DISCUSSION PAPER SERIES

IZA DP No. 5087

Non-Standard Employment and Labour Force Participation: A Comparative View of the Recent Development in Europe

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July 2010

Forschungsinstitut
zur Zukunft der Arbeit
Institute for the Study
of Labor

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July 2010

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ABSTRACT

Non-Standard Employment and Labour Force Participation: A Comparative View of the Recent Development in Europe*

This paper presents – in a new way of examination and portrayal – the extent and changes of nonstandard employment relationships (part-time work, fixed-term contracts, and self-employment) in 24 EU member states at two points of time, in 1998 and 2008, on the basis of the European Labour Force Survey. Apart from a detailed statistical description by gender, skills and branches, theoretical considerations explaining the development are also examined and tested in a preliminary way. Finally, the most important results and their challenges to the future labour market policy are emphasised again and discussed. The central outcome is neither the complaint of the eroding 'standard employment relationship' nor of its potential 'precariousness'; it is rather the requirement of increasing variability in employment relations due to rising employment participation of women (work-life-balance), mature aged workers, and persons with restricted work capacities. However, parallel to this development social risks are also spreading over the life course, especially the risk of great income volatility through multiple or long periods of unemployment, changing working times, obsolete skills or restricted work capacities due to ill health. In order to reduce or to avoid new social inequalities, future labour market reforms have to acknowledge this development by establishing new forms of social security or by constituting a more flexible standard employment relationship through adaptations in labour and social law. The contribution ends by providing some suggestions to such reforms.

JEL Classification: J21, J38, J41, J48, J68

Keywords: non-standard employment, labour force participation, flexibility, labour market policy

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* I thank Paula Protsch for gathering and handling of the statistics, Ernest Berkhout and Jules Theeuwes for their kind hospitality at SEO Amsterdam, for their help and challenging suggestions, which I could not all fulfill, and Jutta Hoehne for bringing everything in format. The paper has been published in slightly reduced form in Berkhout et al., Bridging the Gap – International Data Base on Employment and Adaptable Labor, Amsterdam (2010), SEO Socioeconomic Research, pp. 119-154.

1. Introduction

Despite the current crisis, which led again to mass unemployment in many countries, the long-term perspective of most EU member states is still one of labour shortage for two reasons: one quantitative related to the ageing society, one qualitative related to the rapid change of technology and global competition. Whereas migration might fill this gap to some extent, raising labour force participation of the native population is generally seen as the more sustainable solution. Furthermore, changing work preferences, especially among women traditionally tied to unpaid work in the private households, hint to unexploited potentials of endogenous factors driving labour force participation. Preferences for labour market participation might still be blocked by institutional barriers of various sorts: employment protection, tax disincentives, lack of child care or elderly care infrastructure, and wage discrimination.

Other important factors slowing down the potential increase in labour force participation are all sorts of regulations that enforce outdated standards of the employment relationship. Such standards – traditionally defined as open-ended contracts in dependent full-time work, possibly further restricted to one employer and five days a week from nine o'clock in the morning to six o'clock in the evening – limit both the use of flexible labour for the employers as well as the opportunity of variable employment over the life course for the employees.

The last decades, however, have seen an erosion of this – conventionally defined – "standard employment relationship" through part-time work, fixed-term contracts, temp-agency work and self-employment. Whereas many welcomed this development as a blessing for flexible labour markets, others were highly critical and hinted very early to disastrous intended or unintended side-effects such as low or volatile income, dead-end jobs instead of stepping stones, high job insecurity, and poverty in old-age. At the beginning of this century, the European Commission stepped in as a kind of broker by recommending to direct the European Employment Strategy towards a proper balance of flexibility and

security (Kok et el. 2004), dubbed already early by ingenious Dutch researchers as 'flexicurity' (Wilthagen 1998).

Varying a well-known saying by Martin Luther with respect to his wife: 'as we have got this term, we have to like it.' All the more, since a further increase of labour force participation seems inevitably be connected with a greater variety of employment relationships. The aim of the following essay is to test this assumption in a preliminary way through systematic descriptive work and conceptual reflections: first by comparing the development of non-standard employment in EU member states from 1998 to 2008; second by relating this development to the dynamics of economic welfare and labour force participation; third by exploring some determinants to explain this development; fourth by discussing the policy consequences aimed at ensuring a *complementary* relationship between flexibility and security rather than trading-off one against the other; fifth by summarising the main results and concluding.

2. The Change of the Employment Relationship in the European Union

The following view on the dynamics of the employment relationship is based on the European Labour Force Survey using the following definitions for labour force participation and non-standard employment:

- (1) Activity rate / or labour force participation rate = (Employed + Unemployed) as per cent of working age population (age 15 to 64)[2]
- (2) Part-time employment rate = employed in part-time work and in open-ended contracts or in own account work[3] as per cent of working age population; or as a share of total employment

2 Notice that "labour force participation" is measured by including the unemployed who belong – in functional terms – to the active labour force (i.e., being available to the labour market and willing to work). The downside of this measure is spoiling international comparability since the measurement of unemployment between countries varies more than the measurement of employment despite ILO or OECD standards especially at the margin of the ages and with respect to health related employability. Related to the latter, the standard for employability applied in Germany for instance is (since 2003) stricter than in Denmark or in the Netherlands. Konle-Seidl/ Eichhorst (2008) find that Dutch unemployment rates would almost double by applying the German standards.

- (3) Fixed-term employment rate = employed in fixed-term contracts (including temp-agency work with fixed-term contracts and part-timers in fixed-term contracts) as per cent of working age population; or as a share of total employment
- (4) Self-employment rate = own account workers (self-employed without dependent employees) in full-time as per cent of working age population; or as share of total employment
- (5) (Aggregate) Non-standard employment rate = sum of (2, 3 and 4) as per cent of working age population; or as share of total employment.

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 on a fixed-term contract, and temporary workers may work full-time. On the other hand, this data set leaves open the option to separate part-time from full-time fixed-term contracts or to distinguish between part-time and full-time own self-employment if the analytical perspective requires such a differentiation.

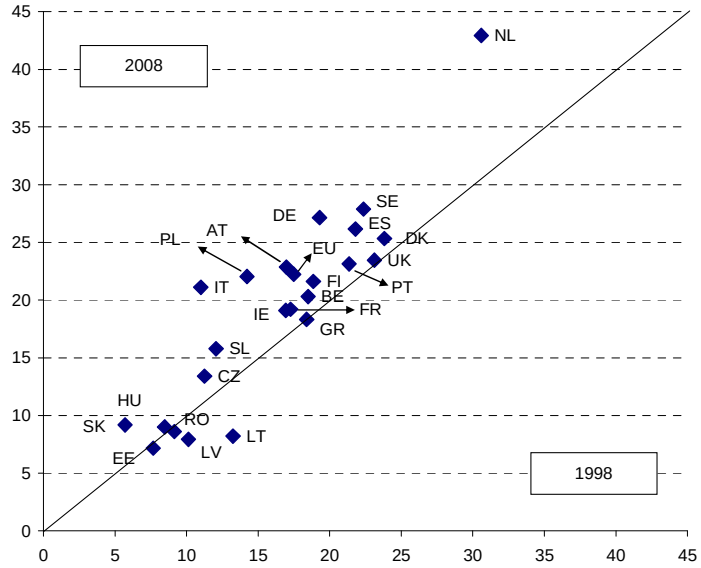
Figure 1 shows the development of the (aggregate) non-standard employment rate for 24 EU member states[4]. The first pattern we can see is the fact that countries belonging to the so-called social-democratic regime, here including Netherlands a 'hybrid', rank highest in terms of the combined indicator for non-standard employment.[5]

3 Notice that self-reported „part-time" is used here, which includes both the possibility that some people are in an open-ended full-time contract but actually work part-time, or the possibility that people are in an open-ended part-time contract but actually work more than 35 hours.

4 Excluded are – for reasons of data limitations or exceptionality – Bulgaria, Cyprus and Malta.

5 I refer to the classic 'regime'-typology by Esping-Andersen (1990); Netherlands as a 'hybrid' contains 'conservative' elements as well. See Appendix 1 for country abbreviations.

Figure 1: Aggregate non-standard employment rates in Europe, 1998 and 2008



Source: Eurostat, Labour Force Survey; own calculations; the "aggregate" non-standard employment rate includes part-time, fixed-term and own account work controlling for overlaps; the EU-average excludes Bulgaria, Malta and Cyprus; see footnote 5.

However, with around one quarter of the working-age population non-standard employment is also fairly well developed in the 'liberal' system of UK, and even in family centred or so-called conservative employment systems like Austria, Belgium, France, Germany, Italy, Spain and Portugal.[6]

On the other hand, it is remarkable that most of the new member states cluster together in the left corner of the figure, which means displaying low non-standard employment rates of around 10 percent, and some countries showing even declining rates.

This leads to the second pattern that immediately can be observed from Figure 1. Most countries are situated above the diagonal line, which means above the implicit time axis. If all countries would lie on this diagonal, nothing would have changed from 1998 to 2008. This is true for some countries, e.g. for UK, Greece,

6 May be catholic Poland can be counted to this regime-type as well.

and Hungary. Some countries, especially Lithuania and Latvia, experienced even a decline in the aggregate non-standard employment rate. In most other countries, however, especially in Italy, Poland, Spain, Germany and Netherlands, the non-standard employment rate increased by about five to ten percentage points.

By decomposing non-standard employment into its three components of part-time work, fixed-term employment and self-employment, our expectation is confirmed: part-time work is the most prominent element in non-standard employment of most countries. As already hinted at the beginning by pondering about the definition of "standard" employment from a life-course perspective, there are good reasons to argue that at least open-ended part-time work in the range of 20 to 35 hours deserves to be counted as standard, and not "atypical" anymore. Part-time work is common especially in well developed knowledge and service economies. Part-time employment rates – including the non-trivial number of self-employed people working in part-time – however display great variation between the EU member states, ranging from one percent in Romania to 27 percent for "champion" Netherlands. The fixed-term employment rates (including part-timers with fixed-term contracts) vary "only" between (roughly) one percent in Romania again and 16 percent in Spain; whereas the self-employment rate (excluding part-time) displays a minimum of two percent (Luxembourg) and a maximum of 12 percent (Greece).[7]

Behind any variation of figures there are possibly hidden patterns. Are these three components of "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 24 country observations in 2008. In order to avoid auto-correlations, we further subdivide self-employment into part-time and full-time, and do the same with fixed-term contracts, which leaves – as fifth element – part-time work in form of open-ended contracts.

7 See the corresponding figures in Appendix 2.

Table 1: Correlates of non-standard employment in 2008

	Part-time[1)] (Open-ended)	Fixed-term (Full-time)	Fixed-term (Part-time)	Self-empl.[2)] (Full-time)	Self-empl.[2)] (Part-time)
Part-time (Open-ended)	1.00				
Fixed-term (Full-time)	- 0.07	1.00			
Fixed-term (Part-time)	**0.68**	**0.34**	1.00		
Self-employed (Full-time)	**- 0.46**	0.14	- 0.19	1.00	
Self-employed (Part-time)	**0.49**	0.28	**0.62**	0.15	1.00

Source: Eurostat, Labour Force Survey, own calculations; N = 24 Member States of the EU (without Bulgaria, Malta, Cyprus);
Strong ('significant') coefficients (>= 0.30) are in bold
1) Part-time according to self-assessment; without self-employed
2) Own account workers (without dependent employees)

The strong positive correlation between open-ended and fixed-term part-time employment (r=0.68) is intuitively clear since both contractual forms are complementary. One can plausibly assume that a majority of open-ended part-time employment is the continuation of fixed-term part-time work. The same explanation can be given for the positive correlation between fixed-term part-time work and fixed-term full-time work (r=0.34), in other words: a substantial part of fixed-term part-time contracts might lead to fixed-term full-time contracts, although such interpretations cannot directly be derived from such correlations.

A bit more difficult to explain is the strong correlation between fixed-term part-time employment and part-time self-employment (r=0.62). Common underlying causal factors of this correlation probably are supply constraints, in particular of single or married women (or of the few single men) having children who can devote only part of their time to gainful employment. This interpretation is corroborated by the significant correlation between open-ended part-time work and part-time self-employment (r=0.49).[8]

8 One is also tempted to explain this correlation by the possible combination of gainful part-time work (as the main and reliable income source) and part-time self-employment (as experimental area of additional income or 'self-realisation'). However, the nature of the data does not allow this conclusion since individuals are counted by the main occupation they are

The most interesting result of this exercise is the strong negative correlation between full-time self-employment and open-ended part-time work (r=-0.46), which indicates a substitutive relationship between these forms of non-standard employment. This would mean, as far as this interpretation is correct, that not all forms of non-standard employment are driving labour force participation – at least not for all target groups. This substitutive pattern forecasts the decline of full-time self-employment in favour of part-time employment especially for countries that need to catch up with the 'developed' countries in terms of non-standard employment and labour force participation. Furthermore, it can be assumed that formerly self-employed people in agriculture, retailing or sweat-shops 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.

The differentiation of these observations by gender provides further hints to the reasons of rising non-standard employment. Figures 2 and 3 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 vary between 8 percent (Estonia) and 30 percent (Netherlands) in 2008; however, for women, they range from 6 percent (Slovak Republic) to 56 percent (Netherlands). Whereas non-standard employment of women increased (apart from Romania and the Baltic states) in almost all EU member states, especially in the Netherlands and Germany, the pattern of dynamics is mixed for men: The small Baltic States, and also Greece, experienced a decline, and only a few of the countries (Italy, Poland, and Netherlands) show a substantial increase in male non-standard employment.

reporting. Nevertheless, as we will see later, this combination may indeed play an important role.

Figure 2: Aggregate non-standard employment rates in Europe, 1998 and 2008, Women

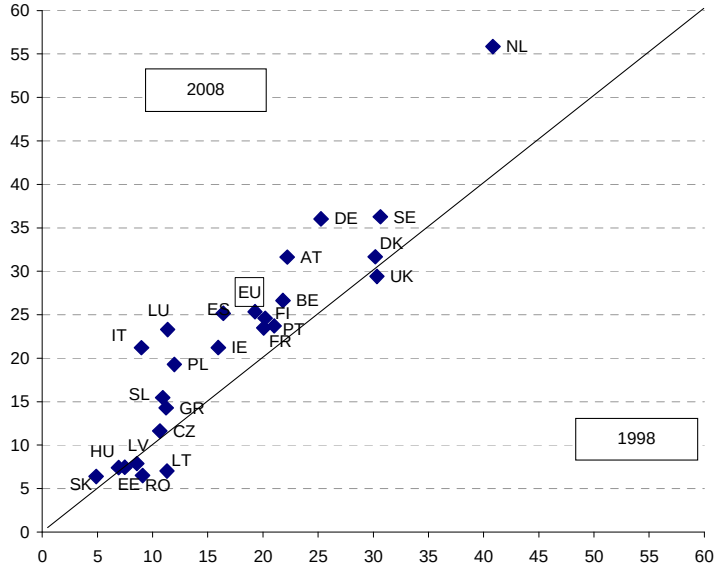
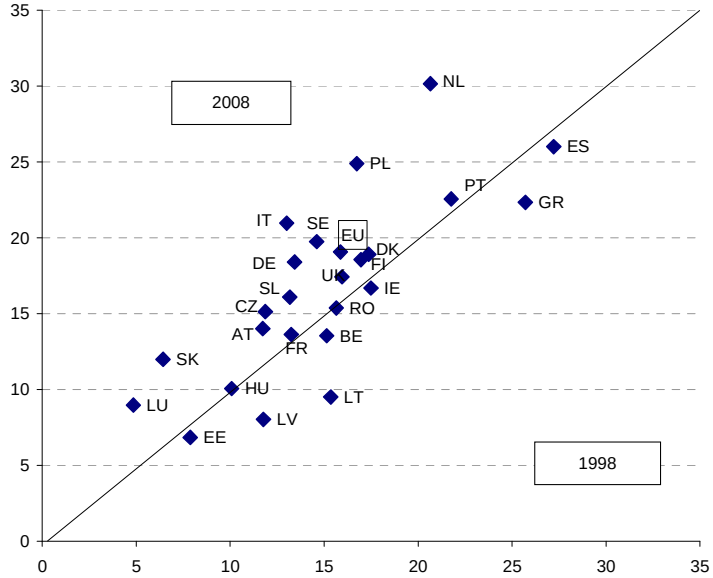


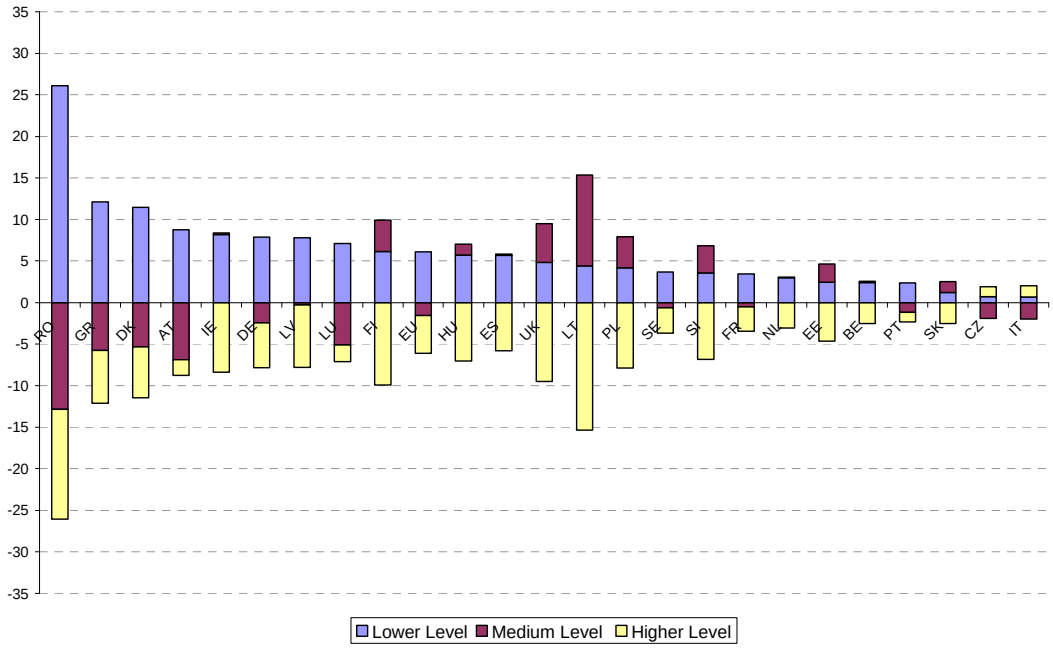
Figure 3: Aggregate non-standard employment rates in Europe, 1998 and 2008, Men



Source: Eurostat, Labour Force Survey; own calculations; the "aggregate" non-standard employment rate includes part-time, fixed-term and self-employment, controlled for overlaps.

The differentiation according to education[9], surprisingly, does not provide a clear pattern. One would expect a concentration of non-standard employment among low-skilled people which is, as we find at first glance (Table 1, Appendix), only partly true. Whereas non-standard employment among low-skilled people is common in Mediterranean countries like Portugal, Spain and Greece, many highly skilled people in non-standard employment can also be found in the 'social-democratic' regimes like Denmark, Sweden and Netherlands.

Figure 4: Share of skill-groups in nonstandard employment compared to their shares in total employment in Europe 2008 (differences in percentage points)



Source: Eurostat: Labour Force Survey; own calculations

Confronting the shares of non-standard employment by qualification with corresponding shares of these skill levels in total employment, the pattern

9 According to ISCED (1997): Low=ISCED 0-2 (pre-primary education; primary or first stage of education of basic education; lower secondary education or second stage of basic education); Middle=ISCED 3-4 ([upper] secondary education; post-secondary non tertiary education; High= 5-6 (first stage of tertiary education [not leading directly to an advanced research qualification]; second stage of tertiary education [leading to an advanced research qualification]). The reader, however, should be aware of the dubious validity of these levels for comparative aims (Müller 2007).

becomes clearer (Figure 4). Without any exception, low skilled people are overrepresented in non-standard employment, however, with great variation across EU member states. We find, for instance, about 12 percentage point overrepresentation in Denmark, 8 in Germany, and only 3 in the Netherlands (six percentage points being the EU-average). At medium skill level, the pattern is mixed, whereas at high-skill level, high skilled people are underrepresented in most countries (especially in Eastern European new member states), with the exception of Italy and Czech Republic.

3. Explaining the Dynamics of Non-standard Employment

Many possible factors would have to be taken into account to explain the dynamics of non-standard employment. One would have to start with structural changes on the supply and demand side including their interaction, and then scrutinize institutional as well as policy determinants as reactions to these changes, for instance taxation, social security reforms and labour market policies targeted towards specific groups like elderly and women. Last but not least, changes in labour market regulation, especially those targeted to non-standard work, would have to be considered.

In the following, a pragmatic approach – instead of following a systematic analytical framework – shall be applied to bring some insights at home.[10] Leaving aside text book wisdoms like wage elasticity at the supply side or marginal productivity at the demand side, such a perspective is both guided by interesting patterns observed as well as by considerations of policy relevance.

The basic assumption guiding these considerations is the expectation that non-standard employment is not only a risky and often unpleasant side effect of the new employment dynamics. It is, first of all, a central requisite for high labour

10 For economic text-book versions see, among others, Ehrenberg/ Smith (2003); in the framework of comparing employment systems Schmid (2008, chapters 2 and 3); from a sociological point of view and related to the perspective of 'precarious work' see Kalleberg (2009).

force participation in a modern economy in which both men and women want to combine family, life and labour market work. It can also be anticipated that in a knowledge economy people of all ages want to combine life-long-learning and work; and it seems also plausible that in an ageing society – in which the proportion of young and old fundamentally change – age is becoming an asset and not (only) a burden. Furthermore, non-standard employment in the form of part-time, temporary or own account work may also replace, to some extent, flexible adjustment forms within the standard employment relationship (e.g. short-time work, overtime, job rotation) which have evolved in large-scale internal labour markets related to mass production in manufacturing. It seems that in knowledge based service economies dominated by project oriented work organization and horizontal labour division employers probably have to rely more on external flexibility with respective higher labour turnover. The resulting increase in non-standard employment forms with corresponding higher risks for workers, then, would imply the necessity of developing new securities to avoid new forms of labour market segmentation.

3.1 Is non-standard employment driving labour force participation?

Before starting to test the relationship between non-standard employment and labour force participation in a preliminary and descriptive way, 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 requires 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 is safe to assume that either job security has to be combined with multiple skills, or individual job security has to be replaced by individual employment security 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 labour force participation of women (especially of those with high skills) increases coordination problems – for both men and women – between gainful labour market work and work related to care or education which money can't (or should not) buy. 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.

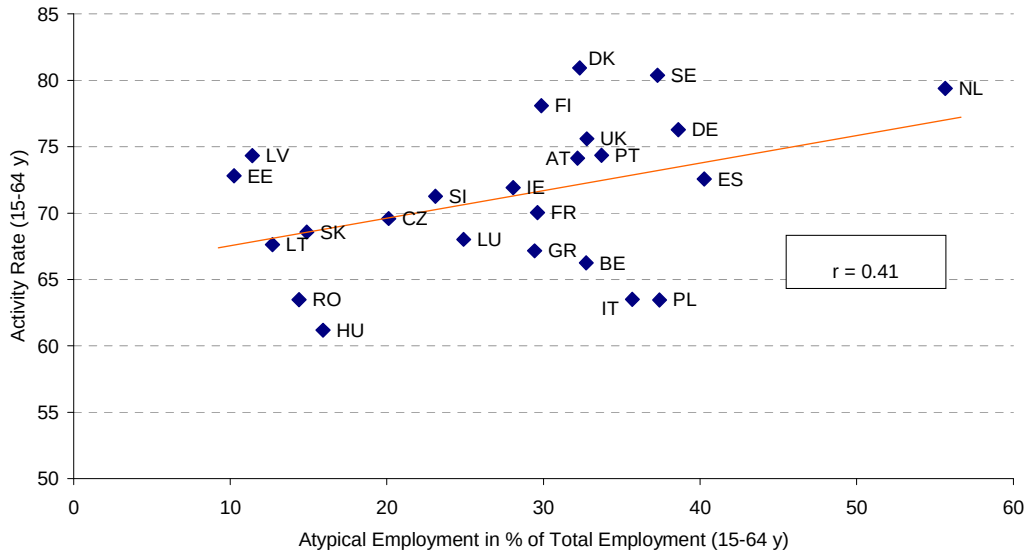
Both kinds of reasoning lead to the expectation that labour force participation and non-standard employment are developing in a parallel way. This expectation would be (at least provisionally) falsified by significant negative correlations between non-standard employment shares and labour force participation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

Figure 5 shows, however, a (albeit not very strong) positive relationship between the aggregate share of non-standard employment[11] and activity rate in 2008 for 24 member states of the EU (excluded are Cyprus, Malta and Bulgaria). As the scatter plot makes clear, the Scandinavian countries and the Netherlands rank highest both in terms of non-standard employment shares and labour force participation; the new member states, but surprisingly also Italy, rank lowest.

The "causal" interpretation of this figure would be substantiated if the change of both variables (the activity rate and the share of non-standard employment) would go in the same direction. Checking this for the change from 1998 and 2008 (not shown here), we find a positive but not significant sign ($r = 0.16$). The scatter plot, however, hints to – especially for the new member states – erratic movements that

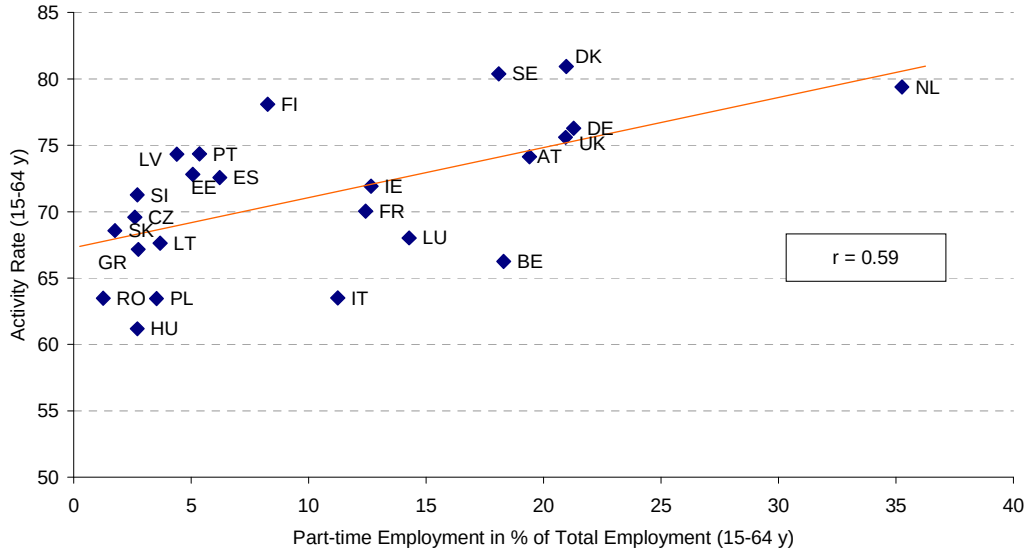
11 Notice that we use here the shares of aggregate (part-time, fixed-term, self-employment) non-standard employment in total employment to avoid multi-collinearity, since non-standard employment rates are parts of labour force participation.

Figure 5: Aggregate non-standard employment in percent of total employment and activity rate (2008)



Source: Eurostat Labour Force Survey; own calculations

Figure 6: Part-time employment in percent of total employment and activity rate (2008)



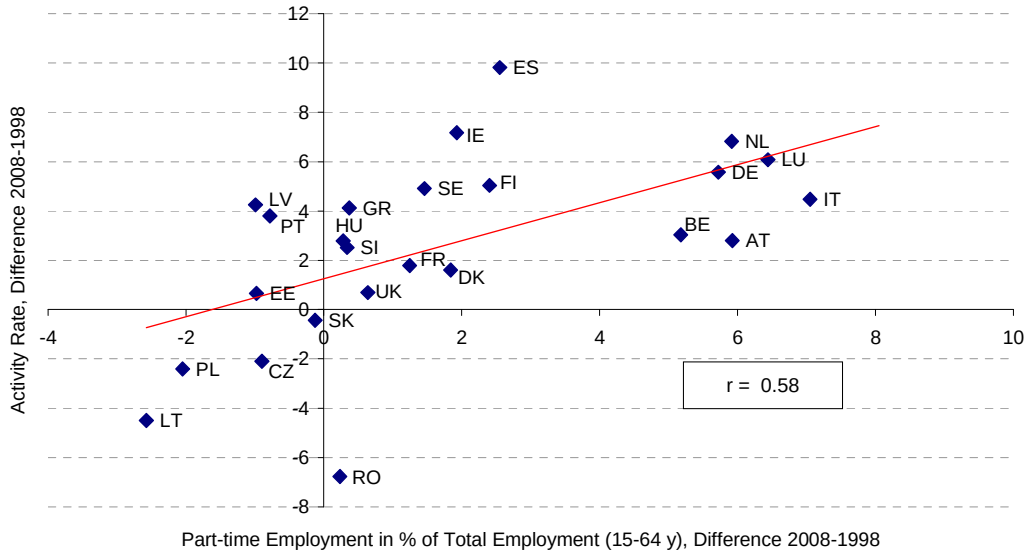
Source: Eurostat: Labour Force Survey; own calculations

destroy the expected stronger correlation. It is very likely, that the overall relationship between non-standard employment and activity rates is "spoiled" by possibly opposite links between the components of "non-standard" jobs. So, a look on the differentiated correlations might give a clue.

Figure 6 shows the relationship between the share of part-time work and the overall activity rate, which turns out – not unexpectedly – to be positive again and much stronger than the overall relationship.

The assumption that part-time work might drive labour force participation is also strongly supported by the 'dynamic' scatter plot showing the changes of part-time (as percentage of total employment) and the changes of labour force participation from 1998 to 2008 (Figure 7). As to be expected, the correlation in the corresponding 'dynamic' scatter plot for women (not shown here) is particularly strong (r=0.64), but the nexus is also strong for men (r=0.43).

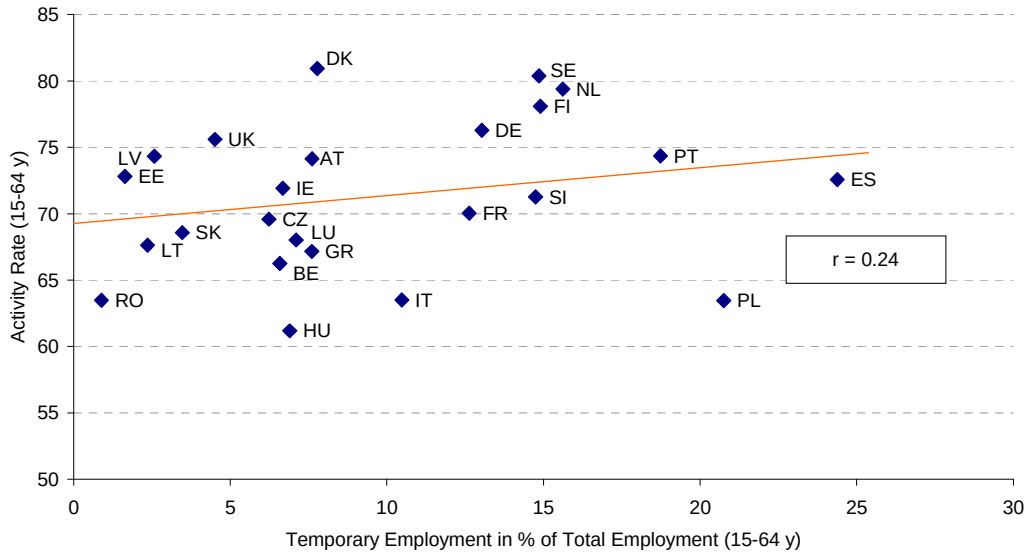
Figure 7: Change of part-time employment in percent of total employment and change of activity rate (Differences 2008-1998 in percentage points)



Source: Eurostat: Labour Force Survey; own calculations

The positive correlation between the share of temporary (or fixed-term) work and the activity rate, however, is rather small (Figure 8). This weak relationship indicates already that fixed-term work contracts play a quite different role within the various employment systems represented in the European Union. Two outliers in Figure 8 are of special interest. Although Poland's overall labour force participation is low, its share of temporary work is high. In this country, fixed-term employment rocketed from 514,000 (1998) to 3,207,000 (2008), whereas total employment stagnated. The reason probably is the lax regulation of temporary work which allowed until 2003 fixed-term chain contracts without any limit. Only in 2004, Poland introduced stricter regulation, except in the seasonal and temp-agency sector. In fact, the height of fixed-term contracts was in 2007, and the number of temporary workers declined slightly in 2008.

Figure 8: Temporary employment in percent of total employment and activity rate (2008)



Source: Eurostat: Labour Force Survey; own calculations

On the other hand, Denmark's high labour force participation combined with exceptionally low shares of temporary work hints to an alternative to fixed-term contracts: low employment protection combined with high income security (through generous unemployment benefits) and high employment security

(through active labour market policy). Thus, flexibility within the "standard" employment relationship might serve as a functional equivalent to external flexibility through fixed-term contracts, a point to which we will come later.

As fixed-term contracts obviously play a different role within the context of different employment regimes, it would also be interesting to look at various organisational forms of temporary work, especially at the role of temp-agencies as possible mediators between employers' predominant interest in flexibility and employees' predominant interest in security. Professional temp-agency firms might be able to pool the risks in a way to make both interests compatible or even complementary by establishing a virtuous circle between flexibility and security.[12] A first hint for such a potential positive role has already been provided elsewhere, indicating a positive correlation between employment participation and voluntary temporary work (Berkhout et al. 2010, chapter 1, figure 14).

Unfortunately, as explained at the beginning, our data base (European Labour Force Survey) is unable to separate different organisational forms of temporary work. However, combining the CIETT Statistics (Berkhout et al. 2010, table 7) with OECD statistics, we can look at the relationship between temp-agency penetration and labour force participation rates (Figure 9).

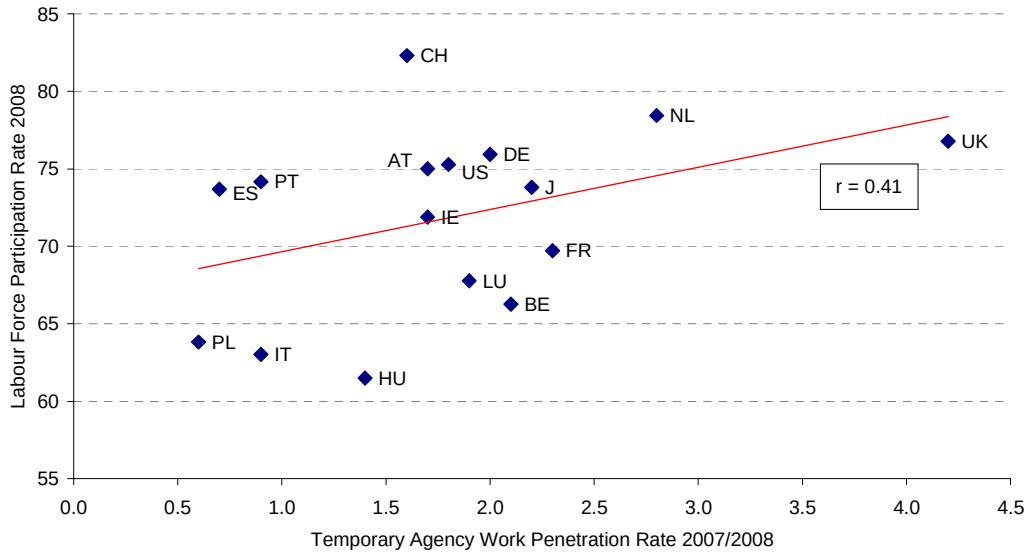
Utilizing all statistical information, it turns out – not shown here – that the correlation is positive but weak (r=0.13).[13] However, if we skip the Nordic employment systems (DK, FI, NO, SE), in which temp-agency work is rather differently regulated than in continental or 'liberal' European employment systems,[14] we find

12 For an extensive discussion of the complex flexibility-security nexus, in which – apart from trade-offs – also virtuous and vicious circles are possible, see Schmid (2008, chapter 8).

13 However, due to data restrictions, the country set differs from that used in the other tables and figures. On the one hand, it excludes some EU-member states; on the other hand it includes Switzerland (CH), the United States (US), Japan (J), and Norway (NO).

14 Most important is, first, the late liberalization of temp-agency work; second, the dominant modus of collective agreements, especially in Denmark and Sweden; the upward dynamic in both countries (from a very low level), however, is remarkable. For more information see Berkhout et al. 2010, chapter 1.2; Ahlberg/ Bruun (2008), Arrowsmith (2009), Coe et al. (2007), and Hansen et al. (2009).

Figure 9: Temp-agency penetration rate* and labour force participation rate for selected countries (2007/08)



Source: Labour force participation (OECD Employment Outlook 2009); temp-agency work (CIETT, see chapter 1, table 7). Labour force participation rates refer to persons aged 16-64 in UK, US, ES, SE; temp-agency penetration rates refer to 2007 in DK, HU, IE, IT, PT.
*) Temp-agency penetration rate=average daily number of temporary agency workers full-time-equivalent as a percentage of total employment.

a stronger positive relationship between temp-agency work and labour force participation (r=0.41). Again with proper caution, this evidence allows the conclusion that at least some part of the higher labour force participation might be related to the 'driving force' of temp-agency work.[15]

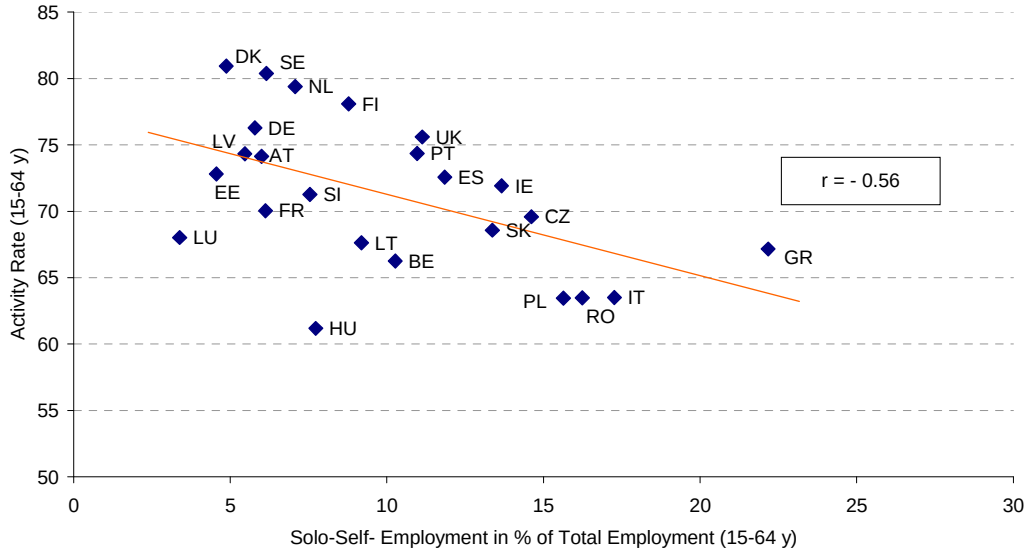
The factor really "disturbing" the expected parallel development of non-standard employment and labour force participation comes with the third component of "non-standard" jobs, with the category of (full-time working) self-employed. Here, the scatter plot shows a surprisingly strong negative correlation (Figure 10).

If we distinguish between men and women (not shown here), this negative correlation is especially strong among women (r=-0.66). It is very likely that the

15 Note, that this observation does not allow a statement on the quality of related jobs. This requires looking at the individual level and long-term job sequences ('careers') related to the (potentially positive) intermediate role of temp-agency work.

share of self-employed (own account work without employees) is still strongly related to the importance of agriculture which is corroborated by the fact that this share declines in the respective countries (such as Greece, Spain and most of the new member states). It is probably safe to say that a "causal" point for a positive correlation between self-employment and activity rate can only be made related to the modern type of own account work which is completely unrelated to agriculture and rather connected with the so-called creative sector. The latter informed speculation might also be the reason that own account work even increased in some rather 'developed' countries like Netherlands, Germany, Austria, UK and Denmark.

Figure 10: Self-employment (own account workers without employees) in percent of total employment and activity rate (2008)



Source: Eurostat: Labour Force Survey; own calculations

The speculation gets a bit more save by exploiting our possibility to differentiate between full-time and part-time self-employment under the assumption that part-time represents more the modern type and full-time more the traditional type (especially related to agriculture) of own account work. The following correlation matrix of the changes in the share of non-standard employment and the changes in labour force participation provides some interesting insights (Table 2).

Our expectation is at least partly corroborated by the different signs between part-time and full-time self-employment in the expected direction. Furthermore, the strong correlation between the change of the share in part-time self-employment and change of labour force participation for women indicates that own account work may indeed serve as driver of labour force participation at least for women.

Table 2: Correlates of the changes in the share of non-standard employment and the change in labour force participation (1998-2008)

	Total	Men	Women
Part-time open-ended	**0.60**	**0.48**	**0.65**
Part-time fixed-term	0.27	**0.40**	0.08
Part-time self-employed	0.27	0.21	**0.39**
Full-time fixed-term	-0.10	-0.02	-0.15
Full-time self-employed	-0.25	-0.26	-0.03

Source: Eurostat, Labour Force Survey, own calculations

The correlation matrix reveals three further insights. First, the change in open-ended part-time work strongly correlates with the change in labour force participation, for the total and both for women and (a bit less) for men, which confirms our previous results. Second, it is interesting to see, that part-time work in fixed-term contracts correlates with labour force participation only for men in a 'significant' way, not for women. This pattern (tentatively) may reflect the fact that temporary part-time serves only for men as effective stepping stone for participating in the labour market. The dynamics of temporary full-time employment is not at all related to the dynamics of labour force participation.

To summarise this part, it is evident that only the availability of part-time work can be considered as a strong driving force of labour force participation. This conclusion is corroborated by the quite strong correlation (r=0.58) between the changes of the activity rates and changes of the shares in part-time work from 1998 to 2008. The correlation becomes even stronger considering only open-ended part-time work without self-employment. Temporary work, however, and especially own account work play an ambiguous role that would have to be

specified for the target groups of increasing labour force participation, especially related to women, the young and the elderly. There is some reason to believe that temp-agency work can support higher labour market activity of people who otherwise would become 'outsiders' (the young, long-term unemployed and returning women) if properly regulated and professionally organized. There is also some evidence that part-time self-employment drives female labour force participation.

3.2 Is non-standard employment related to structural change?

Finding a positive relationship between structural change in the economy and non-standard employment would further corroborate the expected parallel development of non-standard employment and labour force participation. The expectation would be disconfirmed if we would find a significant negative relationship between growing industries and non-standard employment.

A direct preliminary test would be, again, a simple correlation with non-standard employment and the most dynamic growth sectors of the economy in terms of employment. As the proper statistical data basis for this exercise is not available, we present only scattered evidence from other sources.

First, a special study in *Germany* (Statistisches Bundesamt 2008) about the sectoral composition of non-standard employment shows, that wholesale and retail trade, restaurants and hotels, business services and social (especially health) services are most prone to non-standard employment; the least prone to non-standard employment are the declining sectors of manufacturing (apart from temp-agency work being heavily concentrated in this sector) and construction (in which temp-agency was completely prohibited until 2003, since then only partly deregulated).

Second, two shift-share analyses, again in *Germany*, come to the result that structural changes in sectoral and in gender composition of employment explain some part of the decline in standard employment (and, vice versa, of increasing

non-standard employment). A study (covering the period of 1991 to 2007) finds that structural change of gender composition explains eight percent of the decline in standard employment; and structural change in the sectoral composition explains 16 percent (Sachverständigenrat 2008, p. 438). Another study, only concentrating on West-Germany and the period of 1985 to 2005, allocates even 27 percent of the decline in standard employment to structural change in the gender composition and 22 percent to structural change in the sectoral composition (Schäfer and Seyda, 2008).

Berkhout et al. (2009) provide a very informative sectoral breakdown of temporary and part-time employment for all EU member states and for 2007/ 2008. If we look at countries with both high shares of part-time work and labour force participation, a clear pattern emerges: There are two sectoral clusters contributing most to part-time work: first wholesale, retail & repair plus hotels & restaurants; second, education, health & social work plus other community, social and personal services.

The picture related to temporary work is not as clear-cut. In most countries, temporary work is overrepresented (relative to the average) in "other community, social and personal services"; the same holds true – with a few exceptions (for instance the Netherlands and Poland) – in education, health & social work and in hotels & restaurants (exception Denmark). In countries with exceptional high shares in fixed-term contracts but low participation rates, temporary work is typically concentrated in sectors with seasonal characteristics or other peculiar conditions. Spain, for instance, employs in construction 45% of the work force in temporary work, and 32% in agriculture. Agriculture also attracts high shares of temporary work in Germany (13%), Italy (25%), Slovakia (9%) and Hungary (8%). Poland's temporary workers are also highly concentrated in construction (35%) and to an unusual extent in hotels & restaurants (41%); Poland is also exceptional in having a high share of temporary work in manufacturing (30% as

compared to 12% for the EU-27 average).[16] Temp-agency work (not necessarily restricted to fix-term employment, but usually related to this contract type) does not show a clear sectoral or occupational pattern. It seems that this form of temporary work plays – according to the respective employment regime – different roles: from replacing people on (growing) leave schemes, thus contributing to the stability of the core work-force, to simple cost-cutting strategies, thus contributing to shifting employment risks to the most vulnerable workers.

For an intermediate summary, it seems worthwhile to briefly reflect on the sectoral pattern of part-time work which we have identified as the main driver for labour force participation. Both sectoral clusters in which part-time work is concentrated share a low level of labour division in producing or providing the services and a high share of self-servicing. Most of these services – especially the expanding education, health and social services – are directly oriented towards persons, often in interactive form. Many of these services have been provided in former times by unpaid household work or barter exchanges in neighbourhoods. All in all, the driving force of part-time work seems to be grounded in the interaction of changing work preferences (especially among women) and transforming formerly unpaid services into market transaction ('marketisation').

3.3 Institutional determinants of non-standard employment

As elaborated in the preceding section, structural change explains – both on the supply and the demand side – some but even not the major part of the dynamics in non-standard employment. Other determinants have to be considered, especially related to target groups with low labour force participation like women, the elderly and low skilled people (or even more generally the "inactive").[17]

16 An analysis of self-employment according to industries or occupations was not possible here.

17 Fighting effectively unemployment, especially long-term unemployment, would increase employment, but not necessarily labour force participation since the unemployed are counted to the active labour force.

Obviously, institutional change – which means changes in the rules of the labour market game – has to be taken into consideration for further explanations.

First of all, economic incentives through changing institutions of wage formation or tax treatment would have to be considered. Unjustified gender wage gap through open or statistical discrimination are one possible factor blocking or slowing down the rise in female labour force participation (Mandel/ Semyonov 2005). The same holds true if non-standard employment is systematically punished by lower wages per hour, which is an established fact especially related to fixed-term employment (Schoeman et al. 1998).[18]

Well established is the fact that equal tax treatment for married women has a strong positive effect on female labour force participation. Married women, especially if they work part-time, are taxed more heavily than men or single women in many OECD countries. Sweden is a good example 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 separately and equally compared to men (Jaumotte 2003), and another study attributed to the change from tax allowances to non transferable tax credits of a recent Dutch tax reform a positive impact on female labour force participation (Bosch/ van der Klaauw 2009).

Parental leave arrangements, both in terms of costs and duration, are important drivers of labour force participation, too. They are relatively well researched in the meantime, although the links between institutional arrangements and labour supply reactions can be quite complicated. Two main results, however, are well established. First, the availability of affordable care services is a strong positive driver, whereas long parental leaves combined with entitlements to return to the

18 More recent studies emphasize especially the wage punishment of fixed-term contracts for (higher) skilled workers; for Germany see Gebel (2009), for Italy Elia (2009), and for Spain Fernandes-Kranz/ Rodriguez-Panas (2009).

job produce ambivalent results, improving participation on the one hand but leading to wage and income penalties on the other hand (Esping-Andersen 2002).

Drivers of labour force participation for elderly are also well studied (OECD 2006). Most important for early retirement were strong incentives by generous pension entitlements not calculated on an actuarial basis, a policy that most of the EU member states withdrew in the meantime. Some countries (for instance Germany) still have strong seniority based wages which reduce the transition probability into early retirement at least of the healthiest people. On the other hand, however, seniority wages hamper transitions of elderly unemployed back into employment, leading them often to escape into inactivity and on alternative transfer schemes like disability pensions. Comparative research also indicates that non-standard forms of employment, especially part-time and new self-employment in service related local jobs can help keeping the elderly active on the labour market (Hartlapp/ Schmid 2008).

Much neglected is the low labour force participation among low-skilled people, hinting to the possibility that an egalitarian education policy might be one of the most effective policies to increase labour force participation. Taking the European Employment Strategy's main goal of full employment, namely, to reach an overall employment rate of 70 percent by 2010 and an employment rate of at least 60 percent for women, then the breakdown by qualification immediately shows where the main problem lies.[19]

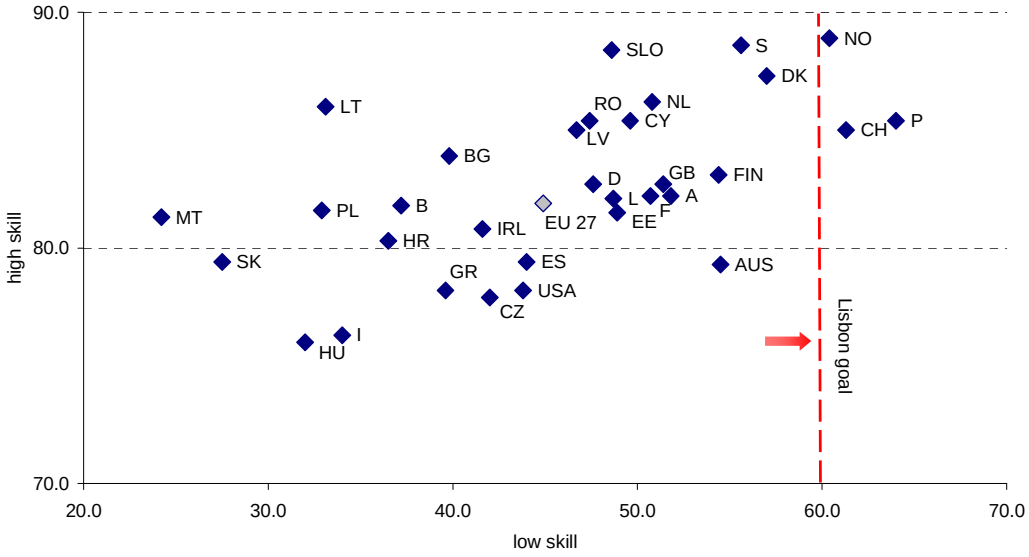
Taking women as the main target group for raising labour force participation at the EU-level, highly skilled women already surpass the benchmark of 60 percent by 15 to 25 percentage points, almost regardless of the kind of welfare regime involved. It is the low-skilled women whose opportunities for (employment) participation in the labour market are seriously compromised.[20] Portugal, Norway

19 I refer here to ‚employment participation' because the skill level of the total active labour force is not as easily available; both figures, however, strongly correlate.

20 The difference in employment rates between highly skilled and low-skilled people is also present among men but slightly less marked. I also abstract from critical qualifications with

and Switzerland are the exception, with employment rates of women already over 60 percent. At the overall EU-27 level, low-skilled women are – with an average employment rate of about 45 percent – 37 percentage points below the average employment rate for highly skilled women. The employment rate of highly skilled Dutch women, to take an example of a 'progressive' country, is relatively high and matches almost that of the Scandinavian countries. However, although the Dutch figure for low-skilled women is above the EU-27 average, it is still far away from the Lisbon target (Figure 11).

Figure 11: Employment rates of women (25-64 years old) by skill level, 2008 (2006)



The figure includes some Non-EU countries for the sake of comparison: (AUS = Australia, NO=Norway, USA=United States of America, CH=Switzerland); "low skill" (ISCED 0-2), "high skill" (ISCED 5-6). Source: Eurostat; AUS and USA (OECD Employment Outlook 2008, Table D, year 2006). For abbreviations of EU-countries see Appendix 1.

Finally, a prominent candidate for being a barrier instead of a driver for labour force participation is employment protection regulation. Although its influence on employment dynamics is well researched in the meantime, its impact is still much

respect to the employment rate as proper benchmark for employment policy. Apart from the quality of jobs, working time would have to be taken into account, especially for women who overwhelmingly work part-time, many even in marginal jobs. Information on full-time equivalents would be necessary if increasing working volume (important for economic prosperity) is the goal.

contested.[21] As such, high employment protection shields the 'insiders' against the risk to become unemployed. The other side of the coin, however, is the higher risk of unemployed or inactive people (the 'outsiders') to remain unemployed or inactive. Among the 'outsiders', employment protection might reduce the employment chances especially for young people looking for their first job and for women trying to re-enter the labour market. Because other institutions or labour market policies might intervene, the available empirical evidence for the theoretical expectation of segmentation is not clear-cut. 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.

However, employment protection might drive non-standard employment also for other reasons. Fixed-term contracts allow employers to circumvent employment protection or to combine external flexibility (hire and fire) with job security for the core work force. Both possibilities lead to the same consequence: segmentation between 'insiders' (with standard contracts) and 'outsiders' (with non-standard, fixed-term contracts).

The theoretical relationship between employment protection and part-time work or self-employment is more difficult to establish. Open-ended part-time work is not more flexible than standard employment, and it is, as we have already seen, very much supply driven and dominated by women. New self-employment (especially in the form of 'dependent' or fake self-employment), on the other hand, could be used for outsourcing certain functions, so that a slight positive link between employment protection and self-employment might be expected, especially, if employment protection is combined with high non-wage costs related to social security financing. To test these expectations, we restrict

21 For an overview of the state of the art see OECD (2004).

ourselves again to a descriptive test by simple correlations, which should be complemented in further research by multivariate analyses (Table 3).

Table 3: Correlates between employment protection and non-standard employment rates

	Non-standard Empl. Rate *Men*[1)]	Non-standard Empl. Rate *Women*[2)]	Part-time Empl. Rate *Total*[3)]	Fixed-term Empl. Rate *Total*[4)]	Self-Empl. Rate *Total*[5)]
Individual employment protection[6)]	**0.33**	0.12	- 0.12	**0.53**	0.10
Collective employment protection[7)]	0.22	0.14	0.08	0.13	0.08
Temporary employment protection[8)]	0.25	0.05	- 0.16	**0.46**	0.17
Combined employment protection[9)]	**0.39**	0.13	- 0.16	**0.62**	0.19

Source: Eurostat; OECD 2004; own calculations
Figures in bold 'significant' (N=24 member states of the EU; Bulgaria, Malta and Cyprus excluded)
1) Men in part-time, fixed-term or own self-employment in percent of working-age men (15 to 64) (2008)
2) Women in part-time, fixed-term or own self-employment in percent of working-age women (15 to 64) (2008)
3) Employees in open-ended part-time (without self-employed) in percent of working-age population (15 to 64) (2008)
4) Employees in fixed-term contracts in percent of working-age population (15 to 64) (2008)
5) Employees in own self-employment (without part-timers) in percent of working-age population (15 to 64) (2008)
6) Indicator composed of eight characteristics of employment protection against individual dismissals (OECD 2004)
7) Indicator composed of four characteristics of employment protection against mass dismissals (OECD 2004)
8) Indicator composed of six characteristics of employment protection in case of temporary work (OECD 2004)
9) Indicator composed of 6), 7) und 8); all four indicators represent employment protection regulation around the year 2003; according to OECD-Employment Outlook 2008 (p. 132) no significant changes can be reported since then; most changes were related to temporary work in the direction of stricter regulation.

The results largely meet the expectations. Generally, high employment protection seems to induce high non-standard employment among men; the correlations, however, are not strong. The signs related to non-standard employment of women go in the right direction but the correlations are quite weak. Decomposing non-standard employment into the three elements of part-time work, fixed-term employment and self-employment confirms quite clearly that individual

employment protection drives up fixed-term employment both for men and women but not part-time work.

The coefficients for self-employment have the right sign, but are rather weak. Employment protection especially directed towards temporary work also correlates positively with the fixed-term employment rate (r=0.46), although the causal link might be the other way round (growing temporary work might induce tightening regulation). Collective employment protection seems to play no role in determining non-standard employment. Finally, the combined indicator of employment protection hints to a quite strong correlation (r=0.62) with the employment rate in fixed-term contracts.

3.4 Preferences for non-standard employment

It is evident that asking people themselves about their preferences should provide insights into the reasons for non-standard employment. This raises, however, a measurement problem. Preferences cannot be directly measured, since preferences 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 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 and across countries might tell a story. The European Labour Force Survey (ELFS) contains information about the reasons people are giving for being in part-time or temporary (fixed-term) work.[22] In the following, however, we cannot

22 Related to part-time, the possible reasons are: (1) undergoing school education or training; (2) own illness or disability; (3) looking after children or incapacitated adults; (4) other family or personal reason; (5) could not find a full-time job; (6) other reason; (7) none of these reasons applies. Related to temporary work (fixed-term), the possible reasons are: (1) contract covering a period of training (apprentices, trainees, research assistance, etc.); (2) could not

exploit the whole potential of this information available and have to restrict ourselves to some impressions.[23]

For part-time work (and year 2005) the following peculiarities are worth to be emphasised: A majority of women in Germany (57%) and UK (45%) mentioned "looking after children or incapacitated adults" as reason for working part-time; both countries are known as having relatively conservative attitudes related to gender role models. This reason has little or no importance in countries having a reputation for progressive family and gender policy, for instance the Scandinavian countries, the Netherlands and France. Here, many women just do not want to work full-time (Netherlands 74%, France 57%, and Denmark 41%).[24]

With the exception of Netherlands, the reason of not having found a full-time job is also common in these countries (France 29%, Sweden 25% and Denmark 18%). Employment in part-time due to education or training is only substantive in Denmark (31%). Finally, a remarkable share of women in Sweden (11%) works part-time for reasons of illness or disability. Especially for the latter two reasons, it would be desirable having this information broken down both by age and gender.

For temporary work or fixed-term contracts (here referring to 2007), "person could not find a permanent job" is the most important reason given in almost all countries. In Greece, Portugal and Spain, over 80 percent of temporary workers prefer a permanent job (or an open-ended contract). The average in the 27 EU member states is 60 percent. Countries with a vocational training system in form of apprenticeship (combining 'on' and 'off' the job training) deviate from this

find a permanent job; (3) did not want a permanent job; (4) probationary period; (5) none of these reasons applies.

23 The following figures are taken from Berkhout et al. (2009).

24 The interpretation of these results is corroborated by Gash (2008). The methodological subtlety of this study consists in the indirect measurement of preferences by comparing transition rates (into full-time, inactivity, other employment) of part-time workers with corresponding transition rates of full-time workers. By statistically controlling transition probabilities for socio-demographic and other factors, part-time working women in the UK remain longer in this status and in the same job than in Denmark or France.

pattern since apprentices per definition have a temporary contract, e.g. Germany (25%) and Austria (20%); combining education and temporary work is also common in Denmark and the Netherlands (about 35%).

The pattern becomes even more pronounced if we concentrate on the age group of 15 to 24 for which we found already a concentration of temporary work. In Austria and Germany, over 80 percent of young people give "education or training" as the primary reason for being involved in a temporary contract, in Denmark 50 percent.

Finally, in some countries, for example in Scandinavia, and especially in the UK, a substantive minority (about one third) doesn't want a permanent job. One reason could be the difference in wages and working conditions. In Denmark, for instance, it is reported that working conditions and wages for professionals and specialists, e.g. in the health sector, are often better in temp-agency contracts than in 'regular' contracts since higher employment insecurity related to these temporary contracts is compensated by higher wages (Ahlberg/ Bruun 2008, 41). Wages and working conditions in 'everyday-labour-markets', however, seem to be universally connected with less attractive wages and working conditions, independent of the employment regimes.

3.5 Reasons for self-employment

The analysis would need further differentiation according to the different components of non-standard employment to get a full understanding of their dynamics and various functions they play in the modern labour market. Since the state of the art is already quite developed for part-time work and for temporary work (including temp-agency work), we just refer here to some literature and turn to some additional reflections related to self-employment, especially in the form of own account work.[25]

25 For non-standard employment see Mangan (2000) and Houseman/ Osawa (2003); on part-time work Leschke (2008) and Sciarra et al. (2005); related to temporary work the 'classic'

A study on the development of female self-employment on the basis of the ELFS (Strohmeyer/ Tonoyan 2007) reports that most of the increase in own account work from 1995 to 2005 took part in form of part-time work (54% compared to 15% in full-time self-employment); the same pattern can be seen among men. The share of part-time working women in own account work ranges from 11% in Greece, over 18% in France, 32% in Sweden, 38% in West-Germany to 68% in the Netherlands. On the basis of a Heckman-Probit estimation, the authors also found that "having a family with children" turned out as the most important driver for the choice of part-time work in self-employment. This pattern is especially strong in so-called "conservative welfare regimes" where public care facilities are still underdeveloped, and where traditional values concerning labour division in the family still prevail. Unfortunately, the study is silent about the combination of part-time self-employment and dependent part-time work. However, the great share of marginal part-time in self-employment seems to imply that – as we already speculated looking at the corresponding correlations – such combinations are quite common.

This informed speculation is corroborated by a recent study in Sweden (Delmar et al. 2008)[26], which hints to a stepping-stone function of part-time self-employment. The authors find persons who combine own account work with wage work constitute a majority of the total number of self-employed. Most people enter own self-employment by engaging first in combinatory work, indicating that the decision to transit into self-employment is more complex than characterized in earlier research.

Three "transitional motivations" might explain this astonishing pattern: First supplemented utility maximization, which means attaining psychological utility from self-employment by retaining at the same time economic security from dependent wage work (so to speak balancing flexibility and security on an

Schoeman et al. (1998); for temp-agency work Storrie (2002); for self-employed Arum/ Mueller (2004).

26 The empirical basis of this study is unique and representative for all cases of self-employment in Sweden from 1990 to 2002.

individual level); second providing a hedge against the potential risk of unemployment; third reducing uncertainty associated with entry into self-employment or exit from self-employment. 91 percent of dependent employees enter self-employment as combiners, and only 9 percent of them start with full self-employment. Of all combiners, 68 percent go back into dependent wage work, and 32 end up as pure self-employed. Finally, 61 percent of the pure self-employed transit at one stage or the other in their life course to dependent employment, and 39 percent transit to a combinatory status.

4. Policy Debate

Before discussing the main results, a big caveat is at place. Although a remarkable body of research on the consequences of non-standard employment for income, employment stability or social security is already available, important pieces of information are still missing.[27] Proper risk assessment of non-standard employment would require the analysis of individuals' long-term transitions sequences over the life course (careers) to uncover whether risky events end up in status maintaining, integrative or exclusionary transitions.[28] Equally important are deeper studies on the functions of non-standard employment at the level of firms, especially whether they are mainly used as instruments of short-term cost reductions and shifting the burdens of risks to the non-standard employees or as instruments to improve long-term competiveness through diversified high quality production and enabling especially school leavers and young adults to accumulate work experiences and to improve their work-life balance in the 'rush hour of live'.

The first question to be raised is the consequence of non-standard employment for social security, especially in old age. In as far as pension entitlements are related to wage income, the corresponding first conclusion is to attack any wage discrimination that might be connected with non-standard employment contracts.

27 For the most recent state of the art in the spirit of 'transitional labour markets' (TLM) and 'flexicurity' see the excellent volume edited by Muffels (2008).

28 For criteria and examples of proper risk assessment (including the important element of communicating risks and from a TLM point of view), see Schmid (2006).

As this might be self-evident for some countries, e.g. for Netherlands, for many EU member states it is not. Any gender wage gap obviously hurts above all women who are overrepresented in part-time work. Related to fixed-term employment, countries with no legal minimum wage are especially prone to wage discrimination. The main risk of (new) self-employment is the extreme volatility of the income stream over the life course, and many own account workers even remain at the lowest income level for a long, if not all the time.

The flip side of this coin is positive wage discrimination. One example is continued salary pay in the critical event of illness often linked to the employment status.[29] Small or medium sized employers are less able than large employers to reinsure this risk with the likely consequence that they tend to escape into fixed-term contracts in order to reduce this risk. Another and more important example are seniority wages, which originally served as an insurance device smoothing individual productivity changes over the life course. The rationale of this internal labour market institution diminishes with the need of higher external flexibility. As the corresponding coupling of pension entitlements to the last wage before retirement became unjustified, most countries have abolished this rule in the meantime. Nevertheless, even if pension entitlements now are consequently linked to average life course income, the transition to an intermediate spell of non-standard employment (especially part-time) or to substantially lower paid jobs does not yet pay. Under the assumption, however, that such mobility is necessary due to better adapting to structural change or reduced individual earnings capacities, or even desired due to changes in preference over the life course, better insurance is required to offset the related risks of unemployment and income volatility (Kalleberg 2009, p. 16). One possibility would be to extend unemployment insurance towards an employment insurance that makes valuable transitions pay, among other through continuous vocational training accounts, life course saving systems or wage insurance (Schmid 2008, chapter 8).

29 With respect to the obligation of the employer to continue paying an ill employee's wage in international comparison see Knegt/ Westerveld (2008); in the duration of this obligation (up to two years), the Netherlands is unprecedented in the rest of Europe.

The second question relates to the financing source of social security. The rise in non-standard employment logically implies not to link fund raising for social security too closely to the standard-employment relationship. Otherwise, the employment contract becomes, indeed, more and more an 'exclusionary device' (Knegt 2008). Strategies to reconstruct the employment contract to an inclusionary device – which means to develop a new standard-employment relationship – are manifold. The respective varieties in the EU member states still require more systematic screening before one could start to recommend simple alternatives. Nevertheless, the principle alternatives are clear: extension of individual or collective private insurances, linking social security to citizenship status ('basic securities') or making public social security institutions – especially the employment contract – more inclusive. Many countries, for instance, have started to make additional private or collective insurance mandatory for employers and workers independent of their employment status. France, The Netherlands, Switzerland, Denmark and Sweden, for instance, have reached an almost universal coverage of the employees by firm or branch level additional insurances. In contrast, for instance to Germany, these countries arranged such an extension either by law or by legally extending corresponding collective agreements. At the EU level, such national activities could be induced by directives, especially for own account workers for whom – in contrast to part-time and temporary workers – no such binding regulatory framework exists.

Schulze Buschoff and Protsch (2008) argue on the basis of comparative studies that contributory financing systems with bottom down income thresholds are not suitable to cover the specific risks related to non-standard employment, especially not for new self-employed. They argue for an extension of tax financed basic income guarantees to cover the risk of extreme income volatility related to self-employment and – to some extent – to fixed-term contracts. Tax financed basic income guarantees ('folks' pensions, national health insurance, earnings related benefits) seem better able to balance flexibility and security than contributory insurance schemes often based on corporate arrangements.

Basic income guarantees, however, usually offer only limited income protection in old age, and they are not designed to compensate for the higher income risks related to non-standard work. Some countries, therefore, introduced risk contingent schemes in various forms, either through risk related contributions (higher premiums for higher risks, as it is common in work accident insurance) or through mandatory contributions to training or employability funds. France (higher social security contributions for temp-agency workers), Denmark and Sweden (better wages and working conditions for skilled temp-agency workers) and the Netherlands (contributions targeted to training and employability for temp-agency workers) provide here 'best practice'. The existence of such 'active securities' probably makes workers more inclined to take over the risks related to non-standard employment. And to the extent that such schemes induce an 'entitlement effect', they might even promote higher employment in the formal sector and thereby labour force participation.

The third question is to what extent in-built flexibilities into open-ended employment contracts should be considered as functional equivalent to non-standard employment. It seems that to a certain degree, internal flexibility can substitute external flexibility through in-built flexibility of the open-ended "standard" contract, for example, working time variability over the life course or job rotation. Contracts that include the possibility of long-term working-time accounts are already one observable trend as an instrument to build in flexibility over the life course into the employment contract without affecting seriously income and employment security. Research, however shows, that the risks related to a fair implementation should not be underestimated. Employers, on the one hand, tend to use such accounts to overcome economic slumps like in the present times (2009/10), and small as well as medium sized enterprises seem to have difficulties to use this instrument. Furthermore, the state has to enter the game by ensuring claims to time accounts both in the event of insolvency of firms and workers' transition between firms. On the other hand, employees often prefer cash (e.g. for working overtime) to time as an investment in an uncertain future.

Especially tempting for them is the use of such accounts for early retirement instead of investing the accumulated accounts into employability measures, a behavioural feature that doesn't fit with the objective of raising labour force participation.[30]

Sweden delivers a good example for the consequences of increasing in-built flexibilities in terms of employment or labour force participation. The Swedes can be proud of having one of the highest employment rates of about 74 percent and well above the Lisbon goal. However, their effective employment rate – the rate of people in working age population actually working during the week – is only in the size of about 64 percent. Though precise statistics explaining this difference between 'nominal' and 'effective' employment rate does not exist, the potential factors explaining this discrepancy are clear. The 'good' reasons are: despite an open-ended contract in dependent fulltime work (or a standard employment relationship), many people do not work because they are on educational, parental or care leave. The 'bad' reasons are: despite an open-ended contract in dependent fulltime work, many people are not working because they are ill, in psychological trouble or absent for undeclared reasons.[31]

In as far as the discrepancy between 'nominal' and 'effective' employment rate is not only a universal trend but also to be recommended for enhancing flexibility and security, then the full-employment goal of the Lisbon strategy set at 70 percent for 2010 is far too modest. In the long-term, this benchmark probably has to be set at 80 percent, a benchmark that the Dutch and Swedes already established in their national employment programmes.

30 See, for instance, Delsen/ Smits (2009), Roman (2006), Wotschack/ Hildebrandt (2008).

31 Another reason for the discrepancy between 'nominal' and 'effective' employment rate could be institutional. Germany's part-time scheme for 'gradual' retirement (now abolished) provides an extreme example. The scheme subsidised five years part-time, of which the first half (2 and 1/2 year) could be taken as full-time, the second half as zero-time. Notice again that we used self-reported part-time figures. Thus, in the German 'block-model' of part-time work for elderly it might well be that the elderly 'part-timers' report that they work full-time in the first half of the scheme, but report being inactive or even not employed anymore in the second half of the scheme.

The trend towards non-standard forms of employment, finally, raises the question whether all this leads to – or even whether we need – a new 'standard employment relationship'. Expanding the institutional status of the employment contract to all forms of employment, including even unpaid but socially highly valued work as proposed for instance by Supiot (2001), seems to be the most radical and most promising route towards a new standard-employment relationship. The main aim is the move from protecting jobs to protecting people or from job security to labour market security (Auer 2007). The old standard employment contract would be transformed into a new labour contract which includes income and employment risks related to transitions between various employment-statuses. The core is the establishment of new social rights and (neglected in the much quoted Supiot-Report) of new social obligations to both sides of the labour market.

The *new social rights* would be new in that they cover subjects unfamiliar to industrial wage-earners on which the traditional standard employment relationship builds: rights to education and training, to appropriate working hours, to a family life and to occupational redeployment, retraining or vocational rehabilitation. Their scope would also be new since they would cover not only "regular" wage-earners but also the self-employed, the semi-self-employed, temp-agency and marginal workers. They are new in nature because they often take the form of vouchers or social drawing rights, which allow workers to rely on solidarity within defined and perhaps collectively bargained limits when exercising their new freedom to act.

The *new social obligations* would be new in that they cover subjects unfamiliar in the traditional employment relationship: obligations to training and retraining both for employees as well as for employers, to actively searching a new job or accepting a less well paid job, to healthy life styles and occupational rehabilitation, to work-place adjustments according to the capabilities of workers, and to changing working times according to the needs either related to the individual life course or to volatile market demands of goods and 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 independent of size and function. They would be new in nature since they often take the form of 'voice', i.e. being ready to negotiate at individual, firm, regional and branch level in order to reach mutual agreements and to accept compromises in case of different interests.

In brief: The establishment of social rights and new social obligations into an inclusive employment contract would ensure the development of capabilities that not only 'make workers fit for the market', but that also 'make the market fit for the workers' (Gazier 2007). The management of working time flexibility over the life course thereby is, as we have seen, probably the most important driver of labour force participation that meets the otherwise empty 'flexicurity' ideal.

5. Summary and Conclusions

(1) The main result regarding the nexus of non-standard employment and labour force participation is quickly told: it is part-time work – especially in its open-ended form of dependent work – which drives labour force participation. This holds especially (and obviously) true for women but also (and less obviously) for men. The overall driving capacity of temporary work, i.e. the employment relationship in fixed-term contracts, so far was weak. However, it might become a forceful and welcome driver if good quality of jobs or stepping-stone-functions is provided, but it may also remain driven itself mainly by cost-cutting considerations of employers. Self-employment is ambiguously related to labour force participation since– in the long-term – countervailing tendencies let expect rather stagnation than an extension of this employment form.

(2) The second important result is a deeper understanding of the dynamics of non-standard employment. The standard employment relationship defined in its traditional and narrow way (as an open-ended and dependent full-time employment relationship) declines and 'non-standard' forms increase. For the 24

EU member states represented here, the employment rate in part-time, fixed-term and self-employment (overlaps controlled) rose from 17.5 percent (1998) to 22.3 percent (2008). The huge differences between the EU member states show a clear pattern: The 'social-democratic' employment regimes (Netherlands included) are at the top, but non-standard employment rates are also high in family centred 'conservative' and in 'liberal' regimes. Apart from Poland (which deregulated – until recently – temporary work in an exceptional radical way), all East-European new member states are 'underdeveloped' in terms of non-standard employment.

Whereas temporary work is mainly driven by cost competition and new forms of work organisation, the main underlying causal factors for part-time work are women's strive for economic independence and the transformation of formerly unpaid family work into market work. Thus, globalisation, information technologies and 'feminisation' of the labour markets are the megatrends standing behind the increase of non-standard employment. Furthermore, the positive relationships of non-standard employment with labour force participation and GDP growth indicates that an increasing variety of employment relationship may well be one of the preconditions for a sustainable economic dynamics and prosperity.

(3) The third important result relates to the differentiated role of the three components of non-standard employment. Part-time work has clearly the strongest weight in this 'partnership'. As it is (still) taken up mainly by women, this form of non-standard employment reflects above all restrictions in labour supply due to family obligations. And as many tasks, especially caring tasks, cannot or should not be transformed into market transactions, flexibility of working time will further be required if gender equality and work-life balance are highly estimated. Thus, non-marginal part-time employment in the form of open-ended part-time contracts say in the range of 20 to 35 hours a week deserves to be counted as part of a new standard employment relationship.

For temporary work, we observed a relatively slow upward movement, if not a stagnating trend. Poland is the great exception, but there are signs that the new regulation here might stop the rocketing upward movement in the last ten years. The study also made quite clear that temporary and open-ended part-time work are complementary due to their double function as recruitment channel for employers and as career-bridge for school leavers and young adults. Although the data base of this study did not allow a distinction of different forms of temporary work, other sources make clear that temp-agency work (although not necessarily restricted to temporary work) may play an increasing role as intermediate employment form and drive labour force participation by mobilising long-term unemployed and inactive members of the workforce.

Regarding self-employment, first attention should be drawn to the overall stagnating or even declining trend of this non-standard form of employment. Only a minority of the EU member states experienced (mostly from a low level) an increase in self-employment in the last ten years. This result sharply contrasts optimistic expectations of many policy maker and some researchers who sometimes see in self-employment a panacea for job creation or increasing labour force participation. However, it became also clear that this component of non-standard employment deserves much deeper research, all the more because the phenomenon of fake self-employment erodes the strict borderlines between dependent work and genuine self-employment.

Since we were not able – at this stage of research – to skip self-employment related to agriculture, our data set contains probably two different kinds of own account work: a traditional type related especially to agriculture and partly to conventional petty bourgeois self-employment, and a modern type related to the 'creative sector' and to the new professionals in information and communication technologies. Whereas the traditional type is declining, thereby contributing to a negative relationship between self-employment and labour force participation, the modern type of own account work might contribute in two ways to increased labour force participation: first by new professional (full-time) jobs for new

markets, second by offering a combination of ‘inactivity’ (mostly activities in unpaid care work) and gainful work or by providing a stepping stone for inactive people, for instance for women after parental leave, or for elderly after (early) retirement. This assumption is partly confirmed by the weak but positive relationship of part-time self-employment with labour force participation especially for women.

(4) The fourth grave result is the unequal distribution of non-standard employment among socio-economic groups. This observation, although not new, is all the more relevant since the usual higher risks related to non-standard employment in terms of income, unemployment, social security in old age and partly even in terms of health are sources of new inequalities if welfare states are not able to adjust their institutions to this new dynamics. Low-skilled people are overrepresented, whereas highly skilled people are underrepresented in non-standard employment. The overrepresentation of low-skilled concerns especially people in fixed-term contracts, whereas highly skilled people are substantially represented in part-time employment only in a few (‘modern’) countries. Temporary work concentrates especially on school leavers and young adults, whereas women are strongly represented in own account work, especially in its growing part-time form. The other side of the coin is the extremely poor level of labour market participation among the low-skilled which hints to the need of substantive efforts especially in education policy to overcome this deficit. As far as education is (or even should be) related to ‘on-the-job’ training, temporary work, including temp-agency work, might provide important ‘midwife services’.

(5) These observations were reason to ponder a bit more about the underlying causes that erode the traditional standard employment relationship. Looking at the distribution of non-standard employment by industrial branches, the assumption of a continuous transformation of unpaid household work into market transaction driving especially part-time work and increasing female labour force participation was confirmed. This process encompasses the whole economy but concentrates on a few and in part strongly growing sectors (business and health services). In

addition, one can observe some common features in this process contributing to explain or understand the changes in the employment relationship. We find non-standard employment often in sectors with low depth or breath of labour division (retail trade or reparation), or in sectors with strong seasonal characteristics (agriculture, construction, hotel and restaurants, tourism), or in sectors related to personal services (education, health, care) which often require interaction and availability all around the clock (24 hours economy). This pattern underlies the likelihood that non-standard employment will further increase, but it also reminds that the rationale for open-ended (long-term) full-time employment contracts is still resilient.

(6) Labour market institutions also play a role. Taxes and social security contributions provide economic incentives both for the labour demand and supply side to search for employment forms with the highest returns or the lowest costs. High income taxes or social security contributions certainly do not encourage own account work except the respective people circumvent those rules by choosing informal ('black work") or even illegal forms of employment. On the slip side of 'going informal', however, we find lack of social security in case of illness or old age as well as hidden forms of exploitation or even Mafia-kind employment relationships.[32] We also found a surprisingly strong negative correlation between (formal) labour force participation and full-time self-employment, which hints to the necessity of constructing – in terms of social security – a more inclusive employment relationship if one intends to stimulate this 'non-standard' form of employment for the sake of its supposedly creative and innovative functions. One possibility would be to subsidise social security contributions in times of low and volatile income, and progressive social security contributions in times of high earnings. An alternative would be to radically change the framework conditions for multiple forms of employment and frequent transitions between these forms through a more inclusive labour law and social security legislation.

32 The Nobel Prize winning economist Amartya Sen (2001, chapter 11) saw in the Mafia even a functional equivalent to formalized structures and entitlements to social security.

(7) Unequal taxation of male and female income favours marginal forms of part-time with high risks related to sustainable labour market careers and social security in old age. It also favours the traditional role division between men and women. The same holds true for non-targeted forms of wage subsidies in form of in-work-benefits, that allow combining wage and transfer income ad ultimo but keeping people, especially women, in low wage jobs without promotion opportunities. One has also to be aware that albeit "mother-friendly" policies might enable more women to become economically active, they also might exacerbate gender occupational inequality. Comparative research shows that lower earnings differentials between men and women in developed welfare states with high labour force participation are probably to be attributed to their more egalitarian wage structures rather than to their family policies. Cross-national research also indicates that in contrast to extended maternal leaves, expansion of public sector employment and the provision of services such as subsidized day care are suitable instruments to increase labour force participation without doing harm to economic outcomes for women (Jaumotte 2003, Mandel/ Semyonov 2005).

(8) High employment protection drives – as expected – fixed-term employment, especially for men. Fixed-term contracts allow employers to circumvent dismissal protection or to combine external flexibility (hire and fire) with internal security for the core labour force (employment protection) with respective loyalty and – may be – higher productivity. Both options lead to a segmentation of the labour market in so called ‘insiders’ with open-ended contracts and ‘outsiders’ with fixed-term contracts. Employment protection regulation, therefore, would have to be developed in a way that both flexibility and security complement each other in a functional way without enhancing the inbuilt tendencies of labour market segmentation. A ‘best practice’ case of such a regulation is the Austrian new severance pay act (2003) based on ‘inclusive’ mandatory employers’ contributions according to which each dismissed worker receives a payment, an entitlement that can be put into a savings account even if the person has only a

brief employment record or quits the job on his or her own. The former system required a minimum contribution period of three years, a rule that excluded most flexibility-enhancing workers who had low average employment spells. It trapped employers as well (especially small-scale ones), who accumulated substantial liabilities in the form of severance entitlements held by their employees with long periods of service (Schmid 2008, p. 293). Scattered anecdotal evidence hints to the potential positive role of temp-agency work in balancing flexibility and security through risk pooling and risk sharing (see also chapter 1 in this report).

(9) Cultural factors also play a role in choosing – in as far as this choice is free at all – non-standard employment relationship. Unfiltered responses to preference questions, but also a few sophisticated studies provide evidence that women of 'conservative' welfare regimes are still not very supportive to the transformation of care work into market transactions. They choose part-time work mainly for the reason to combine unpaid family work with some additional market income. With respect to temporary work, the most important – and probably increasing – preferential reason is to combine education or continuous training and education with gainful work or to accumulate vocational experiences of various kinds in order to maintain or to improve employability. Due to their risk-pooling capacity, temp-agencies might play an important role for optimal job matching and recruitment, especially for school leavers and young adults. In countries with high levels of temporary work also for mature adults (like Spain or recently Poland), however, having no other choice is the main reason for temporary jobs, which means lack of jobs with open ended contracts. Such countries, probably, have to come to a more balanced regulation of 'flexicurity', not least for the sake of higher productivity enhanced through the 'psychological contract' fostered by open-ended contracts.

Good studies on preferences and on the dynamics over the life course are especially missing related to (new) self-employment. However, we found a 'best practice case' of research in Sweden which produced in part thrilling results that probably can be transposed to other comparable countries. Apart from

unemployment as an important driver to choose self-employment, most people in dependent work who decide to become self-employed choose a combination of dependent (part-time) employment and (part-time) self-employment to test under the 'safety umbrella' of dependent work whether own account work might become an alternative income source at the end. Many become fully self-employed at the end, the majority, however, returns to dependent work or keeps the combinatory status. Unfortunately, a conscious employment policy that systematically supports or encourages such trial and error processes is not yet in sight. Labour market policy, so far, reacted in some countries only with respect to the target group of unemployed for whom own account work, however, often is only an escape route rather than a sustainable solution. Nevertheless, as evaluation studies in the meantime show, employment or labour force participation can effectively be promoted by this way.[33]

(10) Last, but not least, our results hint to a great and in many countries unexploited potential as functional equivalent to non-standard employment: the flexibilisation of the standard employment relationship. The implantation of flexible elements into the open-ended full-time contract can take various forms: agreements on regulated time-offs (sabbaticals) for various reasons such as child care, care for the frail elderly or the ills or disabled among the members of the family, training or educational leaves, physiological or psychological recreation. Such agreements provide at the same time the relative security of a formal employment relationship as well as the flexibility of working time according to the needs of the life course. They would also foster flexibility without destroying the potential of open-ended contracts for sustainable 'psychological contracts' between employers and employees.

For the other side of the employment contract, the employers or managers responsible for competitive production or high quality services, corresponding framework conditions have to be created enabling them to cope with the

33 For Germany, e.g., see Baumgartner/ Caliendo (2007).

increasing costs and with the adjustment of the work organisation. However, since such a new standard employment relationship extends the expectation horizon for both sides, the higher costs in the first round probably will be more than compensated in the second round due to higher motivation, job satisfaction, loyalty, productivity and competitiveness.

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Appendix 1

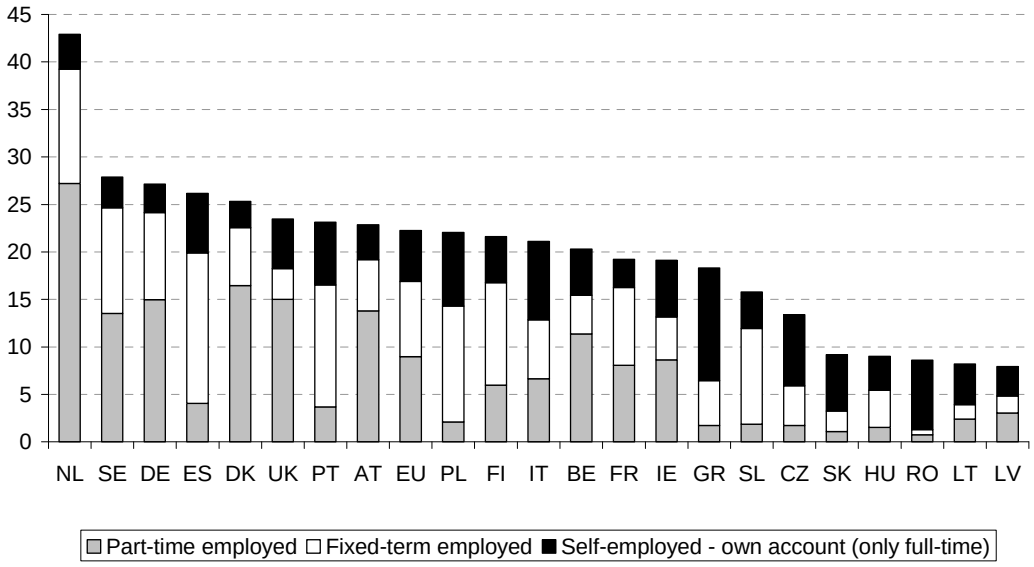
Country Abbreviations

AT	Austria
BE	Belgium
BG	Bulgaria *
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
CY	Cyprus *
LV	Lithuania
LT	Latvia
LU	Luxembourg
HU	Hungary
MT	Malta *
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

* Countries excluded in most parts of the analysis

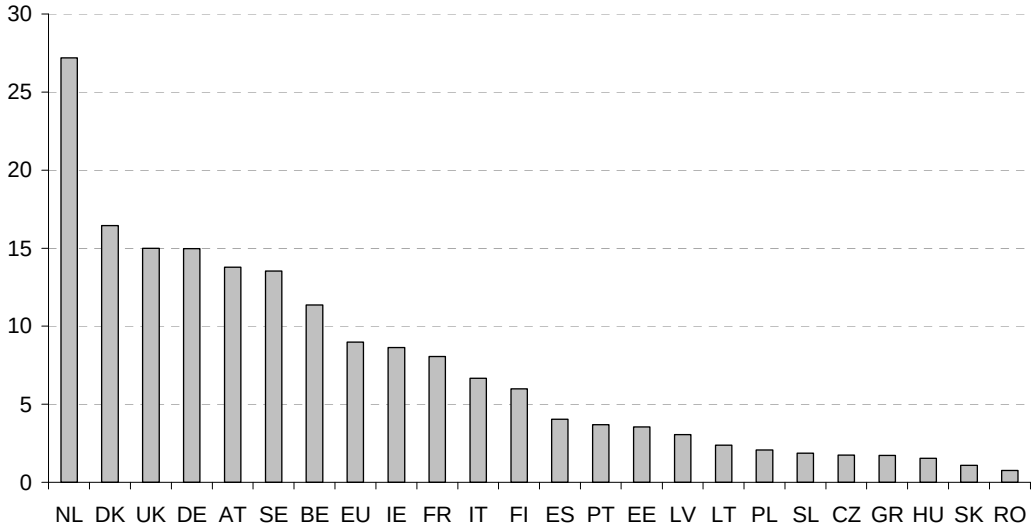
Appendix 2: Differentiated non-standard employment rates, 2008

A2.1: Non-standard employment rates in Europe according to three non-standard components, 2008

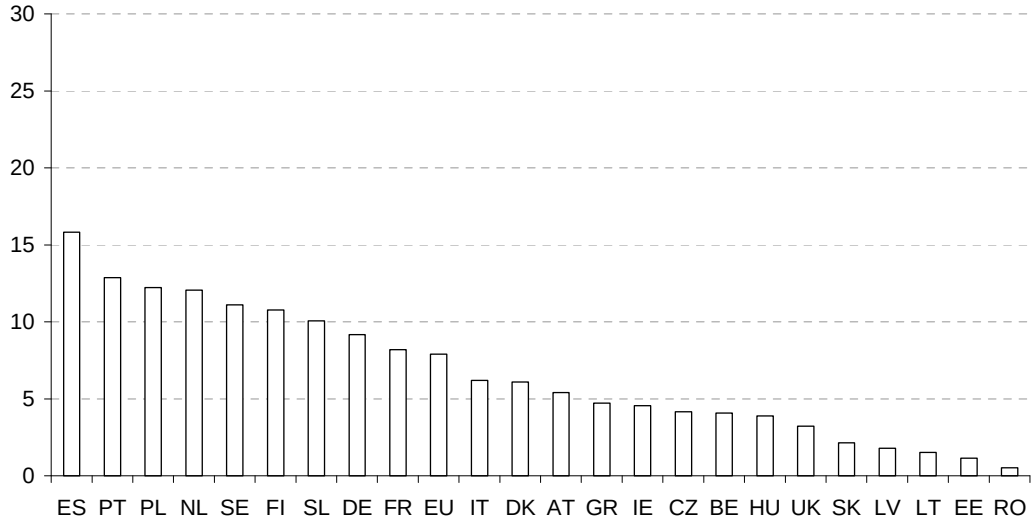


Source: Eurostat, Labour Force Survey; own calculations; yellow=part-time (including self-employed), brown=fixed-term employment (including part-time), blue=self-employed (only full-time)

A2.2: Part-time employed persons (including self-employed) in percent of working-age population (age 15 to 64)

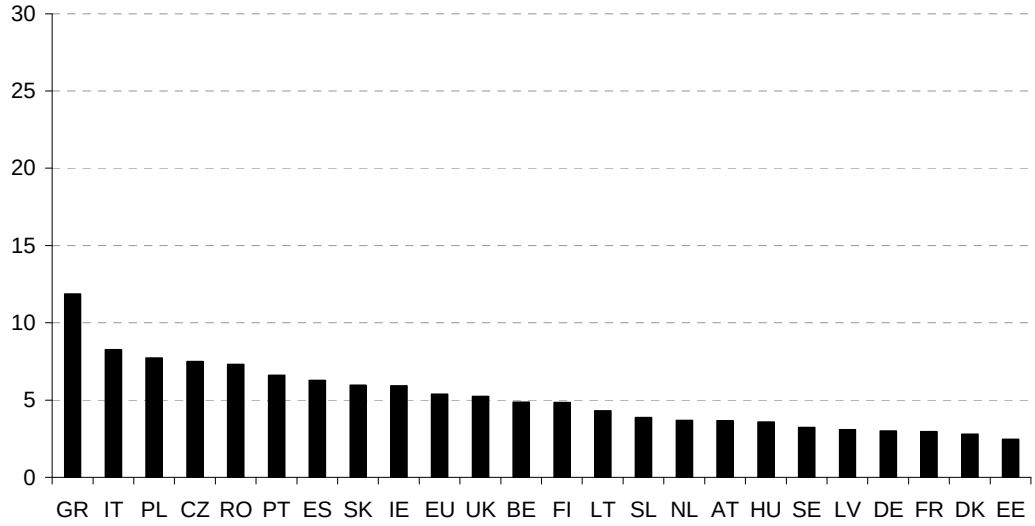


A2.3: Fixed-term employed persons (including part-time) in percent of working-age population (age 15 to 64)



Source: Eurostat, Labour Force Survey; own calculations

A2.4: Self-employed persons (only full-time) in percent of working-age population (age 15 to 64)



Source: Eurostat, Labour Force Survey, own calculations

Appendix 3: Non-standard employment rates by skill, 2008

	Low	Middle	High
FR	5.3	8.6	5.4
AT	6.1	13.2	3.8
BE	4.9	8.7	7.3
CZ	0.9	10.3	2.2
DE	6.2	15.4	5.6
DK	8.7	9.2	6.6
EE	0.9	4.2	2.0
ES	12.7	6.3	7.3
FI	5.2	11.2	5.4
GR	8.5	6.3	3.6
HU	1.7	6.0	1.5
IE	6.1	7.7	5.6
IT	8.1	9.2	3.8
LT	0.9	6.5	1.7
LU	5.3	6.3	4.9
LV	1.7	5.0	1.4
NL	12.3	18.0	11.9
PL	2.8	15.8	3.4
PT	16.5	3.5	3.4
RO	5.2	5.5	0.2
SE	4.8	15.0	7.8
SL	2.8	10.4	2.6
SK	0.5	7.4	1.3
UK	5.8	11.3	5.3
EU (24)	6.6	10.7	4.9

Non-standard employed by skill level in percent of working age population (15-64 years). According to ISCED (1997): *Low*=ISCED 0-2 (pre-primary education; primary or first stage of education of basic education; lower secondary education or second stage of basic education); *Middle*=ISCED 3-4 ([upper] secondary education; post-secondary non tertiary education; *High= 5-6 (*first stage of tertiary education [not leading directly to an advanced research qualification]; second stage of tertiary education [leading to an advanced research qualification]).

Source: Eurostat, Labour Force Survey, own calculations.