certainly to ensure social security in old age. Schulze Buschoff and Protsch (2008) argue, on the basis of comparative studies, that contributory financing systems with income thresholds at the bottom (e.g. mini-jobs) are not suitable for covering the specific risks related to non-standard employment, especially not for the new self-employed. They propose tax-financed basic income guarantees in old age to cover the risk of extreme income disparity or volatile income streams related to self-employment: Tax-financed social pensions ('folks' pensions) would prevent or at least mitigate extreme poverty for the self-employed in old age. As a complement, self-employed could – or even should – also be included in the existing unemployment or employment insurance schemes for two reasons: a universal coverage would ease transitions between or combinations of the two employment relationships, and the corresponding individual contributions of those self-employed with a very low income could be supported by loans or credits that are paid off in times of higher or stable income.

Figure 18. Managing social risks related to self-employment

| Institutions/<br>Strategies | Making Transitions Pay                                                   | Making Market Fit to Workers                                              |  |  |
|-----------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------|--|--|
| U/E -Insurance              | Inclusion of self-employed as far as possible or specialised U/E-I-funds | Loans or credits for U/E-I contributions to self-employed with low income |  |  |
| E-Services                  | Advice to start-ups                                                      | Quality standards for business start-ups                                  |  |  |
| E&T                         | Include start-up training into regular school/university curricula       | Quality standards for services providers                                  |  |  |
| EP                          | Improvement of author's royalty or exploitation rights                   | Enforce royalty and exploitation rights                                   |  |  |
| W-Formation                 | Minimum income for contract work                                         | Enforce minimum income                                                    |  |  |
| T&B                         | Maintain accumulated UB-entitlements when transiting to self-employment  | Basic income guarantee (decouple social security from job career)         |  |  |
| Public E&S                  |                                                                          | Provide facilities and other infrastructure for start-ups                 |  |  |

One of the most effective labour market programmes in Germany (even in times of mass unemployment) was a start-up scheme that transformed individual unemployment benefit entitlements into capitalised loans combined with subsidies for contributing to social security (e.g. Caliendo and Künn, 2011). At the height of this measure, 350,000 unemployed (about 10 per cent of the unemployed) were supported in their bid for self-employment. About 30 per cent of these start-ups even expanded and hired employees (Schmid, 2011a, p. 145). Apart from the financial incentives, institutional capacities were built up to ensure a careful selection of candidates and an examination of their business plans according to quality standards, thus contributing to the success. The programme, however, was substantially reduced through the government's drastic austerity measures in 2011/12, although repeated evaluations confirmed the effectiveness *and* efficiency (at least for parts) of the programme.

A most recent evaluation (Bernhard et al. 2015) reports that 90 per cent of supported start-ups were still self-employed after 18 months, 7.5 per cent transited to waged employment and only 2.5 per cent again became unemployed. Furthermore, in the vein of the austerity philosophy (aiming at zero debt-budget) the original individual entitlement to such a measure (provided that certain conditions were fulfilled) was transformed into a discretionary measure, the size of individual support was reduced, access conditions were made more difficult, and placement into waged employment now had priority – conditions which have been found to be somehow too restrictive among evaluators. A more supportive stance, particularly intensive advice and training assistance for those unemployed willing to start-up a business, is recommended.

Moreover, maintaining accumulated unemployment benefits for an interim time up to five years would encourage the unemployed to take the risk of self-employment because they could fall back onto the standard benefit scheme. Moreover, specific insurance schemes for certain categories of self-employed could be established, for which the French and the German (*Künstlersozialversicherung*) artist social insurances would be an example (Schmid, 2008, pp. 189–190).

Finally, contract work is becoming more and more widespread and often involves self-employed or freelancers as contractors. A minimum income regulation seems to be necessary – corresponding to minimum wages – to ensure a minimum level of decent income.

# 5. Main findings and outlook

This study looked at extent, structure, dynamics, causes and consequences of non-standard employment in the European Union (EU28). Whereas standard employment (SE) is considered as employment in open-ended contracts, in full-time work and in a wage-/ or salary relationship, non-standard employment (NSE) has been defined here as employment in part-time work, temporary work, and self-employment, further differentiated for the first time – compared to earlier studies – into open-ended part-time, temporary part-time, part-time self-employment, full-time self-employment without and with employees, and full-time temporary work (including temp-agency work).

### 5.1 Main findings

We started with an original exposition of an analytical framework for the whole set of labour market institutions by sketching their potential role in the management of social risks related to NSE. This exercise comes to the conclusion that institutions always have to be considered both as restrictions as well opportunities and to be analysed in their historical context and mutual interplay, and we drew attention, in particular, to the concepts of institutional path dependency, institutional complementarity, institutional incongruence, institutional trade-offs and equivalents, and illustrated them by examples.

We then proceeded by providing rich information on the extent, structure, and development of non-standard employment in all member states of EU28 on the consistent data base of the European Labour Force Survey in the period 1998 to 2014. For reasons of internal comparability, all figures are provided as percentage of the working-age population (age 15 to 64). The main results can be summarised in the following points:

- In EU28, the NSE-rate increased to a level of 25.8 per cent (2014); in other words: about a quarter of the working age population is either in part-time, temporary work or in self-employment (controlled for overlaps).
- The dynamics of NSE, however, slowed drastically down after the economic crisis; only part-time employment increased further with a moderate tempo; temporary work as well as self-employment decreased.
- Country differences within EU28, however, are huge, and part-time work explains the majority of this difference. Women are largely overrepresented in part-time, and in the recent period part-time increased especially among senior workers. Whereas part-time employment is most common in services, temporary employment is common in all sectors, even in manufacturing.

The analysis went beyond description by developing a simple but powerful causal model and by demonstrating the consequences of NSE for economic performance and social inclusion. Among the most interesting results are the following:

- In institutional terms, it is in particular strong individual employment protection which induces employers to utilize NSE, in particular full-time fixed-term employment.
- In behavioural terms, for men the strongest reason for being in part-time is not finding a full-time job and combining part-time with education or training; for women, the strongest reason for being in part-time is looking after children or incapacitated adults and not finding a full-time job. Overall, involuntary part-time is increasing.

- In consequential terms, only part-time work turns out as a strong driver for increasing labour force participation. Most interesting and provocative is the result that voluntary part-time work not only contributes to social inclusion but also to increasing wealth and productivity, whereas temporary work and self-employment contribute to neither wealth, productivity nor social inclusion.
- In social terms, the study concurs with many other studies that NSE leads more or less to lower wages, higher inequality and (gender) segmented labour markets. Institutions, however, can matter, in particular in occupations requiring high skills; it is particular full-time equivalent childcare provision and public employment which can prevent or at least mitigate the risk of being in involuntary part-time and in low-wage at the same time.

In its final section, the study draws some policy lessons for managing social risks related to NSE following the concept of transitional labour markets. In this framework, ex ante risk sharing to empower individual actors to adjust to structural changes on the labour market plays a predominant role for protected mobility. Furthermore, as preventative strategy, not only workers have to be made fit to the market, but also the market has to be made fit to the workers, in particular by continuously investing in human capital and in the workplace environment. Related to the three main components of NSE, the main conclusions are the following:

- As regards involuntary part-time work, it is recommended that unemployment insurance should offer partial unemployment benefits as already practiced in a few countries. A broader "employment insurance" could also cover voluntary part-time (often 'enforced' by unpaid social obligations) under some circumstances, for instance in the form of parental leave or care-leave allowances for ill children or dependent elderly. A much neglected opportunity would be the easy transition from full-time to voluntary part-time and to provide part-time unemployment benefits under the condition that the other part of the 'working' time is used for labour market education or training. Finally, the importance of the state not only as employer of last resort but also as a model employer for flexible and protected working time arrangements over the life course should not be neglected.
- With respect to the spreading of temporary employment, adjusting the conditions with regard to qualifying contribution periods for entitlements to social security should be considered; in general, shorter or more flexible contribution periods are to be recommended; a further institutional response could be to complement social insurance by mandatory individual savings accounts as 'active' securities (encouraging mobility) replacing severance payments as a relic of 'passive' securities; minimum wages would also complement a social protection floor for those in temporary work.
- In the case of self-employment, universal basic income guarantees based on citizenship or residency would substantially mitigate the high poverty risks in old age. Self-employed should also be included into the existing unemployment or employment insurance schemes; vice versa, entitlements to unemployment benefits of formerly 'standard' workers could be transformed into subsidies for start-ups of unemployed.

#### 5.2 Outlook

In light of the increasing complexity of the global world of work and the emergence of the digital economy, the overall conclusion has to be more general rather than specific. The main message is that we should embrace NSE as an opportunity rather than as a danger. The consequence of this view, however, is a responsibility of policy makers to take care of new institutional capacities that provide social protection for people engaging in these risky employment relationships.

41

So far, the dangerous elements of risks related to NSE have been emphasised: precarious and dead-end jobs, rising inequality and segmentation. This view is certainly justified by the facts, but we hope to have added and justified a more optimistic view by pointing to the opportunity elements of risks related to NSE: enhancing productivity through increasing the variability of employment relationships and greater sovereignty of workers for choosing the most suitable form of employment relationship over the life course with changing needs and preferences. The provocative news from the empirical part of this study is the observation that it is voluntary part-time (here, an indicator of working time flexibility over the life course) in particular which seems to be an important driver for a new 'marriage' of equity and efficiency in the digital economy. Furthermore, Europe should not dismiss the labour market complexity of the global world around its small continent which is, to a large extent, still strongly characterised by informal employment relationships with low social protection (see also ILO, 2016).

Embracing more contractual complexity requires enhanced institutional capacities to respond to the new challenges of fair risk-sharing at three levels: the legal, the financial and the organisational level. At the legal level, a new labour standard based on the idea of a right to a decent income beyond formal employment might be the solution. At the financial level, social protection – in a digital economy – may rely less on wage-based contributions and more on general taxation (including capital gains, wealth and luxurious consumption). At the organisational level, negotiated flexicurity and effective labour market services are at the core, like matching, monitoring and evaluation, case management based on individualised assessment, continuous training and vocational education, co-financing implemented within modern governance structures such as co-determination and participation in investment decisions.

As far as the legal level is concerned, expanding the range of the labour contract to all forms of work, also including unpaid but socially highly valued work as proposed, for instance, by the Supiot Report (Supiot, 2001, 2016), seems to be the most radical and promising route for ensuring protection of workers. The main aim is the move from protecting jobs to protecting the employability of people, or from job security to labour market security (Auer, 2007; Auer and Gazier, 2006). Social security linked to traditional employment relationships would be extended in the new standard to include income and employment risks related to transitions between various employment and labour market statuses (Schmid, 2008, 2015). The legal core is the establishment of new social rights and new social obligations on both sides of the labour market.

The new social rights would be new in that they would cover subjects unfamiliar to industrial wage-earners on which the traditional standard employment relationship is built: the right to regular employability assessment, to appropriate working hours including the right to request shorter working hours (Coote, 2013, XXI), to a family life, to occupational redeployment, retraining or vocational rehabilitation, and – lastly – to a flexible employment guarantee through the state (Atkinson, 2015, pp. 140-7). In contrast to earlier job guarantees, this guarantee would be flexible in three respects: First, individuals would be free to choose an offer by the state. Second, individuals could combine this right with various 'non-standard' forms of employment, e.g. involuntary part-time. Third, the guarantee could also take the form of subsidised employment in the (private) market sector. This right is also an immediate conclusion from the insight that employment has not only instrumental but also intrinsic features. Providing job opportunities can, for instance, take youth out of their 'natural' neighbourhood and eliminate, at least for a certain time, the often negative effects of peer groups in disadvantaged environments (Akerlof and Kranton, 2011).

The scope of new social rights would also be new since they would cover not only 'standard' wage-earners but also the 'non-standard' part-time workers, the self-employed or semi-self-employed, the temp-agency workers, the marginal workers, and even zero-hours

contract workers. One example would be including the risk of reduced earnings capacity in a way analogue to short-time work (of full-time workers) covered by unemployment insurance. The income loss induced by reduced working time (due to, for example, care obligations) could be compensated by part-time unemployment benefits or – as in the German case – a wage-related parental leave allowance. Such a benefit would also be helpful when related to the increasing demand of care for frail elderly which, for example in Germany, in its majority (three-fourths) is still provided within the family and again predominantly by women.

The new social rights are new in nature because they often take the form of vouchers, social drawing rights or personnel accounts, which provide transition securities from one labour contract to another and allow workers to rely on solidarity within defined and perhaps collectively bargained limits when exercising their new freedom to act (Korver and Schmid, 2012). A good practice example of such coordinated flexibility is the German collective agreement established in the chemical industry in April 2008, setting up so-called demography funds. This overall framework agreement requires all employers to contribute an annual sum of €338 for each employee into a fund, which can be utilised after corresponding negotiations and deliberations at the firm level for various aims, among others for training or retraining, for buying occupational disability insurance or for early retirement, however, under the condition of building a bridge for young workers entering employment.

To the extent that these new rights enhance the range of individual choices, a corresponding new field of individual responsibilities opens up. This dimension, strange enough, is not covered in the Supiot Report. Amartya Sen, however, is quite outspoken in this respect: "Freedom to choose gives us the opportunity to decide what we should do, but with the opportunity comes the responsibility for what we do – to the extent that they are chosen actions. Since a capability is the power to do something, the accountability that emanates from that ability – that power – is a part of the capability perspective, and this can make room for demands of duty – what can be broadly called deontological demands" (Sen, 2009, p. 19).

The new social obligations arising from the extended room of individual freedom to act would be new in that they would cover subjects unfamiliar in the traditional employment relationship: obligations to train and retrain both for employees as well as for employers to maintain employability; to actively search for a new job or accept a less well paid job under fair compensating rules; to healthy lifestyles and occupational rehabilitation; to reasonable workplace adjustments according to the capabilities of workers (Deakin, 2009) or to changing working times according to the needs either related to the individual life course or to volatile market demands of goods and services. A good example in this direction is the 2010 modification of the German law for severely disabled people, which stipulates the right of the disabled against their employer to an employment which enables them to utilise and further develop their abilities and knowledge, the right to privileged access to firm-specific training, the right to facilitate the participation in external training, the right to a disability-conform work environment, and the right to equip the workplace with required technical facilities. It is evident that these kinds of adjustments duties require support through collective agreements or social pacts between firms and other key actors in the local or regional labour market with the support of modern labour market services.

The scope of new social obligations would also be new since they would cover not only certain categories of workers or employers but also the core workers in open-ended contracts and all firms regardless of size and function. The exemption of civil servants or the self-employed from contributing to social security (especially pensions and unemployment insurance) as, for instance, in Germany, would not be justified under the regulatory idea of an inclusive labour contract. A good practice example is the obligation to work-share in case of cyclical troughs of demand if workers' representatives (Betriebsrat) require this from the employer whereby, in turn, the law entitles them to ask employers to work-share as an instrument to maintain the employment relationship. The German scheme of short-time work

(Kurzarbeit) demonstrates the usefulness of such a device for internal flexibility as well as the need to fine-tune the contractual arrangements (Möller, 2010; Schmid, 2015, pp. 84-6; Storrie, 2012).

The new social obligations would be new in nature since they often take the form of 'voice', involving negotiations at individual, firm, regional and branch level in order to reach mutual agreements and to accept compromises in case of different interests, so-called negotiated flexicurity (Schmid, 2008, pp. 317-22). As many workers in NSFE have limited voice, it is important to include measures that can strengthen their ability to be heard and negotiate effectively. Voice as an adjustment mechanism to structural change involving high uncertainty is known in the literature on industrial relations as legally acknowledged learning communities. Covenants are a good practice case, which – for instance – are widely used as a governance instrument in the Netherlands. A covenant is an undersigned written agreement, or a system of agreements, between two or more parties, at least one that is or represents a public authority, meant to effectuate governmental policy. There is no single format of a covenant, but they share common features: enough overlapping interests of participants, mechanisms bringing about both definition and the machinery of achievements. The parties cooperate and formal sanctions are absent, yet parties have the opportunity to go to court in the case of another party defaulting. Covenants could also be understood as a "pressure" or "incentive" mechanism for coordination to economise on the most scarce and strategic resource, that is, the ability to take adequate decisions and to avoid the decision traps of collective good production in uncertain environments (Frank, 2012; Korver and Schmid, 2012, pp. 39-41).

To sum up: The challenge of NSE could be taken as a chance to design a roadmap guided by the regulatory idea of an inclusive labour contract. New social rights and obligations under this systemic reorientation would increase the internal flexibility of 'standard' employment as a functional equivalent to external flexibility which often ends up in precarious NSE. But they would also include voluntary forms of NSE in a broader social protection framework as currently existent, for instance, by extending the conventional unemployment insurance to a system of employment insurance which also covers income risks other than unemployment, such as voluntary or involuntary part-time or short-time work (Schmid, 2015).

The establishment of new social rights and new social obligations according to the regulatory idea of an inclusive labour contract would also ensure the development of institutional capabilities that not only make workers fit to the market, but that also make the market fit to the workers (Gazier, 2007; Schmid, 2008). The employment strategy of inclusive growth should be based on the regulatory idea of a new labour standard which goes beyond employment and includes all kinds of work that are socially valued or even obligatory. The inclusive labour contract brings together the supply strategy of investments in human capabilities over the whole life course, and the demand strategy of inclusive growth through job creation by proper fiscal and monetary policies enhanced by the protected variability of labour contracts. This would also be an essential element of a global social policy that aims at the prevention of a vicious cycle or cut-throat global competition, originally described by the socialist political activist, Ferdinand Lassalle, as the iron law of falling real net wages towards an existence minimum (Supiot, 2016, XXXVIII).

### References

- Acemoglu, D.; Johnson, S.; Robinson, J.A. 2001. "The colonial origins of comparative development: An empirical investigation," *American Economic Review* 91 (5), pp. 1369-1401.
- Akerlof, G.A.; Yellen, J.L. 1990. "The Fair Wage-Effort Hypothesis and Unemployment," *Quarterly Journal of Economics*, Vol. CV, May, pp. 255-83.
- j.; Shiller, R.J. 2009. Animal Spirits How Human Psychology Drives the Economy and why it Matters for Global Capitalism, Princeton University Press.
- Kranton, R.E. 2011. *Identity Economics How our Identities Shape our Work, Wages, and Well-Being*, Princeton, Princeton University Press.
- Anxo, D.; Erhel, C.; Schippers, J. (eds.) 2007. Labour Market Transitions and Time Adjustment over the Life Course, Amsterdam, Dutch University Press.
- Atkinson, A.B. 2015. *Inequality What Can Be Done?*, Cambridge (MA) and London, Harvard University Press.
- Auer, P. 2007. "In Search of Optimal Labour Market Institutions" in H. Jørgensen and P.K. Madsen (eds.): Flexicurity and Beyond Finding a New Agenda for the European Social Model, Copenhagen, DJØF Publishing, pp. 67–98.
- \_\_\_\_\_; Cazes, S. (eds.) 2003. Employment Stability in an Age of Flexibility, Geneva, ILO.
- ; Berg, J.; Coulibaly, I. 2005. "Is a Stable Workforce Good for the Economy? Insights into the Tenure-Productivity-Employment Relationship," *International Labour Review*, 144 (3), pp. 319-343.
- ; Gazier, B. 2006. L'introuvable sécurité de l'emploi, Paris, Flammarion.
- Barr, N. 2001. The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State, Oxford, Oxford University Press.
- Baumol, W. 1967. "Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis," *American Economic Review*, 57(2) 1967, pp. 415- 426.
- Bergemann, A.; Riphahn, T. 2015. *Maternal Employment Effects of Paid Parental Leave*, Bonn, IZA Discussion Paper No. 9073, available at SSRN: <a href="https://ssrn.com/abstract=2612325">https://ssrn.com/abstract=2612325</a>
- Berkhout, E.; Heyma, A.; Prins, J. 2013. Flexibility @ Work 2013 Yearly Report on Flexible Labor and Employment, Amsterdam, SEO Socioeconomic Research and Randstad.
- Bernhard, S. and K. Evers, M. Grüttner (2015), Der Gründungszuschuss nach seiner gesetzlichen Neuregelung: Die Folgen des Kurswechsels, in: IAB-Kurzbericht 21, Nürnberg
- Bonilla, G.; Gruat, J.V. 2003. Social Protection A Life Cycle Continuum Investment for Social Justice, Poverty Reduction and Sustainable Development, Geneva, ILO.
- Bosch, N.; Van der Klaauw, B. 2009. Analyzing Female Labor Supply: Evidence from a Dutch Tax Reform, Bonn, IZA Discussion Paper 4238.

- Brown, W. 2014. Minimum Wage, Minimum Fuss: The Building of the British National Minimum Wage Peer Review on Minimum Wage, London, publication commissioned by the European Community Programme for Employment and Social Solidarity (2007-2013).
- Butcher, T. 2012. "Still Evidence Based? The Role of Policy Evaluation in Recession and Beyond: The Case of the National Minimum Wage," *National Institute Economic Review*, No. 219, R26-R40.
- Caliendo, M.; Künn, S. 2011. "Start-Up Subsidies for the Unemployed: Long-Term Evidence and Effect Heterogeneity," *Journal of Public Economics*, 95(3-4), pp. 311-331.
- Casale, G.; Perulli, A. 2014. Towards the Single Employment Contract: Comparative Reflections, Geneva, ILO.
- Coote, A. 2013. "Introduction: A New Economics of Work and Time," in A. Coote and J. Franklin (eds.): *Time on Our Side*, London, nef-publication.
- Deakin, S. 2009. "Capacitas: Contract Law, Capabilities and the Legal Foundations," in S. Deakin and A. Supiot (eds.): Capacitas Contract Law and the Institutional Preconditions of a Market Economy, Oxford and Portland, Hart Publishing, pp. 1-29.
- Dias da Silva, A.; Turrini, A. 2015. Precarious and Less Well Paid? Wage Differences between Permanent and Fixed-term Contracts across the EU, Bonn, IZA Policy Paper No. 105.
- Dolls, M.; Fuest, C.; Peichl, A. 2011. "Automatic Stabilizers, Economic Crisis and Income Distribution in Europe," *Research in Labor Economics*, 32, pp. 227-256.
- Eichhorst, W.; Rodríguez-Planas, N.; Schmidl, R.; Zimmermann, K.F. 2012. A Roadmap to Vocational Education and Training Systems Around the World, Bonn, IZA Discussion Paper No. 7110.
- Marx, P. (eds.) 2015. Non-standard Employment in Post-industrial Labour Markets: An Occupational Perspective, Cheltenham (UK) and Northampton (USA), Edward Elgar.
- \_\_\_\_\_; \_\_\_\_\_; Wehner, C. 2016. Labour Market Reforms in Europe Towards More Flexicure Labour Markets? Bonn, IZA Discussion Papers No. 9863.
- Esping-Andersen, G.; Gallie, D.; Hemerijck, A.; Miles, J. 2002. Why We Need a New Welfare State, Oxford, Oxford University Press.
- Estevez-Abe, M.; Iversen, T.; Soskice, D. 2001. "Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State," in P.A. Hall and D. Soskice (eds): *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*, Oxford, Oxford University Press, pp. 145-183.
- Falkner, G.; Treib, O.; Hartlapp, M.; Leiber, S. 2005. Complying with Europe. EU Harmonisation and Soft Law in the Member States, Cambridge, Cambridge University Press.
- Frank, R.H. 2012. *The Darwin Economy. Liberty, Competition, and the Common Good*, Princeton and Oxford, Princeton University Press.
- Freeman, R.B.; Sunwoong Kim; Jaeho Keum. (eds.) 2008. Beyond Flexibility: Roadmaps for Korean Labor Policy, Korea Labor Institute.

- Gangl, M. 2003. "The Only Way Up? Employment Protection and Job Mobility among Recent Entrants to European Labour Markets," *European Sociological Review*, 19 (5), pp. 429-49.
- Gazier, B. 2007. "Making Transitions Pay: The 'Transitional Labour Markets' Approach to 'Flexicurity'" in H. Jørgensen and P.K. Madsen (eds.): Flexicurity and Beyond Finding a New Agenda for the European Social Model, Copenhagen, DJØF Publishing, pp. 99-130.
- \_\_\_\_\_. 2013. Labour Market Institutions, Contribution to the Expert Meeting on Employment Targeting and Sectoral Approaches to Job Creation, ILO, Geneva, 10-11 October, 19 f.
- Gottschall, K.; Kittel, B.; Briken, K.; Heuer, J.-O.; Hils, S.; Tepe, M. 2015. *Public Sector Employment Regimes Transformation of the State as an Employer*, Houndmills and New York, Palgrave Macmillan.
- Hall, P.A.; Soskice, D. (eds) 2001. Varieties of Capitalism. The Institutional Foundations of Comparative Advantage, Oxford, Oxford University Press.
- Heimer, C.A. 2003. "Insurers as Moral Actors" in R.E. Ericson and A. Doyle: *Risk and Morality*, Toronto, University of Toronto Press, pp. 284-316.
- Hemerijck, A. 2013. Changing Welfare States, Oxford, Oxford University Press.
- Hipp, L.; Bernhardt, J.; Allmendinger, J. 2015. "Institutions and the Prevalence of Nonstandard Employment," *Socio-Economic Review*, 13 (1), pp. 1-27.
- Holzmann, R.; Jorgensen, S. 2000. Social Risk Management: A New Conceptual Framework for Social Protection and Beyond, Social Protection Discussion Paper Series No. 0006, Washington, The World Bank.
- International Labour Office (ILO). 2014. World Social Protection Report 2014/15: Building economic recovery, inclusive development and social justice, Geneva.
- \_\_\_\_\_. 2016. Non-standard Employment around the World: Understanding Challenges, Shaping Prospects, Geneva.
- Jansson, J.O. 2006. *The Economics of Services Development and Policy*, Cheltenham (UK) and Northampton (MA), Edward Elgar.
- Jaumotte, F. 2003. Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries, OECD Economics Department Working Papers No. 376, Paris, OECD.
- Kaldor, N. 1936. "Wage Subsidies as a Remedy for Unemployment," *Journal of Political Economy*, 44 (6), pp. 721-742.
- Kleinknecht, A.; Van Schaik, F.N.; Zhou, H. 2014. "Is flexible labour good for innovation? Evidence from firm-level data," *Cambridge Journal of Economics*, 38(5), pp. 1207-1219.
- Korver, T.; Schmid, G. 2012. "Enhancing Transition Capacities and Sustainable Transitions" in J. de Munck, C. Didry, I. Ferreras, A. Jobert (eds.): *Renewing Democratic Deliberation in Europe: The Challenge of Social and Civil Dialogue*, Brussels, Peter Lang, pp. 23-55.
- Lalive, R.; Landais, C.; Zweimüller, J. 2013. Market Externalities of Large Unemployment Insurance Extension Programs, Bonn, IZA-Discussion Paper 7650.

- Lepage-Saucier, N.; Schleich, J.; Wasmer, E. 2013. *Moving Towards a Single Labour Contract:*Pros, Cons and Mixed Feelings, OECD Economics Department Working Papers 1026,
  OECD Publishing, <a href="http://dx.doi.org/10.1787/5k4c0vvc4zxv-en">http://dx.doi.org/10.1787/5k4c0vvc4zxv-en</a>
- Leschke, J.; Schmid, G.; Griga, D. 2007. "On the Marriage of Flexibility and Security: Lessons from the Hartz Reforms in Germany" in H. Jorgensen and P.K. Madsen (eds.): *Flexicurity and Beyond. Finding a New Agenda for the European Social Model*, Copenhagen, DJOF Publishing, pp. 335-364.
- \_\_\_\_\_. 2015. "Non-standard employment of women in service sector occupations: a comparison of European countries" in W. Eichhorst and P. Marx (eds.): Non-standard Employment in Post-industrial Labour Markets: An Occupational Perspective, Cheltenham (UK) and Northhampotn (USA), Edward Elgar, pp. 324-352.
- Lisi, D. 2013. "The Impact of Temporary Employment and Employment Protection on Labour Productivity: Evidence from an Industry-Level Panel," *Journal of Labour Market Research*, 46 (2), pp. 119-144.
- Madsen, P.K. 2006. "How Can It Possibly Fly? The Paradox of a Dynamic Labour Market" in J.L. Campbell, J.A. Hall and O.K. Pedersen (eds.): *National Identity and the Varieties of Capitalism The Danish Experience*, Montreal, McGill-Queen's University Press, pp. 321-355.
- Manning, A. 2003. *Monopsony in Motion Imperfect Competition in Labor Markets*, Princeton and Oxford, Princeton University Press.
- Marsden, D. 2004. "The 'Network Economy' and Models of the Employment Contract," *British Journal of Industrial Relations*, 42 (4), pp. 659-684.
- Martin, J.P.; Scarpetta, S. 2011. Setting It Right: Employment Protection, Labour Reallocation and Productivity, Bonn, IZA Policy Paper No. 25.
- Metcalf, D. 2008. "Why Has the British National Minimum Wage Had Little or No Impact on Employment?" *The Journal of Industrial Relations*, Vol. 50, No. 3, pp. 498-512.
- Mindestlohnkommission. 2016. Erster Bericht zu den Auswirkungen des gesetzlichen Mindestlohns, Berlin, www.mindestlohn-kommission.de
- Möller, J. 2010. "The German Labor Market Response in the World Recession De-mystifying a Miracle," ZAF (Zeitschrift für Arbeitsmarktforschung), 42 (4), pp. 325-336.
- Organisation for Economic Co-operation and Development (OECD). 2015. "Non-standard Work, Job Polarisation and Inequality," *In It Together: Why Less Inequality Benefits All*, Paris, OECD Publishing.
- Okun, A.M. 1975. Equality and Efficiency The Big Trade-off, Washington, The Brookings Institution.
- Schmid, G.; Reissert, B.; Bruche, G. 1992. *Unemployment Insurance and Active Labor Market Policy An International Comparison of Financing Systems*, Detroit, Wayne State University Press.
- \_\_\_\_\_. (ed.) 1994. Labor Market Institutions in Europe A Socioeconomic Evaluation of Performance, Armonk, N.Y., M.E.Sharpe.

- \_\_\_\_\_. 2008. Full Employment in Europe Managing Labour Market Transitions and Risks, Cheltenham (UK) und Northampton (MA, USA), Edward Elgar.
- 2011a. "Übergänge am Arbeitsmarkt Arbeit, nicht nur Arbeitslosigkeit versichern," Berlin, *edition sigma*, 123/4.
- ----. 2011b. "Non-Standard Employment in Europe: Its Development and Consequences for the European Employment Strategy," *German Policy Studies* 7(1), pp. 171-210, <a href="http://spaef.com/gps.php">http://spaef.com/gps.php</a>
- ----. 2015. "Sharing Risks of Labour Market Transitions: Towards a System of Employment Insurance," *British Journal of Industrial Relations*, 53(1), pp. 70-93, <a href="http://www.guentherschmid.eu/pdf/Sharing Risks">http://www.guentherschmid.eu/pdf/Sharing Risks</a> BJIR-2015.pdf
- \_\_\_\_\_; Modrack, S. 2008. Employment Dynamics in Germany: Lessons to be Learned from the Hartz Reforms, Discussion Paper SP I 2008-102, WZB Berlin Social Science Centre, <a href="http://bibliothek.wzb.eu/pdf/2008/i08-102.pdf">http://bibliothek.wzb.eu/pdf/2008/i08-102.pdf</a>
- Schömann, K.; Rogowski, R.; Kruppe, T. 1998. Labour Market Efficiency in the European Union Employment Protection and Fixed-term Contracts, London, Routledge.
- Schulze Buschoff, K.; Protsch, P. 2008. "(A-)typical and (in-)secure? Social Protection and "non-standard" Forms of Employment in Europe," *International Social Security Review*, 61 (4), pp. 51-73.
- Sen A. 2001. Development as Freedom, New York, Alfred A. Knopf.
- . 2009. The Idea of Justice, London, Allan Lane and Penguin Books.
- Smith, A. 1937. [1776] The Wealth of Nations, New York, Random House.
- Solow, R. 1990. The Labor Market as a Social Institution, Oxford, Basic Blackwell.
- Storrie, D. 2012. *Temporary Agency Work in the European Union*, Dublin, Foundation for the Improvement of Living Conditions.
- Supiot, A. 2016. Beyond Employment: Changes in Work and the Future of Labour Law in Europe, Oxford, Oxford University Press, second edition with a new preface in French by the author.
- Van den Berg, A.; von Restorff, C.-H.; Parent, D.; Masi, A.C. 2008. "From Unemployment to Employment Insurance: Towards Transitional Labour Markets in Canada?" in R. Muffels (ed.): Flexibility and Employment Security in Europe. Labour Markets in Transitions, Cheltenham (UK) and Northampton (MA, USA), Edward Elgar Publishing, pp. 307-340.
- Williams, C.C.; Renooy, P. 2014. *Flexibility @ Work: Tackling Undeclared Work*, Amsterdam, Randstad, Yearly Report on Flexible Labor and Employment.
- Zhou, H.; Dekker, R.; Kleinknecht, A. 2011. "Flexible Labor and Innovation Performance: Evidence from Longitudinal Firm-level Data," *Industrial and Corporate Change*, 20 (3), pp. 941-968.

# **APPENDIX**

Figure A1. Part-time employment rates in 2014 as percentage of working-age population (15-64)

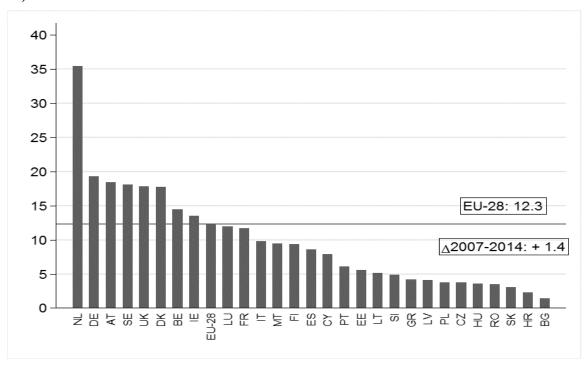
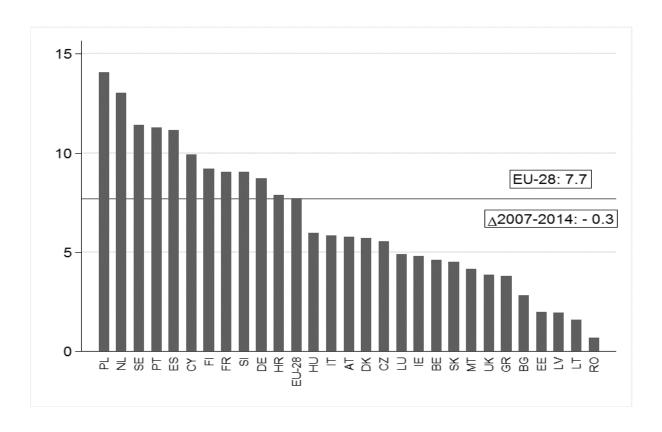
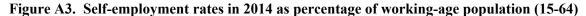


Figure A2. Fixed-term employment rates in 2014 as percentage of working-age population (15-64)





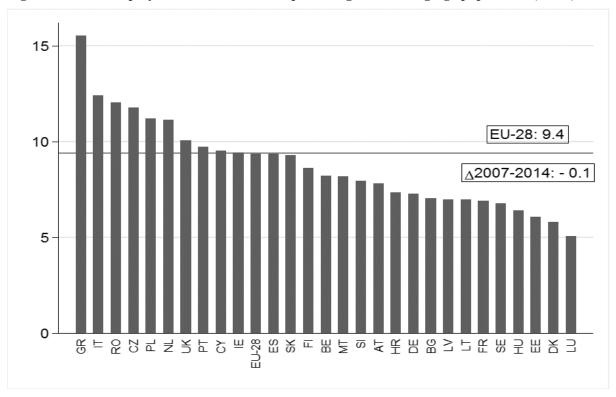


Figure A4. Share of skill-groups in part-time employment compared to their shares in total employment in Europe 2014 (differences in percentage points)

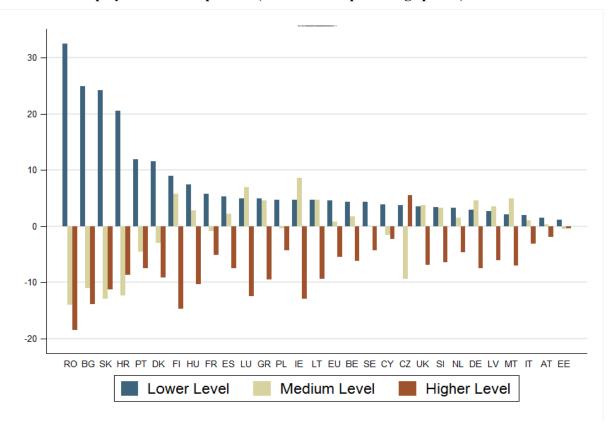


Figure A5. Share of skill-groups in temporary employment compared to their shares in total employment in Europe 2014 (differences in percentage points)

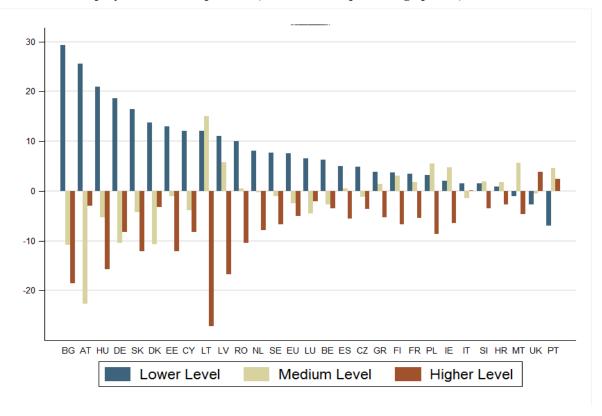
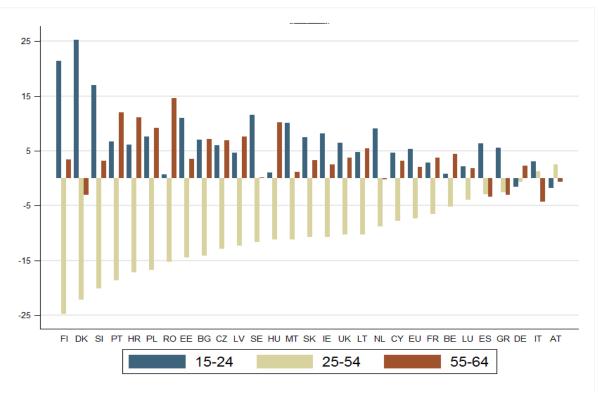
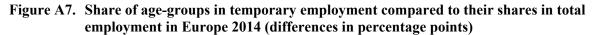


Figure A6. Share of age-groups in part-time employment compared to their shares in total employment in Europe 2014 (differences in percentage points)





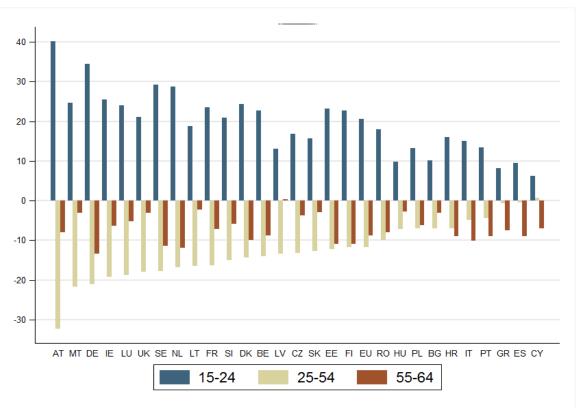


Table A1. Reasons for part-time work in selected countries in 2014 (2008)

|             | Looking<br>after<br>children or<br>incapacitate<br>d adults | Other<br>personal<br>reasons | Own<br>illness or<br>disability | Person<br>undergoing<br>school<br>education<br>or training | Person<br>could not<br>find a full-<br>time job | Other<br>reasons |
|-------------|-------------------------------------------------------------|------------------------------|---------------------------------|------------------------------------------------------------|-------------------------------------------------|------------------|
| EU-28       | 21.7 (22.1)                                                 | 13.2 (15.5)                  | 4.1 (4.5)                       | 10.3 (10.7)                                                | 29.6 (25.6)                                     | 21.1 (21.6)      |
| Germany     | 23.9 (22.3)                                                 | 17.7 (22.0)                  | 3.7 (2.9)                       | 10.2 (10.3)                                                | 14.5 (23.0)                                     | 30.0 (19.5)      |
| Netherlands | 29.2 (34.3)                                                 | 4.3 (7.0)                    | 4.1 (4.9)                       | 22.1 (22.9)                                                | 10.9 (4.5)                                      | 29.4 (26.4)      |
| Sweden      | 16.4 (18.2)                                                 | 10.6 (13.9)                  | 10.0<br>(14.2)                  | 13.2 (11.6)                                                | 29.8 (26.1)                                     | 20.0 (16.0)      |
| UK*         | 32.8 (34.5)                                                 | 18.6 (18.6)                  | 2.3 (2.4)                       | 12.0 (14.1)                                                | 18.8 (14.7)                                     | 15.5 (15.7)      |

<sup>\*</sup>numbers in brackets represent the year 2009 for the UK, due to a lack of data for 2008

# **Conditions of Work and Employment Series**

- No. 1 Quality of working life: A review on changes in work organization, conditions of employment and work-life arrangements (2003), by Howard Gospel
- No. 2 Sexual harassment at work: A review of preventive measures (2005), by Deirdre McCann
- No. 3 Statistics on working time arrangements based on time-use survey data (2003), by Andrew S. Harvey, Jonathan Gershuny, Kimberly Fisher & Ather Akbari
- No. 4 The definition, classification and measurement of working time arrangements (2003), by David Bell & Peter Elias
- No. 5 Reconciling work and family: Issues and policies in Japan (2003), by Masahiro Abe, Chizuka Hamamoto & Shigeto Tanaka
- No. 6 Reconciling work and family: Issues and policies in the Republic of Korea (2004), by Tae-Hong Kim & Hye-Kyung Kim
- No. 7 Domestic work, conditions of work and employment: A legal perspective (2003), by José Maria Ramirez-Machado
- No. 8 Reconciling work and family: Issues and policies in Brazil (2004), by Bila Sorj
- No. 9 Employment conditions in an ageing world: Meeting the working time challenge (2004), by Annie Jolivet & Sangheon Lee
- No. 10 Designing programmes to improve working and employment conditions in the informal economy: A literature review (2004), by Dr. Richard D. Rinehart
- No. 11 Working time in transition: The dual task of standardization and flexibilization in China (2005), by Xiangquan Zeng, Liang Lu & Sa'ad Umar Idris
- No. 12 Compressed working weeks (2006), by Philip Tucker
- No. 13 Étude sur les temps de travail et l'organisation du travail: Le cas du Sénégal. Analyse juridique et enquête auprès des entreprises (2006), by Alfred Inis Ndiaye
- No. 14 Reconciling work and family: Issues and policies in Thailand (2006), by Kyoko Kusakabe
- No. 15 Conditions of work and employment for older workers in industrialized countries: Understanding the issues (2006), by N.S. Ghosheh Jr., Sangheon Lee & Deirdre McCann
- No. 16 Wage fixing in the informal economy: Evidence from Brazil, India, Indonesia and South Africa (2006) by Catherine Saget
- No. 18 Reconciling work and family: Issues and policies in Trinidad and Tobago (2008), by Rhoda Reddock & Yvonne Bobb-Smith
- No. 19 Minding the gaps: Non-regular employment and labour market segmentation in the Republic of Korea (2007) by Byung-Hee Lee & Sangheon Lee
- No. 20 Age discrimination and older workers: Theory and legislation in comparative context (2008), by Naj Ghosheh

- No. 21 Labour market regulation: Motives, measures, effects (2009), by Giuseppe Bertola
- No. 22 Reconciling work and family: Issues and policies in China (2009), by Liu Bohong, Zhang Yongying & Li Yani
- No. 23 Domestic work and domestic workers in Ghana: An overview of the legal regime and practice (2009), by Dzodzi Tsikata
- No. 24 A comparison of public and private sector earnings in Jordan (2010), by Christopher Dougherty
- No. 25 The German work-sharing scheme: An instrument for the crisis (2010), by Andreas Crimmann, Frank Weissner & Lutz Bellmann
- No. 26 Extending the coverage of minimum wages in India: Simulations from household data (2010), by Patrick Belser & Uma Rani
- No. 27 The legal regulation of working time in domestic work (2010), by Deirdre Mc Cann & Jill Murray
- No. 28 What do we know about low-wage work and low-wage workers (2011), by Damian Grimshaw
- No. 29 Estimating a living wage: a methodological review (2011), by Richard Anker
- No. 30 Measuring the economic and social value of domestic work: conceptual and methodological framework (2011), by Debbie Budlender
- No. 31 Working Time, Health, and Safety: a Research Synthesis Paper (2012), by Philip Tucker & Simon Folkard
- No. 32 The influence of working time arrangements on work-life integration or 'balance': A review of the international evidence (2012), by Colette Fagan, Clare Lyonette, Mark Smith & Abril Saldaña-Tejeda
- No. 33 The Effects of Working Time on Productivity and Firm Performance: a research synthesis paper (2012), by Lonnie Golden
- No. 34 Estudio sobre trabajo doméstico en Uruguay (2012), by Karina Batthyány
- No. 35 Why have wage shares fallen? A panel analysis of the determinants of functional income distribution (2012), by Engelbert Stockhammer
- No. 36 Wage-led or Profit-led Supply: Wages, Productivity and Investment (2012), by Servaas Storm & C.W.M. Naastepad
- No. 37 Financialisation and the requirements and potentials for wage-led recovery a review focusing on the G20 (2012), by Eckhard Hein & Matthias Mundt
- No 38 Wage Protection Legislation in Africa (2012), by Najati Ghosheh
- No. 39 Income inequality as a cause of the Great Recession? A survey of current debates (2012), by Simon Sturn & Till van Treeck
- No. 40 Is aggregate demand wage-led or profit-led? National and global effects (2012), by Özlem Onaran & Giorgos Galanis

- No. 41 Wage-led growth: Concept, theories and policies (2012), by Marc Lavoie & Engelbert Stockhammer
- No. 42 The visible face of Women's invisible labour: domestic workers in Turkey (2013), by Seyhan Erdoğdu & Gülay Toksöz
- No. 43 In search of good quality part-time employment (2013), by Colette Fagan, Helen Norman, Mark Smith & María C. González Menéndez
- No. 44 The use of working time-related crisis response measures during the Great Recession (2013), by Angelika Kümmerling & Steffen Lehndorff
- No. 45 Analysis of employment, real wage, and productivity trends in South Africa since 1994 (2014), by Martin Wittenberg
- No. 46 Poverty, inequality and employment in Chile (2014), by Sarah Gammage, Tomás Alburquerque & Gonzálo Durán
- No. 47 Deregulating labour markets: How robust is the analysis of recent IMF working papers? (2014), by Mariya Aleksynska
- No. 48 Growth with equity in Singapore: Challenges and prospects (2014), by Hui Weng Tat & Ruby Toh
- No. 49 Informality and employment quality in Argentina, Country case study on labour market segmentation (2014), by Fabio Bertranou, Luis Casanova, Maribel Jiménez & Mónica Jiménez
- No. 50 Comparing indicators of labour market regulations across databases: A post scriptum to the employing workers debate (2014), by Mariya Aleksynska & Sandrine Cazes
- No. 51 The largest drop in income inequality in the European Union during the Great Recession: Romania's puzzling case (2014), by Ciprian Domnisoru
- No. 52 Segmentation and informality in Vietnam: A survey of literature, Country case study on labour market segmentation (2014), by Jean-Pierre Cling, Mireille Razafindrakoto & François Roubaud
- No. 53 A chronology of employment protection legislation in some selected European countries (2014), by Mariya Aleksynska & Alexandra Schmidt
- No. 54 How tight is the link between wages and productivity? A survey of the literature (2014), by Johannes Van Biesebroeck
- No. 55 Job quality in segmented labour markets: The Israeli case, Country case study on labour market segmentation (2014), by Shoshana Neuman
- No. 56 The organization of working time and its effects in the health services sector: A comparative analysis of Brazil, South Africa, and the Republic of Korea (2014), by Jon Messenger & Patricia Vidal
- No. 57 The motherhood pay gap: A review of the issues, theory and international evidence (2015), by Damian Grimshaw & Jill Rubery
- No. 58 The long journey home: The contested exclusion and inclusion of domestic workers from Federal wage and hour protections in the United States (2015), by Harmony Goldberg

- No. 60 Negociación colectiva, salarios y productividad: el caso uruguayo (2015), by Graziela Mazzuchi, Juan Manuel Rodríguez y Eloísa González
- No. 61 Non-standard work and workers: Organizational implications (2015), by Elizabeth George & Prithviraj Chattopadhyay
- No. 62 What does the minimum wage do in developing countries? A review of studies and methodologies (2015), by Dale Belman & Paul Wolfson
- No. 63 The regulation of non-standard forms of employment in India, Indonesia and Viet Nam (2015), by Ingrid Landau, Petra Mahy & Richard Mitchell
- No. 64 The regulation of non-standard forms of employment in China, Japan and the Republic of Korea (2015), by Fang Lee Cooke & Ronald Brown
- No. 65 Re-regulating for inclusive labour markets (2015), by Jill Rubery
- No. 66 Minimum wage setting practices in domestic work: An inter-state analysis (2015), by Neetha N.
- No. 67 The effects of non-standard forms of employment on worker health and safety (2015), by Michael Quinlan
- No. 68 Structural change and non-standard forms of employment in India (2015), by Ravi Srivastava
- No. 69 Non-standard forms of employment in some Asian countries: A study of wages and working conditions of temporary workers (2016), by Huu-Chi Nguyen, Thanh Tam Nguyen-Huu & Thi-Thuy-Linh Le
- No. 70 Non-standard forms of employment in Uganda and Ghana (2016, by Christelle Dumas & Cédric Houdré
- No. 71 The rise of the "just-in-time workforce": On-demand work, crowdwork and labour protection in the "gig-economy" (2016), by Valerio De Stefano
- No. 72 The introduction of a minimum wage for domestic workers in South Africa (2016), by Debbie Budlender
- No. 73 Productivity, wages and union in Japan (2016), by Takao Kato
- No. 74 Income security in the on-demand economy: Findings and policy lessons from a survey of crowdworkers (2016), by Janine Berg
- No. 75 Non-standard forms of employment in Latin America. Prevalence, characteristics and impacts on wages (2016), by Roxana Maurizio
- No. 76 Formas atípicas de empleo en América Latina: Incidencia, características e impactos en la determinación salarial (2016), by Roxana Maurizio
- No. 77 Firms' demand for temporary labour in developing countries: Necessity or strategy? (2016), by Mariya Aleksynska & Janine Berg
- No. 78 Remembering rest periods in law (2016), by Najati Ghosheh

- No. 79 Initial effects of Constitutional Amendment 72 on domestic work in Brazil (2016), by the Institute for Applied Economic Research (IPEA)
- No. 80 Coverage of employment protection legislation (EPL) (2016), by Mariya Aleksynska & Friederike Eberlein
- No. 81 Emplois atypiques et résultats sur le marché du travail au Cameroun, en République Démocratique du Congo et au Tchad (2016), by Benjamin Fomba Kamga, Vincent de Paul Mboutchouang & Gaston Brice Nkoumou Ngoa
- No. 82 Impacto de las reformas legislativas en el sector del empleo del hogar en España (2016), by Magdalena Diaz Gorfinkel
- No. 83 Redistributing value added towards labour in apparel supply chains: tackling low wages through purchasing practices (2016) by Doug Miller & Klaus Hohenegger
- No. 84 Resultados de las reformas jurídicas relativas a las trabajadoras y los trabajadores domésticos en Uruguay (2016), by Alma Espino González
- No. 85 Evaluating the effects of the structural labour market reforms on collective bargaining in Greece (2016), by Aristea Koukiadaki & Damian Grimshaw
- No. 86 Purchasing practices and low wages in global supply chains Empirical cases from the garment industry (2016), by Mark Starmanns
- No. 87 Sectoral collective bargaining, productivity and competitiveness in South Africa's clothing value chain: manufacturers between a rock and a hard place (2017), by Shane Godfrey, Trenton Elsley & Michaelle Taal
- No. 88 Mapping employment dismissal law: A leximetric investigation of EPL stringency and regulatory style (2017), by Benoit Pierre Freyens & J.H. Verkerke
- No. 90 The International Labour Organisation and the living wage: A historical perspective (2017), by Emmanuel Reynaud